

**Report to the
Secretary of State for Transport
and the
Secretary of State for Communities and Local
Government**

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**an Inspector appointed by the Secretary of State for Transport and the Secretary of State for
Communities and Local Government**

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Date: 29 July 2015

TRANSPORT AND WORKS ACT 1992

ACQUISITION OF LAND ACT 1981

TOWN AND COUNTRY PLANNING ACT 1990

PLANNING (LISTED BUILDINGS AND CONSERVATION AREAS) ACT 1990

THE LEEDS TROLLEY VEHICLE SYSTEM ORDER 201[]

APPLICATION FOR DEEMED PLANNING PERMISSION

**APPLICATIONS FOR LISTED BUILDING AND CONSERVATION AREA
CONSENTS**

Date of Inquiry: 29 April 2014

Refs: TWA/13/APP/04 and NPCU/LBC/CAC/N4720

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ABBREVIATIONS & GLOSSARY

A660JC	The A660 Joint Council
Applicants	West Yorkshire Combined Authority (formerly Metro) and Leeds City Council
ASC	Alternative Specific Constant
BAFFB	Best and final funding bid
BCR	Benefit/Cost Ratio
BRT	Bus Rapid Transit
BSOG	Bus Service Operator Grant
CA	Conservation Area
CAC	Conservation Area Consent
CCTV	Closed circuit television
CIEEM	Chartered Institute of Ecology and Environmental Management
CEMP	Construction Environmental Management Plan
CJEU	Court of Justice of the European Union
CO ₂	Carbon dioxide
CoCP	Code of Construction Practice
CS	Core Strategy
CTMP	Construction Traffic Management Plan
DCLG	Department for Communities and Local Government
DCRA	Department of Consumer and Regulatory Affairs
Defra	Department for Environment Food and Rural Affairs
DF	Design Freeze
DfT	Department for Transport
DM	Do Minimum (scenario)
DoE	(Former) Department of the Environment
DoS	Degree of Saturation (for TRANSYT)
DS	Do Something (scenario)
EA	Environment Agency
ECHR	European Convention on Human Rights
EH	English Heritage (Split into English Heritage trust and Historic England on 1 April 2015)
EIA	Environmental Impact Assessment
EIR2004	Environmental Information Regulations 2004

EMC	Electro-magnetic Compatibility
EMI	Electro-magnetic Interference with third party electric and electronic equipment
ES	Environmental Statement
ETM	Electronic ticket machine
EU	European Union
FA	Football Association
FRA	Flood Risk Assessment
FSB	(The) Federation of Small Businesses
fttr	Modern articulated bus introduced in Leeds by FWY in 2007
FWM	Friends of Woodhouse Moor
FWY	First West Yorkshire
GHG	Greenhouse gas
g/km	grams per kilometre (of CO ₂ produced)
gCO ₂ /km	grams of CO ₂ per kilometre
gCO ₂ eq/MJ	grams of CO ₂ released per megajoule of energy produced
g/kWh	grams per kilowatt hour (of CO ₂ for electricity generation)
GVA	Gross Value Added (as a measure of the value of goods and services produced in an area, industry or sector of an economy)
GVLIA2	Guidelines for Landscape and Visual Impact Assessment 2 nd Edition
GVLIA3	Guidelines for Landscape and Visual Impact Assessment 3 rd Edition
HCML	Headingley Castle Management Limited
HLD	Headingley Land Developments
HRA	Human Rights Act 1998
HS2	High Speed (Rail) 2
IROPI	Imperative Reasons of Overriding Public Interest (under the Habitats Directive)
km	kilometres
L	Litres
LB&CA Act	The Planning (Listed Buildings and Conservation Areas) Act 1990
LBC	Listed Building Consent
LCA	Low Cost Alternative
LCC	Leeds City Council
LCR	Leeds City Region

LEP	Local Enterprise Partnership
LGA1972	Local Government Act 1972
LQP	Leeds Quality Park (Standard)
LRT	Light Rapid Transit
LTM	Leeds Transport Model
LTP	Local Transport Plan
LTP3	Third West Yorkshire Local Transport Plan
LTVS	Leeds Trolley Vehicle System
m	metres
MHT	Morley House Trust
MSBC	Major Scheme Business Case
NBA	Next Best Alternative
NBFWY	New Bus for West Yorkshire
NBFL	New Bus for Leeds
NE	Natural England
NERCA	Natural Environment and Rural Communities Act 2006
NGT	New Generation Transport
NHPNA	North Hyde Park Neighbourhood Association
NO ₂	Nitrogen dioxide
NPPF	National Planning Policy Framework
NWLTF	North West Leeds Transport Forum
ODPM	(Former) Office of the Deputy Prime Minister
OGC	(The) Office of Government Commerce
OLE	Overhead Line Equipment
OR	(Council) Officer's Report
pcu	passenger car units
PEBC	Programme Entry Business Case
PIM	Pre Inquiry Meeting
PM _{2.5}	Particulate Matter (particles diameter of 2.5 micrometres or less)
PM ₁₀	Particulate Matter (particles diameter of 10 micrometres or less)
PoE	Proof of Evidence
ppa	passengers per annum
PPG	Planning Practice Guidance

Promoters	West Yorkshire Combined Authority (formerly Metro) and Leeds City Council
QCS	Quality Contract Scheme
QPS	Quality Partnership Scheme
RA	Residents' Association
RTI	Real Time Information
SDG	Steer Davies Gleave
SEP	Strategic Economic Plan
SHCA	South Headingley Community Association
SHLAA	Strategic Housing Land Availability Assessment
SofS	Secretary of State
SP	Stated Preference
SPP	Special Parliamentary Procedure
SPRUCE	Former name for Strategic Traffic Management software
SRO	Senior Responsible Owner
STM	Strategic Traffic Management
TA	Transport Assessment
TAG	Transport Analysis Guidance
TEE	Transport Economic Efficiency
TFEU	Treaty on the Functioning of the European Union
TfL	Transport for London
tph	trolley vehicles per hour
TRO	Traffic Regulation Order
TWA 1992	Transport & Works Act 1992
TWA Order	Transport & Works Act Order
UDM	Urban Dynamic Model
UDP	Unitary Development Plan
UTMC	Urban Traffic Management and Control
VPA	Voluntary Partnership Agreement
vph	vehicles per hour
WPRA	West Park Residents' Association
WRA	Weetwood Residents' Association
WYCA	West Yorkshire Combined Authority

WYAAS	West Yorkshire Archaeology Advisory Service
WYITA	West Yorkshire Integrated Transport Authority
WYPTA	West Yorkshire Passenger Transport Authority
WYTF	West Yorkshire plus Transport Fund
$\mu\text{g}/\text{m}^3$	The concentration of an air pollutant in micrograms (one-millionth of a gram) per cubic metre air

CASE DETAILS

THE LEEDS TROLLEY VEHICLE SYSTEM ORDER 201[] and

APPLICATION FOR DEEMED PLANNING PERMISSION

- The Order would be made under sections 1 & 5 of, and paragraphs 1-5, 7-11, 13 & 15-17 of Schedule 1 to the Transport and Works Act 1992.
- The deemed planning permission would be granted by a Direction under section 90(2A) of the Town & Country Planning Act 1990.
- The application for the Order and deemed planning permission was made by Metro and Leeds City Council (the Applicants) on 19 September 2013, and there were 1,764 objections outstanding to it at the commencement of the local Inquiry.
- The Order and deemed planning permission would authorise the construction and operation of a trolley vehicle system, known as the Leeds New Generation Transport (NGT). The Order would include provision for the acquisition, compulsorily and by agreement, of land and rights in and to use land, and provision for the construction, operation and maintenance of the NGT.

Summary of Recommendations: That the Order and Direction be not made.

APPLICATIONS FOR LISTED BUILDING CONSENT

(Application Ref is that given by the Department for Communities and Local Government with the reference given by the Applicants in brackets)

Application Ref: 13/03873/LI (LBC004)

62 Headingley Lane, Headingley, Leeds LS6 1BU

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the removal of a section of approximately 45m of part of a listed wall which is currently approximately 2m in height for the construction and operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03875/LI (LBC012)

Kingston Terrace, Woodhouse, Leeds LS2 9BW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the relocation of approximately 9m length of listed wall and one gate pier for the reinstatement to a location of less than 5m to the north east of its current location.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03876/LI (LBC017)

Old Broadcasting House, Woodhouse Lane, Leeds LS2 9EN

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition and reinstatement of approximately 83m of walling and gate piers by less than 10m to the north-east of its present location.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03877/LI (LBC008)

The Piers, Rose Court, Headingley Lane, Leeds LS6 1BN

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the set back of the twin piers to the north of Rose Court.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03878/LI (LBC006)

Buckingham House, Headingley Lane, Leeds LS6 1BL

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the set back of up to 70m of associated curtilage along Headingley Lane and up to 65m of associated curtilage down the western extent of Buckingham Road.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03879/LI (LBC007)

Ford House, Headingley Lane, Leeds LS6 1BP

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the set back of up to 55m of associated curtilage along Headingley Lane and up to 80m of associated curtilage down the eastern extent of Buckingham Road.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03880/LI (LBC001)

The Coach House, 184 Otley Road, Leeds LS16 5LW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the set back of up to 170m of associated curtilage along Otley Road, Leeds to be relocated to a position of up to 10m north-northwest of the current position.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03887/LI (LBC002)

The Horse Trough opposite 62 Otley Road, Leeds LS6 3QG

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are to set back the horse trough from its existing site by approximately 8m to the north-west.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03888/LI (LBC057)

17-19 Bridge End, Leeds LS1 4RA

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03889/LI (LBC058)

Leeds Bridge House, Hunslet Road, Leeds LS10 1JN

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03890/LI (LBC010)

Feast and Firkin/The Library Public House, 229 Woodhouse Lane, Leeds LS2 3AP

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03892/LI (LBC020)

Leeds Museum, Cookridge Street, Leeds LS2 8BH

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03894/LI (LBC054)

159 Briggate, Leeds LS1 6LY

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03895/LI (LBC038)

30-33 Boar Lane, Leeds LS1 5DA

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03896/LI (LBC021)

39 Cookridge Street, Leeds LS2 3AW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03897/LI (LBC022)

4 Great George Street, Leeds LS2 8HF

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03898/LI (LBC037)

40 Boar Lane, Leeds LS1 5DA

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03899/LI (LBC045)

63 Boar Lane, Leeds LS1 6HW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03900/LI (LBC050)

71 Boar Lane, Leeds LS1 6HW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03906/LI (LBC027)

11-17 Cookridge Street, Leeds LS2 3AG

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03907/LI (LBC026)

19-21 Cookridge Street, Leeds LS2 3AG

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03912/LI (LBC056)

3-5 Briggate, Leeds LS1 4AF

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03913/LI (LBC044)

61-62 Boar Lane, Leeds LS1 6HW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03914/LI (LBC003)

79, 81, 83 and 83A Otley Road, Leeds LS6 3PS

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03915/LI (LBC011)

The Pack Horse Public House, Woodhouse Lane, Leeds LS2 9DX

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03918/LI (LBC033)

26-27 Park Row, Leeds LS1 5QB

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03920/LI (LBC034)

28-30 Park Row, Leeds LS1 5JD

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03922/LI (LBC035)

31-32 Park Row, Leeds LS1 5JD

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03923/LI (LBC029)

23 Park Row, Leeds LS1 5JF

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03925/LI (LBC036)

33-35 Park Row, Leeds LS1 5JL

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03926/LI (LBC031)

19-20 Park Row, Leeds LS1 5JF

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03927/LI (LBC030)

21-22 Park Row, Leeds LS1 5JF

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03928/LI (LBC025)

44-72 The Headrow, Leeds LS1 8EQ

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03929/LI (LBC028)

Sovereign House, 25 Park Row, Leeds LS1 5QL

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03930/LI (LBC024)

St Anne's Roman Catholic Cathedral, Cookridge Street, Leeds LS2 3AG

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03931/LI (LBC059)

The Adelphi Public House, Hunslet Road, Leeds LS10 1JQ

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03933/LI (LBC018)

55 Cookridge Street, Leeds LS2 3AW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03934/LI (LBC052)

1-13 Boar Lane, Leeds LS1 6ET

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03935/LI (LBC048)

14-18 Boar Lane, Leeds LS1 6EN

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03936/LI (LBC032)

18 Park Row, Leeds LS1 5JA

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03937/LI (LBC039)

29 Boar Lane, Leeds LS1 5DA

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03938/LI (LBC040)

24-28 Boar Lane, Leeds LS1 5DA

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03939/LI (LBC047)

1 The Bourse, Boar Lane, Leeds LS1 5DE

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03940/LI (LBC046)

3 The Bourse, Boar Lane, Leeds LS1 5DE

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03941/LI (LBC014)

Emmanuel Church, Woodhouse Lane, Leeds

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03942/LI (LBC013)

Parkinson Building, Woodhouse Lane, Leeds LS2 9HE

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03943/LI (LBC016)

Blenheim Baptist Church, Blackman Lane, Leeds LS2 9ER

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03944/LI (LBC015)

177-179 Woodhouse Lane, Leeds LS2 3AR

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03945/LI (LBC023)

23-27 Cookridge Street, Leeds LS2 3AG

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03946/LI (LBC042)

59 Boar Lane, Leeds LS1 6HW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03947/LI (LBC043)

60 Boar Lane, Leeds LS1 6HW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03948/LI (LBC041)

58 Boar Lane, Leeds LS1 6HW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03949/LI (LBC061)

Garden Gate Public House, 3 Whitfield Place, Hunslet, Leeds LS10 2QB

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03950/LI (LBC019)

49-51 Cookridge Street, Leeds LS2 3AW

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03982/LI (LBC060)

Braime Building, Hunslet Road, Leeds LS10 1JZ

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the removal of up to 85m of associated curtilage along Sayner Lane located to the northeast of the structure and at Gate 5 into the Braime Works.

Summary of Recommendation: That consent be refused.

Application Ref: 13/04271/LI (LBC009)

Rose Court, Headingley Lane, Leeds LS6 1BN

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the setting back of approximately 105m of walling by up to approximately 5m.

Summary of Recommendation: That consent be refused.

Application Ref: 13/04303/LI (LBC005)

Elinor Lupton Centre, Headingley Lane, Headingley, Leeds LS6 1BN

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/04314/LI (LBC055)

165a-169 Queens Court, Briggate, Leeds LS1 6LY

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/04330/LI (LBC051)

148-150 Briggate/4 Duncan Street, Leeds LS1 6BR

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the use of fixing bolts or brackets to be inserted into the façade of the building approximately 6.8m or above from ground level in height to support overhead line wires required for the operation of the Leeds NGT.

Summary of Recommendation: That consent be refused.

Application Ref: 13/05470/LI (LBC062)

The Old Red Lion Public House, 2 and 4 Meadow Lane, Leeds

- The application for listed building consent is made under section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 27 November 2013.
- The works proposed are the installation of a new substation including a new stone plinth and lintel between the building and the substation which may require structural tie in at below-ground level to provide a secure compound facility.

Summary of Recommendation: That consent be refused.

APPLICATIONS FOR CONSERVATION AREA CONSENT

(Application Ref is that given by the Department for Communities and Local Government with the Ref given by the Applicants in brackets)

Application Ref: 13/03952/CA (CAC007)

6 Wood Lane, Headingley, Leeds LS6 2AE

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of number 6 Wood Lane and part of its boundary wall.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03953/CA (CAC016)

2 Victoria Road, Leeds LS6 1BL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of building.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03954/CA (CAC015)

27 Headingley Lane, Leeds LS6 1BL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of house, building and former petrol station forecourt.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03955/CA (CAC004)

40 Otley Road, Leeds LS6 2AL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of building's southerly extension and southern curtilage.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03956/CA (CAC017)

11-25 Headingley Lane, Leeds LS6 1BL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of shop buildings.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03957/CA (CAC012)

Ruinous lodge to the north-east of 35 Headingley Lane, Leeds LS6 1BL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of the ruined structures.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03958/CA (CAC013)

31 Headingley Lane, Leeds LS6 1BL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of the red-bricked gatehouse building.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03959/CA (CAC011)

Curtilage to the south of 35a Headingley Lane, Leeds LS6 1BL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the set back of up to 300m of non-listed curtilage along Headingley Lane. This set back is proposed to be from between 5-10m from the original location.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03963/CA (CAC005)

5 Alma Road, Leeds LS6 2AH

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of an extant structure within a Conservation Area (Headingley Hill, Hyde Park and Woodhouse Moor) and for land take associated with the widening of this stretch of road required for the operation of the Leeds NGT within the northern offline route. The area affected would be a total of 220m² and would affect a stretch of 27m of wall with a set back of between 5 and 7m from their current location.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03964/CA (CAC009)

Shire Oak Road, Headingley, Leeds

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of two boundary walls within a Conservation Area and for land take, both associated with the crossing of the proposed NGT scheme with the extant roadway.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03965/CA (CAC008)

Shire Oak Street, Headingley, Leeds

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of two boundary walls within a Conservation Area.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03966/CA (CAC001)

1, 4, 5, 6 and 8 Weetwood House Court, Otley Road, Leeds LS16 5AF

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition and replacement of unlisted boundary walls, up to 2.5m from their original location within a Conservation Area.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03967/CA (CAC002)

1 and 1A Holly Bank, Otley Road, Leeds

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the set back of unlisted boundary walls, from up to 4.5m from their original location.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03968/CA (CAC003)

42/44 Otley Road, Leeds LS6 2AL

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of curtilage.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03979/CA (CAC014)

Former Coach House to the north of the Girl's High School, Headingley Lane, Leeds LS6 1BN

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of the north-eastern extent of building and curtilage.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03980/CA (CAC010)

35a Headingley Lane, Leeds LS6 1PF

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of the northern section of the building.

Summary of Recommendation: That consent be refused.

Application Ref: 13/03981/CA (CAC006)

Boundary walls in Wood Lane, Leeds

- The application for conservation area consent is made under section 74 of the Planning (Listed Buildings and Conservation Areas) Act 1990.
- The application is made by Leeds City Council.
- The application is dated 13 September 2013.
- The works proposed are the demolition of approximately a total of 55m of walling associated with the breaking through of the Leeds NGT offline route as it crosses Wood Lane.

Summary of Recommendation: That consent be refused.

1. PREAMBLE

The Applications

Transport and Works Act (TWA) Order & Deemed Planning Permission

- 1.1 The NGT Scheme was jointly promoted by Metro and Leeds City Council (LCC). At the time of the application, Metro was the trading name used by both the West Yorkshire Integrated Transport Authority (WYITA) and the West Yorkshire Passenger Transport Authority (WYPTA). In April 2014, West Yorkshire Combined Authority (WYCA) was established with the WYITA being dissolved and its powers transferred to the Combined Authority. WYCA replaces both the WYITA and WYPTA. The application is therefore transferred to the WYCA and LCC.
- 1.2 The Promoters seek powers by way of the Leeds Trolley Vehicle System (LTVS) Order 201[] (the Order), using the provisions of the Transport and Works Act 1992 (TWA 1992), an associated application for deemed planning consent under section 90(2A) of the Town and Country Planning Act 1990 and by way of contemporaneous applications for Listed Building Consent (LBC) and Conservation Area Consent (CAC)¹.
- 1.3 The Order and associated applications for NGT would confer if granted²:
- Planning Permission;
 - Listed Building Consent;
 - Conservation Area Consent;
 - Powers to compulsorily acquire rights and interests in land;
 - Powers to construct specified works;
 - Powers to attach brackets for overhead line equipment (OLE);
 - Powers to operate the transport system;
 - Consent for street works, by way of statutory authority or street works licence;
 - Consent for highway alterations and obstructions, under the Highways Act

¹ Document APP SoC: Applicants' Statement of Case paragraph 2.10

1980 or otherwise;

- Traffic regulation powers, by way of actual or deemed Traffic Regulation Orders; and
- Approval of temporary highway closures, under the Highways Act 1980, Town and Country Planning Act 1990 or otherwise.

1.4 The operational powers which are included within the Order include³:

- A general statutory authority to operate NGT, to ensure that it constitutes a statutory undertaking;
- Prohibition on obstruction;
- A penalty fares regime; and
- To make bye-laws.

1.5 The specific changes to the law which the LTVS TWA Order includes are⁴:

- Deemed off-street segregated sections of NGT to be roads for the purposes of the Transport Act 1985;
- Modification of road traffic and vehicle safety legislation to apply appropriately to trolley vehicles and, if necessary, to 'duo buses'⁵;
- Provision for substituted services not to require registration;
- Adaptation of public service vehicle legislation to trolley vehicles;
- Specific policing powers;
- Disapplication of the Commons Act 2006;
- Disapplication of the Land Clauses Consolidation Act 1845 to the acquisition of land under the Order;
- Disapplication of certain sections of the New Roads and Street Works Act 1991 in respect of works executed pursuant to powers conferred by the Order;
- Disapplication of section 109 of the Water Industry Act 1991, section 23 of the Land Drainage Act 1991 and any bye-laws made under those Acts in respect of anything done under or in pursuance of the Order; and

² Document APP SoC: Applicants' Statement of Case paragraph 2.12

³ Document APP SoC: Applicants' Statement of Case paragraph 2.13

⁴ Document APP SoC: Applicants' Statement of Case paragraph 2.14

⁵ Trolley vehicles with a secondary on board propulsion system

- Disapplication of section 6 of the Ecclesiastical Jurisdiction Measure 1963, section 7 of the Faculty Jurisdiction Measure 1964 and Part 3 of the Care of Churches and Ecclesiastical Jurisdiction Measure 1991 in respect of anything done under or in pursuance of the Order in relation to works Nos 2, 5 and 9 and land numbered 03015A, 08017 and 15077 on the Works and Land Plans⁶.
- 1.6 Other ancillary consents that may be required for the purposes of the NGT works include⁷:
- Protected species licences in relation to bats;
 - Consent from the Environment Agency (EA) in relation to works interfering with the main river; and
 - Approval from LCC under the Control of Pollution Act 1974 in relation to construction noise levels.
- 1.7 The development would comprise the following:
- A two-way trolley vehicle system, including the installation of associated plant, electrical and mechanical equipment, building fixings and any other operations necessary or expedient for the development;
 - Provision of building fixings, to support OLE, on properties fronting the Scheme;
 - Construction of 27 NGT stops (54 in each direction) on the route;
 - Park and ride sites for up to 2,300 car spaces (the first phase would be 1,700 car spaces) at Stourton and up to 850 car spaces at Bodington;
 - Environmental mitigation works;
 - Construction of 10 NGT substations along the route;
 - Land take to build and operate the NGT system;
 - Relocation/amendment to various access points along the route;
 - Provision of replacement sports facilities for the Bodington Park and Ride Scheme; and
 - Creation of green space areas and smaller areas of amenity space.

⁶ Document A-02

⁷ Document APP SoC: Applicants' Statement of Case paragraph 2.17

- 1.8 At the time of the opening of the Inquiry, there were 1,764 objections to the proposed Order⁸, taking account of what the Promoters have indicated as being 5 withdrawals prior to the Inquiry⁹. The objections that had been withdrawn include the Environment Agency (EA), following the signing of a legal agreement, dated 21 March 2014. Of those objections that had not been withdrawn, 134 were made by those with qualifying interests¹⁰. Four additional objections were received during the course of the Inquiry. 67 of the objectors were represented at the Inquiry¹¹.
- 1.9 The grounds for objection included the following:
1. The effect on property through, amongst other things, the compulsory acquisition of interests or rights in land, the demolition of walls, structures or buildings, the attachment of OLE to buildings and changes to access or parking;
 2. Whether the consultation that had been carried out had been adequate and appropriate;
 3. The effect on statutory undertakers' apparatus;
 4. The effect on existing traffic due in particular to trolley vehicle priority measures, additional signalling, alterations to turning movements at, or closure of, road junctions, causing additional congestion and associated pollution;
 5. The effect on the safety and convenience of cyclists due in particular to the loss of existing cycle lanes, changes to junction designs, and shared cycle lanes with articulated trolley vehicles;
 6. The effect on pedestrian safety and convenience, including children, the

⁸ Document APP SoC: Applicants' Statement of Case paragraph 16.1 indicates that 1,759 letters of objection had been received and 1,806 had been registered, including duplicates and one objection relating to another scheme. Since then, and prior to the opening of the Inquiry, 1,815 had been registered, which included 3 duplicates (26 a and b, 938 and 938a and 1817) and 49 numbers not used, giving a total of 1,815+3-49=1,769

⁹ Document APP/100: opening statement on behalf of the Applicants paragraph 55 where it is indicated that there were 1,764 objections to the Order of which 1,759 remain outstanding, showing that there had been 5 withdrawals

¹⁰ Document APP/220 Summary Table: those with qualifying interests are persons falling within the ambit of section 11(4)(b) of the Transport and Works Act 1992 (Statutory Objectors)

¹¹ See Appendix A to this Report for a list of those appearing

- elderly and disabled, due in particular to the widening of roads, changes to junctions, narrowing of footways, additional traffic and the shared use of pedestrianised areas with trolley vehicles;
7. The effect on the existing bus services, particularly due to moving existing bus stops, a potential reduction in the frequency of bus services and trolley vehicle priority measures at signalised junctions;
 8. The effect on the character and appearance of the area, particularly with regard to the conservation areas (CAs), in terms of overhead wires, poles and additional street furniture, road widening, and the loss of trees, verges and green spaces;
 9. Whether the Scheme is contrary to planning policy, including neighbourhood plans;
 10. The cost of the construction and operation of the trolley vehicle system, particularly with regard to the accuracy of the cost estimates, the likely revenue and whether it would represent value for money;
 11. The effect on wildlife habitats through the loss of trees and green space;
 12. The effects due to noise and vibration caused from new roads or alterations to existing roads taking traffic nearer properties or from additional traffic on existing roads or from the power cables and electromagnetic disturbance;
 13. The effects during construction, including upon bus services, public safety and convenience and the economic viability of businesses;
 14. The use and convenience of the trolley vehicle system, with particular regard to its flexibility, its route, the frequency of the stops and times of the vehicles, the amount of standing on the vehicles, its integration with existing public transport and the use of the park and ride sites;
 15. The effect on the economy and businesses, due in particular to changes in parking and road layout, bus and trolley vehicle stops affecting trade and whether the claims about the creation of additional employment are correct; and
 16. Whether there are better alternatives, such as an underground system, a tram, electric, hybrid or environmentally friendly buses, improvements to

the train services, better bus lanes and cycle lanes, improvements to the existing roads, better and more efficient ticketing, road congestion charging and reductions in City Centre parking to discourage the use of the car, and cheaper public transport fares.

- 1.10 During the course of the Inquiry, 4 additional objections were received and 30 objections were withdrawn, including 25 of those made with qualifying interests¹², leaving 1,738 objections remaining at the close of the Inquiry¹³. It will be for the Secretary of State (SofS) for Transport to consider the implications of any subsequent developments with regard to other objections.
- 1.11 There were in addition 10 representations received by the SofS, of which one was represented at the Inquiry, and 40 letters of support, with none of those supporters giving evidence at the Inquiry. Some of the representations and letters of support also expressed concerns about aspects of the Scheme. I report on their positions below.

Listed Building Consent (LBC) Applications and Conservation Area Consent (CAC) Applications

- 1.12 LBCs and CACs are required for the Scheme where works would affect a listed building or its curtilage, or take place within a CA. 61 LBC applications¹⁴ were called-in by the SofS for Communities and Local Government by a letter dated 28 November 2013 under section 12(3A) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (LB&CA Act). The SofS also called-in the 17 applications for CAC¹⁵ by a letter of that same date under section 74 of that same Act. In addition, the SofS called-in one LBC¹⁶ by letter dated 15 January

¹² Document APP/220 Summary Table and includes OBJ 1604 (the Leeds College of Art) who were represented by Gregory Jones QC throughout the Inquiry but confirmed the withdrawal of its objection on 30 October 2014

¹³ This is based upon my calculations of 1,815 having been registered prior to the opening of the Inquiry, which included 3 duplicates (Nos 26 a and b, 938 and 938a and 1817) and 49 numbers not used, and 4 additional objections during the Inquiry (Nos 1815, 1817, 1818 and 1819) less 5 objections withdrawn prior to the opening of the Inquiry and the 30 objections withdrawn during the Inquiry, giving $1,815 + 3 - 49 + 4 - 5 - 30 = 1,738$

¹⁴ Documents A-09a-1 to 20, A-09b-21 to 40 and A-09c-41 to 61

¹⁵ Documents A-10-1 to 17

¹⁶ Document A-09c-62

2014 under section 12(3A) of the LB&CA Act. This was to allow the LBC applications and the CAC application to be determined concurrently with the proposed TWA Order and the application for deemed planning permission.

- 1.13 The Applicants have written to the SofS, dated 2 April 2014, withdrawing 2 of the applications for LBC: Holy Trinity Church (Ref 13/03891/LI) and 24-26 Briggate (Ref 13/03951/LI). The SofS has confirmed in his letter dated 24 April 2014 that the 2 applications will no longer be considered as part of the public Inquiry.
- 1.14 61 letters of objection were received on the LBC and CAC applications. Following the withdrawal of the 2 LBC applications, 3 objections, including English Heritage (EH)¹⁷, were withdrawn. During the course of the Inquiry, 3 other objections have been withdrawn¹⁸.
- 1.15 These representations are reported upon in the Report on the Listed Building and Conservation Area Consents¹⁹.

Statement of Matters

- 1.16 On 18 February 2014 the Department for Transport (DfT) and Department for Communities and Local Government (DCLG) issued a 'Statement of Matters' pursuant to rule 7(6) of the Transport and Works (Inquiries Procedure) Rules 2004. This sets out the matters about which the respective Secretaries of State particularly wish to be informed for the purposes of their considerations of the Order and the applications for deemed planning permission, CAC and LBC.
- 1.17 The Statement of Matters in relation to the applications for the TWA Order and deemed planning permission were:
1. The aims and objectives of, and the need for, the proposed LTVS between Holt Park to the north of Leeds, and Stourton to the south, via the City

¹⁷ English Heritage was split into The English Heritage Trust and Historic England on 1 April 2015 and Historic England have taken on the role that EH provided before that date

¹⁸ Document APP/220 Summary Table

¹⁹ Appendix D to this Report

Centre (the Scheme).

2. The justification for the particular proposals in the draft TWA Order, including the anticipated transportation, regeneration, environmental and socio-economic benefits of the Scheme.
3. The main alternative options considered by the Promoters (including alternative modes to bus, and alternative means of propulsion) and the reasons for choosing the proposals comprised in the Scheme.
4. The extent to which the Scheme would be consistent with the National Planning Policy Framework (NPPF), national transport policy, and local transport, environmental and planning policies.
5. The likely impact on the public, businesses and the environment of constructing and operating the Scheme, including:
 - noise, dust, vibration and disturbance, including the impacts of construction traffic;
 - impacts on air quality;
 - impacts on water resources and water quality;
 - impacts on landscape, townscape and visual amenity, including proposals for the removal and replacement of trees, the effects on the character and appearance of the CAs and on listed buildings;
 - impacts on archaeology;
 - impacts of attaching OLE to buildings;
 - impacts on land use, including effects on commercial property and the viability of businesses, and community facilities; and
 - the effects of the Scheme on open space and recreational facilities.
6. The effects of the Scheme on statutory undertakers and other utility providers, and their ability to carry out undertakings effectively, safely and in compliance with any statutory or contractual obligations.
7. The likely impact on motorists, cyclists and pedestrians of constructing and operating the Scheme, including:
 - (a) the effects of the proposed trolley vehicle system on other public transport services, highway capacity, traffic flow, vehicle parking, pedestrian and cyclist movement and road safety;

- (b) the effects of closing, diverting or altering the layout of the streets as detailed in Schedules 3, 4 and 5 to the draft TWA Order;
 - (c) the effects of the traffic regulation measures specified in Schedule 10 to the draft TWA Order, including the proposed restrictions on parking, loading and access; and
 - (d) any complementary traffic management or other measures proposed by the Promoters to mitigate the effects of the Scheme on road users (including cyclists and pedestrians).
8. The likely impacts of the Scheme on ecological interests (such as bats), including whether implementation of the Scheme is likely to damage or destroy a breeding site or resting place of any species protected under the Conservation of Habitats and Species Regulations 2010 (the 2010 Regulations); and, if so, whether appropriate mitigation measures have been designed and what Natural England's view is (in the light of those proposed mitigation measures) of the likelihood of their granting licences under the 2010 Regulations when applied for by the Promoters.
9. The measures proposed by the Promoters for mitigating any adverse impacts of the Scheme, including:
- the Construction Implementation Strategy and Code of Construction Practice (CoCP);
 - the proposed Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP);
 - the proposed diversions for rights of way stopped up under the draft TWA Order, including whether they would satisfy the requirements of section 5(6) of the TWA 1992, that a public right of way should not be extinguished unless either an alternative right of way has been or will be provided, or the provision of an alternative is not required;
 - any measures to avoid, reduce or remedy any major or significant adverse environmental impacts of the Scheme; and
 - whether, and if so, to what extent, any adverse environmental impacts would still remain after the proposed mitigation.
10. The adequacy of the Environmental Statement (ES) submitted with the

application for the TWA Order, having regard to the requirements of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006, and whether the statutory procedural requirements have been complied with.

11. The conditions proposed to be attached to the deemed planning permission for the Scheme, if given, and in particular whether those conditions meet the tests of DoE Circular 11/95 of being necessary, relevant, enforceable, precise and reasonable.
 12. Whether the Scheme is reasonably capable of attracting the necessary funding, having regard to the Promoters' Business Case Review (Core Document Ref C-1).
 13. Whether there is a compelling case in the public interest for conferring on the Promoters powers compulsorily to acquire and use land for the purposes of the Scheme, having regard to the guidance on the making of compulsory purchase orders in ODPM Circular 06/2004, paragraphs 16 to 23; and whether the land and rights in land for which compulsory acquisition powers are sought are required by the Promoters in order to secure satisfactory implementation of the Scheme.
 - 14 The purpose and effect of any substantive changes proposed by the Promoters to the draft TWA Order and whether anyone whose interests are likely to be affected by such changes has been notified.
 - 15 Any other relevant matters which may be raised at the Inquiry.
- 1.18 The Statement of Matters in relation to the applications for listed building and conservation area consents were:-
16. The extent to which the proposed works affecting the Listed Buildings and Conservation Areas (the works) would accord with the provisions of the LB&CA Act and in particular Sections 16, 66 and 72.
 - 17 The extent to which the works are in accordance with the development plan for the area including any 'saved policies'. The weight that should be attached to the development plan, and any emerging plans.
 18. The extent to which the works would accord with the NPPF and in particular the desirability of sustaining or enhancing the character or

appearance of the heritage assets and CAs.

19. If consent for the works is granted, the need for any conditions to ensure they are carried out in a satisfactory manner.

20. Any other relevant matters which may be raised at the Inquiry.

Pre-Inquiry Meeting (PIM)

1.19 I held a PIM at the Metropole Hotel, Main Hall, King Street, Leeds on 4 March 2014 to discuss procedural matters relating to the Inquiry. There was no discussion of the merits of any cases for or against the proposals. A note following the meeting was circulated to all parties who had submitted objections or other representations²⁰.

The Inquiry

1.20 The public Inquiry has been called by the SofS for Transport under section 11(1) of the TWA 1992. I have been appointed by the SofS for Transport under the TWA 1992 to hold an Inquiry into the application for the TWA Order and deemed planning permission for the development and by the SofS for Communities and Local Government to hold a concurrent Inquiry under the LB&CA Act into the LBCs and CACs.

1.21 I opened the Inquiry at 1000 hours on Tuesday 29 April 2014. The Inquiry sat at the Regus Office, 2 Wellington Place, Leeds LS1 4AP on the following 72 days: 29 April to 2 May, 7 May to 9 May, 13 May to 16 May, 19 May to 23 May, 3 June to 6 June, 10 June to 13 June, 17 June to 20 June, 24 June to 27 June, 15 July to 18 July, 21 July to 24 July, 2 September to 5 September, 9 September to 12 September, 23 September to 26 September, 30 September to 3 October, 6 October to 10 October, 14 October to 17 October, 21 October to 23 October and 28 October to 31 October. It closed at 1315 hours on Friday 31 October 2014.

1.22 At the Inquiry, I have been assisted on the heritage matters by Katie Peerless, a fellow Inspector and Chartered Architect. She attended the Inquiry on

²⁰ Document INSP/002

3 June to 6 June, 7 October to 10 October and 15 October when heritage matters were discussed. She has compiled a separate report on the LBC and CAC applications²¹, which I have used to advise me on my conclusions and recommendations on the TWA Order, the deemed planning permission and the LBC and CAC applications. These conclusions and recommendations are mine alone.

- 1.23 Graham Groom was appointed as independent Programme Officer for the Inquiry and Joanna Vincent, who was appointed as his assistant, carried out this role for most of the Inquiry. Their role was to assist with the procedural and administrative aspects of the Inquiry, including the programme, under my direction. They helped greatly to ensure that the proceedings ran efficiently and effectively, but have played no part in this Report.
- 1.24 On various occasions before and during the Inquiry, Katie Peerless and/or I inspected the Order lands and their surroundings and the Listed Buildings and CAs which are the subjects of the applications for LBC and CAC. These inspections were all undertaken on an unaccompanied basis. At about 0900 hours on 30 October, I made an accompanied site visit to Leeds College of Art. Following the close of the Inquiry, accompanied site visits were made by Katie Peerless and I on 6 November to various properties and land along the route. In response to a request by the Applicants²², I made unaccompanied site visits to use the No 1 bus service, leaving bus stop B on Infirmary Street at about 1630 hours on Monday 17 November heading out of Leeds City Centre to Holt Park, and the No 6 bus leaving the bus stop on Otley Road north of the Glen Road junction at about 0845 hours on Tuesday 18 November heading into Leeds City Centre to the bus station. I also made unaccompanied site visits to Holt Park on 17 November and Stourton on 18 November and was accompanied to inspect and ride on First West Yorkshire's (FWY's) 'New Bus for West Yorkshire' (NBFWY) or 'New Bus for Leeds' (NBFL) on that day.
- 1.25 As part of the TWA Order application, a large number of documents were

²¹ Appendix D to this report

²² Document APP/201: Site Visit Itinerary (Version 2)

submitted by the Applicants to the SofS for Transport²³. These include an ES, which consists of a Non-technical summary²⁴, a Main Statement²⁵, Technical Appendices²⁶ and Supporting Documents²⁷.

- 1.26 A Supplementary Environmental Statement and Supporting Documentation²⁸ were submitted in January 2014, which the Applicants have explained is to give further environmental assessment relating to the implications of further traffic data that had been made available²⁹. Following the cross examination of Mr Ward, the Applicants' heritage witness, the Applicants submitted to the Inquiry what it described as an 'updated Technical Appendix G to the Environmental Impact Assessment (EIA)' and referenced as 'Document B-13', with an accompanying letter, dated 4 July 2014³⁰. The admission of this document as an Inquiry document was opposed in writing by a number of the objectors³¹. Having taken account of the written submissions³² and the verbal reply given by Mr Cameron QC on behalf of the Applicants on 22 July 2014, I gave my Ruling³³ on this matter on 24 July 2014. I allowed the admission of Document B-13 subject to a list of terms, which included a timetable for responses, together with reasons for my decision.
- 1.27 During the course of the Inquiry, legal submissions have been made regarding Competition Law³⁴, the waiver of legal privilege³⁵, the conservation of

²³ Core Documents Section A

²⁴ Document A-08a: Environmental Statement- Non-technical Summary

²⁵ Document A-08b: Environmental Statement- Volume 1- Main Statement

²⁶ Documents A-08c-1 to 7, A-08d and A-08e-1 to 7: Environmental Statement- Technical Appendices

²⁷ Documents A-08f, A-08g-1 to 10, A-08h-1 to 6, A-08i, A-08j, A-08k and A-08l-1 to 2: Volume III Figures and Supporting Documents

²⁸ Core Documents Section B

²⁹ Document APP-15-2: Mr Leather PoE paragraph 3.15

³⁰ Document APP/153

³¹ Third Party Correspondence during the Inquiry 500 series.

³² Third Party Correspondence during the Inquiry 500 series and Documents APP-154, APP-154a and APP-157

³³ Document INSP/102

³⁴ Document OBJ/923/10: Mr Alexander Rebuttal PoE, Document APP/190: Legal Opinion of K P E Lasok QC and Document FWY/159 Appendix 8: response by King & Wood Mallesons LLP 28 October 2014

³⁵ Document OBJ 923 FWY/159: FWY Closing Submissions Appendix 7

biodiversity³⁶ and the appropriation of public open space³⁷. These are summarised with my conclusions in Section 3 of this Report.

- 1.28 At the Inquiry, applications for costs were received from FWY and Drummond and Churchwood Residents' Association (DCRA) by 1300 on 29 October. In accordance with a timetable set at the Inquiry, the Applicants have replied to these costs applications by 12 November and DCRA have given its final response by 19 November. I have not received a final response from FWY. These are summarised with my conclusions and recommendations in Appendix G to this Report.

Compliance with statutory requirements

- 1.29 At the Inquiry the Applicants confirmed³⁸ that they had complied with their obligations under the Transport and Works (Inquiries Procedure) Rules 2004. No one has disputed this compliance. I am satisfied that all the necessary notices of the Inquiry have been posted.

This Report

- 1.30 The applications for the TWA Order and deemed planning permission are matters for the SofS for Transport, while the LBC and CAC applications fall to be determined by the SofS for Communities and Local Government. However, this report covers all of the applications, with cross references to a separate report by Katie Peerless on the LBC and CAC applications, as there are such close interrelationships between them that many of the considerations are common to them all. Also, matters that are not common still have a bearing on the consideration of all elements and, I suggest, are material considerations in the determination of all the applications.
- 1.31 This report sets out a brief description of the land covered by the proposed Order, permission and consents and their surroundings, legal submissions made at the Inquiry, together with my conclusions on those submissions, the

³⁶ Document OBJ 923 FWY/159: FWY Closing Submissions

³⁷ Document OBJ/1623-101 and Document APP/221: Applicant's Closing Submissions

³⁸ Document APP/101

gist of the cases for the Applicants, supporters, objectors and other representations regarding the TWA Order and deemed planning permission, together with rebuttals by the Applicants, my conclusions and my recommendations. It also includes a list of abbreviations and a glossary at the front. The report by Katie Peerless on the LBC and CAC applications, which includes the gist of cases for the Applicants and objectors and conclusions, together with an Annex containing suggested modifications to the application documents, is appended to this report. Also appended are lists of those appearing at the Inquiry, Inquiry documents, suggested conditions in the event of the relevant Secretaries of State directing that deemed permission and the LBC and CAC applications be granted and costs applications with my recommendations.

1.32 In this report I make separate recommendations to each Secretary of State.

2. DESCRIPTION OF THE PROPOSED NGT ROUTE, THE ORDER LAND, ITS SURROUNDINGS AND EXISTING BUS ROUTES ALONG IT

2.1 The existing highway network along the NGT corridor is as described in the Transport Assessment (TA) Annexes³⁹. The TA Annexes also describe the existing on-street and off-street facilities for cyclists⁴⁰; the existing walking facilities⁴¹; and the existing public transport provision⁴² along the NGT route.

2.2 The ES describes the Order land/site and its surroundings, together with the proposed route of the NGT Scheme⁴³. It also gives a brief description of the key infrastructure requirements⁴⁴, and the proposed replacement of University sports pitches⁴⁵, together with the buildings and historic walls that would need to be demolished⁴⁶ and the proposed land for site compounds and facilities⁴⁷.

³⁹ Document B-9 Annex A Section A2 pages 10 to 29

⁴⁰ Document B-9 Annex D Section D2 pages 85 to 96

⁴¹ Document B-9 Annex E Section E2 pages 103 to 112

⁴² Document B-9 Annex F Sections F2 and F3 pages 125 to 147

⁴³ Document A-08b paras 2.10 to 2.21

⁴⁴ Document A-08b paragraph 2.22

⁴⁵ Document A-08b paragraphs 2.34 to 2.46

⁴⁶ Document A-08b paragraphs 2.57 to 2.58 and Table 2.1, pages 27 to 28

⁴⁷ Document A-08b paragraphs 2.62 to 2.66

- 2.3 Details of the historic importance of buildings and structures along the route, and of the CAs through which it passes, are further described and illustrated in the ES⁴⁸. Also, the ES summarises the landscape/townscape in which the proposed NGT route is located and the predicted effects of the proposed development upon the landscape/townscape character and upon views and visual amenity⁴⁹, and an assessment of its effect upon open space along the route⁵⁰.
- 2.4 For reference, simple plans of the route may be found in the Non-Technical Summary to the ES⁵¹. The proposed route of the NGT is about 15 km long. In brief, it comprises of the northern section, which is about 10 km long⁵² and runs from Holt Park district centre, along Otley Old Road and down to Bodington, where it is proposed to construct a park and ride site on Leeds University playing fields. From there, it crosses the Outer Ring Road at Lawnswood roundabout. It then continues southwards along the A660 route past Lawnswood, Weetwood and West Park as well as the Leeds Metropolitan University Headingley campus. At Headingley, the route leaves the existing highway on a new corridor to bypass the A660 at the rear of the Arndale shopping centre before emerging onto Headingley Lane. After continuing through Woodhouse Moor, it passes the main University of Leeds campus and Leeds Metropolitan University. It heads through Leeds City Centre and past Leeds railway station at City Square.
- 2.5 The southern part of the route is about 5 km long⁵³. It crosses the River Aire on Leeds Bridge, and enters an area of recent development, including a proposed development site, at New Dock. From there it proceeds to Hunslet district centre, over the railway to Belle Isle, crossing the corner of Belle Isle Circus. The route terminates at a proposed park and ride site at Stourton, on grassland adjacent to junction 7 of the M621 motorway and Middleton Ring

⁴⁸ Document A-08b pages 107 to 118

⁴⁹ Document A-08b pages 119 to 130

⁵⁰ Document A-08b pages 143 to 148

⁵¹ Document A-08a Figure 2.1 and Figure 2.2

⁵² Document A-08b paragraph 2.2

⁵³ Document A-08b paragraph 2.2

Road. It is wholly contained within the Leeds Main Urban Area, as defined by the Leeds Unitary Development Plan (UDP).

- 2.6 The majority of the northern part of the proposed NGT route is currently served by the No 1 and No 6 buses, and parts of it by the No 28, No 92, No 93 and No 97 bus services⁵⁴. An express bus, the No 84X, serves most of the route with limited stops. The No 1 runs between Beeston and Holt Park, stopping at the Leeds City Centre Infirmary Street, which is its closest stop to the Railway Station, and via Albion Street and the A660. The No 6 bus runs between Leeds City bus station and Holt Park, via Albion Street, the A660 and Otley Old Road. The No 28 runs between Liberty Dock and Adel, via Leeds City bus station, Albion Street, the A660 and Weetwood Lane. The No 92 and No 93 buses link the University Headingley campus with Leeds University Parkinson building and Leeds Met City Campus, using the A660. The No 97 runs between Leeds City bus station and Guiseley via Albion Street, the A660 and Spen Road.
- 2.7 With regard to the southern part of the proposed NGT route, there are buses serving parts of the South Bank and Leeds Docks⁵⁵, as well as the No 12 and No 13 buses running between Middleton and Roundhay Park, via Belle Isle Circus, Hunslet district centre and Leeds City Centre Vicar Lane. The No 85 and No 87 buses run between Morley and Bramley, via Leeds City Centre Infirmary Street and Middleton Ring Road, near the proposed location of Stourton Park and Ride.
- 2.8 I have been given no reason to believe that my bus journeys on Monday 17 and Tuesday 18 November 2014 were not representative of normal weekday journeys at peak times during the University term.
- 2.9 My bus trip on the No 1 bus from Infirmary Street was from an enclosed bus shelter displaying real time information. The bus that I took arrived at about 1630 hours on Monday 17 November, and about 3 minutes after a previous

⁵⁴ Document OBJ 923 FWY/104: Map of the bus routes

⁵⁵ Document OBJ 923 FWY/105: Map of the bus routes serving South Bank

No 1 bus had departed from the stop. As such, it was almost empty. It shortly arrived at Albion Street bus stop, stopping for about 2 minutes to take on passengers. The other significant delays at bus stops, for about a minute each, were at the Leeds University Parkinson Building, due to the number of passengers boarding, and the Headingley Arndale Centre, due to the number of passengers alighting. The main hold up due to traffic was for about 5 minutes where there was no separate bus lane on the A660 between the Buckingham Road junction and St Michael's Road junction. At this point the bus caught up with the other No 1 bus and a No 28 bus. The bus did not encounter any significant delays between the Arndale Centre and Holt Park district centre, where it arrived at about 1708 hours.

- 2.10 My bus trip on the No 6 bus at about 0843 hours on 18 November was from an open bus shelter on Otley Road north of the Glen Road junction. The bus avoided the queue of traffic past this bus stop due to a separate bus lane up to the junction with Shaw Lane and St Anne's Road, where the bus lane became one for general traffic. It arrived at the Arndale Centre bus stop at about 0850 hours, and was full with standing passengers after the St Michael's Road junction bus stop, which it departed at about 0855 hours. The bus did not suffer any significant delays due to traffic for the whole of my journey to Leeds City bus station, arriving at about 0918 hours. It was passed by a No X84 bus on Headingley Lane and another No 6 bus caught it up in the City Centre, where it was delayed due to the number of passengers alighting. The only other significant delay was at Leeds University Parkinson Building due to the number of passengers alighting.

3. LEGAL SUBMISSIONS

Competition Law

For FWY (OBJ 923)

The material points⁵⁶ were:

- 3.1 By virtue of the control that the Promoters will have over Leeds NGT, the Promoters will be a competing operator in the Leeds public transport market and will constitute an 'undertaking' for Competition Act purposes. This has consequences for the Promoters and the Scheme.
- 3.2 The following 2 things would raise material issues for the Promoters, in terms of compliance with UK competition law:
 - (a) the ownership, and management, of the infrastructure to be used by NGT would constitute an essential facility (from day one); and
 - (b) once NGT is up and running, it contemplates a material abstraction of passengers from competing bus operators which would, most likely, establish NGT as the dominant operator on the corridors served by it.
- 3.3 The Promoters would be an owner of NGT and would have a high degree of control over its operation, including setting fares and determining frequency and stopping-points. At the same time, Metro, the public facing element of the recently created WYCA, as one half of the Promoters, would continue to have significant powers and responsibilities as a local transport authority, including under the Transport Acts, which would lead to a conflict of interests. Metro would have clear commercial incentives to favour NGT in respect of any exercise of its powers, irrespective of whether this is in the best interests of passengers. As such, decisions made by Metro in these circumstances would be subject to strong legal challenge on judicial review grounds.
- 3.4 On the first point, it is noted that NGT would *'have a high level of priority over other traffic, provided by sections segregated from other traffic, sections of*

⁵⁶ Document OBJ/923/10: Mr Alexander Rebuttal PoE

*dedicated NGT lane and lanes shared with bus services within the existing highway and priority at existing and upgraded traffic signal junctions*⁵⁷. In effect, due to the proposed conditions of competition on the corridors, which are controlled by the Promoters, buses would be unable to compete with NGT⁵⁸.

- 3.5 The proposal to exclude FWY and all other bus operators from access to the new infrastructure to be made available exclusively to NGT, and proposals on signalling priority, amount to precisely the sort of anti-competitive, exclusionary and discriminatory conduct that a competition authority and/or court would instinctively recognise as abusive.
- 3.6 As an undertaking, however, the Promoters would have to ensure that they do not discriminate between NGT and bus in terms of access to an essential facility and signal priority on the highway. The Promoters are obliged by competition law to allow FWY to secure access to the essential infrastructure on a fair, reasonable and non-discriminatory basis such that they are able to compete against NGT, and thereby to continue to offer passengers a genuine choice. This is clearly not the purpose of the Scheme as promoted by the Promoters.
- 3.7 FWY is not seeking protection from competition. Rather, it is concerned only to ensure that it has fair opportunity to compete on a level-playing field, something which the NGT proposals would deny.
- 3.8 A dominant position has been defined by the EU Court of Justice as: *'a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors,*

⁵⁷ Document APP-2-2 Mr Haskins PoE paragraph 3.18

⁵⁸ Document APP-4-2 Mr Henkel PoE paragraph 6.8: *'It is therefore assumed that, irrespective of the outcome of the NGT contract award, existing operators would not respond with sustained competition with NGT but would, over time, adjust frequencies to reflect residual demand for conventional bus services.'*, and paragraph 8.23: *'existing bus services will still be able to operate and serve elements of the market for local travel which are not met by NGT.'*

*customers and ultimately of its consumers.*⁵⁹

- 3.9 The use of the word 'dominant' by the Applicants⁶⁰, makes it appear to be the express purpose of the Promoters, and the rationale of the entire project, that NGT would assume such a dominant position on the corridors it serves. If NGT would not provide the step change the Promoters set out (with NGT as an improved quality service and bus services reduced) and thus result in a two-tier transport system, then the Promoters would not state the Scheme is necessary. This dominance would arise through a number of exclusionary measures, inherent in the Scheme, which effectively would prevent commercial bus operators from competing on a level-playing field with NGT.
- 3.10 It is questionable, as the Promoters would have every incentive to take further exclusionary measures to eliminate competition, as to whether the Promoters can deliver their vision which seems to depend upon measures that are open to challenge under UK competition law. This is clear from the following⁶¹:
- (a) *'There will be scope to introduce NGT multi-use products and other promotional ticket offers (eg combined Arena/NGT Park and Ride tickets)'*⁶²;
 - (b) *'Metro intends to implement a similar approach with NGT to engage with local communities, and their elected representatives, in re-designing bus networks.'*⁶³;
 - (c) alluding to a possible competitive response from commercial bus operators: *'There would be wider ramifications arising from an incumbent operator 'giving notice' on these services.'*⁶⁴;
 - (d) *'..it will not be possible to provide all bus services with the same signal priority that NGT will get. Substantial signal priority is essential if the NGT*

⁵⁹ Case 27/76 *United Brands v Commission of the European Communities* [1978] ECR 207

⁶⁰ Document APP-4-2 Mr Henkel PoE paragraphs 6.3, 8.5 and 8.9 when referring to FWY, uses the word 'dominant' in a disparaging manner

⁶¹ Document APP-4-2 Mr Henkel PoE paragraph 8.7: *'the business case for NGT assumes that it will abstract customers from existing services but I do not accept that this will result in a two tier public transport system'*

⁶² Document APP-4-2 Mr Henkel PoE paragraph 4.16

⁶³ Document APP-4-2 Mr Henkel PoE paragraph 6.11

⁶⁴ Document APP-4-2 Mr Henkel PoE paragraph 6.14

*journey times are to be significantly better than could be provided by bus....'*⁶⁵;

- (e) Despite 'new higher quality' and 'greater punctuality and substantially better journey times than bus services', 'Metro does not propose premium fares for NGT with fares intended to be broadly comparable to existing bus service fares.'⁶⁶
- (f) '... a QCS⁶⁷ would complement NGT by enabling a 'whole corridor' bus service integration strategy as well as underpinning integrated ticketing across the wider network'⁶⁸; and
- (g) 'If a West Yorkshire QCS is introduced covering the NGT corridor, it is likely that any existing bus services which would otherwise be the subject of some operator response to NGT could be included in the QCS and therefore would be specified and controlled by Metro, rather than remaining subject to either potential withdrawal by the existing operator on 56 days' notice under the de-regulated bus regime or otherwise being used to compete with the NGT services'⁶⁹.

3.11 Bus operators would be able to take the requisite legal steps, including engagement with the Competition and Markets Authority or the commencement of legal proceedings, to prevent NGT from exclusionary behaviour that stifles competition and harms passengers.

3.12 FWY is also concerned that the dual position of Metro as a Promoter, owner and controller of NGT and, at the same time, the local transport authority with powers and responsibilities for the organisation of local transport in the Leeds area, presents an inherent conflict of interests. Metro would have clear commercial incentives to favour NGT in respect of any exercise of its powers, irrespective of whether this is in the best interests of passengers.

3.13 For example, if Metro were to make a Quality Partnership Scheme (QPS), it

⁶⁵ Document APP-4-2 Mr Henkel PoE paragraph 8.17

⁶⁶ Document APP-4-2 Mr Henkel PoE paragraphs 8.23 and 8.30

⁶⁷ Quality Contract Scheme

⁶⁸ Document APP-4-2 Mr Henkel PoE paragraph 5.8

⁶⁹ Document APP-4-2 Mr Henkel PoE paragraph 6.17

would have to comply with the requirements set out in Schedule 10 of the Transport Act 2000 (as amended) and in particular, Metro would have to determine whether the QPS satisfied the 'competition test'. Given its commercial incentives to favour NGT due to the '*significant investment*', other operators would have strong grounds to request the Competition and Markets Authority to investigate and reach an independent view on any application of the competition test by Metro based on its clear conflict of interests. It is evident that the true purpose of the QPS would be to improve the commercial position of NGT, which would be unlawful.

- 3.14 Similarly, if Metro sought to make a Quality Contract Scheme (QCS), the inherent conflict of interest would create serious doubts about Metro's ability to apply correctly the requisite 'public interest' criteria⁷⁰.
- 3.15 Furthermore, the dual role of Metro would create further problems on the basis that FWY and other operators would continue to need to have regular contact with Metro as the local transport authority. However, given Metro's ownership and control of NGT, such contact is likely to constitute anti-competitive behaviour between competitors, contrary to Chapter I of the Competition Act 1998, particularly if operators discuss with Metro future pricing and service frequency.

The Applicants' Response

The material points⁷¹ were:

- 3.16 The Competition Act 1998 creates two prohibitions of anti-competitive conduct commonly known as the Chapter I and Chapter II prohibitions. The first requires some form of collusion or cooperation between two or more undertakings (that is, an anti-competitive agreement, decision of an association of undertakings or concerted practice)⁷².

⁷⁰ The Transport Act 2000 section 124(1)

⁷¹ Document APP/190: Legal Opinion of K P E Lasok QC

⁷² Document OBJ 923 FWY/160 Tab 12: The Competition Act 1998 section 2(1)

- 3.17 The making of the Order would not give rise 'necessarily' to such conduct. If any such conduct took place, it would occur independently of the making and operation of the Order. The making of the Order would produce an infringement of the Chapter II prohibition only if it created a dominant position and also constrained the behaviour of NGT in such a way as to force NGT to engage in abusive conduct (such as by requiring NGT to charge excessively high prices). The proposed Order does neither.
- 3.18 As to the question of the creation of a dominant position, the proposed Order would not prohibit the provision of passenger transport services in competition with NGT. Accordingly, it would not create a monopoly. As the emergence of a dominant position is contingent upon future events that cannot be predicted with certainty and that depend upon commercial decisions that will be made by actual and potential players on the relevant market, and upon the behaviour of consumers, it cannot be said that the making of the Order 'necessarily' creates a dominant position.
- 3.19 The relevant market seems here to be the market for the provision of passenger transport services in the geographical areas served by the NGT system, irrespective of the mode of transport. NGT would be exposed to competition from other providers of passenger transport services within that geographical area. In order to build up its market share, NGT would have to behave competitively. It would therefore have to be responsive to the actions of its competitors and to the wishes of travelling members of the public. There is no basis for believing that NGT would be in any position to behave to an appreciable extent independently of those persons.
- 3.20 Even if the Order and the Promoters' proposals did give rise to a dominant position, they would not necessarily give rise to an abuse of a dominant position. Merely competing with a competitor on the merits is not abusive conduct, even if it damages the competitor⁷³.

⁷³ Document OBJ 923 FWY/160 Tab 7: Case Bellamy & Child, *op cit*, paragraphs 10.053 to 10.056

- 3.21 An 'essential facility' is usually, but not necessarily, defined as infrastructure, access to which is essential in order to enable a competitor to compete on the relevant market⁷⁴. Access to the relevant market, which is that for passenger transport services in the geographical area(s) served by the NGT system, is not contingent upon access to the NGT infrastructure. The relevant market cannot be limited to passenger transport services carried by trolleybus because all the indications are that such services are substitutable (in the technical, competition law, sense) by other means of road transport, including buses and taxis, as well as 'self-supply' by private motor vehicle. An undertaking wishing to transport passengers for reward between different parts of the geographical area(s) served by NGT could do so by using the existing road network and would not be forced to run trolleybuses, or other means of transport, on the NGT lines or those parts of the NGT system that do not run over existing roads.
- 3.22 With regard to the NGT system having exclusive access to the park and ride site at Stourton, that site would not lie on the route of existing services. Therefore access to that park and ride site cannot be an essential facility. Access may be desirable or convenient, but this would not turn it into an essential facility.
- 3.23 So far as traffic signal priority is concerned, giving someone priority at a junction cannot be said to be an essential facility. Where an undertaking in a dominant position possesses or controls an essential facility, that undertaking may be acting unlawfully if, without objective justification, it refuses a competitor access to that facility or makes access particularly onerous or disadvantageous⁷⁵. In the case of traffic signals at a road junction, the facility can only be the road itself. The traffic signals are a means of controlling access to a particular part of the road.

⁷⁴ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraph 10.136

⁷⁵ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraph 10.137 and paragraph 10.061 on objective justification

- 3.24 If NGT is considered to be occupying a dominant position, its exercise of traffic signal priority could be abusive if it was not 'normal'⁷⁶, or not objectively justified, and it had a material adverse effect on competition. At a traffic intersection someone must have priority in order for the traffic at the intersection to be managed safely and efficiently. There is no rule of (competition) law that says that priority must, or must not, be given to one person rather than another. If traffic signal priority meant that traffic at a particular junction was stopped for an unjustified period of time before the appearance of the next NGT trolleybus and kept stationary for an unjustified period of time after the trolleybus had passed, there would be a good argument for saying that there was an abuse. If, on the other hand, traffic is halted only for a reasonable time, it is extremely difficult to see how traffic signal priority could be an abuse.
- 3.25 If NGT had a market share of 55% that is held over time, it would be capable of being an indicator of dominance⁷⁷, but this could only occur at some time in the future. In the current circumstances, a predicted market share is of no probative value, as NGT would be a new entrant into a market and therefore predictions as to what market share it might achieve and, if so, when, and as to the stability of the market share achieved at any one time, cannot be regarded as having the same degree of certainty as the merger of two existing undertakings in the same market.
- 3.26 If NGT had exclusive use of 40% of the total route length and traffic signal priority, it would not be indicative of a dominant position. Possession of those advantages is not sufficient to amount to a barrier to entry and expansion in the market because they do not affect the capacity of the existing road network to accommodate both existing and potential bus operators competing with NGT. It is the same if those factors are coupled with a predicted market

⁷⁶ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraph 10.056(e)

⁷⁷ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraphs 10.024, 10.026 and 10.028

share of 55% because the predicted market shares do not have any probative value in the present context.

- 3.27 If existing bus operators maintained, halved or increased current levels of service, they would be countervailing market power. Competitors may use their market power to counter competition from an allegedly dominant undertaking. However, it cannot be concluded that NGT would be dominant and it is premature and speculative to assert that NGT might at any time be so. If existing bus operators halved their services as a result of NGT, it does not follow that NGT would then be dominant. If NGT increased ticket prices, it could find that that encouraged the existing bus operators to put on more capacity and there would then be a shift of business back to the existing bus operators. As NGT would then be unable to maintain its market share, it would not be regarded as dominant even if, in the meantime, the existing bus operators had halved services. The mere threat that existing bus operators might put back additional capacity onto the roads could be sufficient to constrain NGT from possessing a high market share.
- 3.28 In general terms, pricing can amount to an abuse of a dominant position if the undertaking in question occupies a dominant position and its pricing is: (i) excessively high, which is pricing at levels that exceed what would be achievable in a 'normal' competitive environment having regard to the economic value of what is being supplied⁷⁸; (ii) predatory, which is pricing at a level that is so low that it has no economic purpose other than to drive out competitors⁷⁹; or (iii) discriminatory⁸⁰.
- 3.29 In order to determine whether or not pricing is excessively high, a comparator may be used⁸¹. On this basis, pricing broadly equal to the conventional bus network would not be regarded as excessively high. New entrants into a market are typically obliged to price relatively low in order to obtain a foothold

⁷⁸ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraphs 10.106 and 10.109

⁷⁹ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraph 10.070

⁸⁰ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraphs 10.081 and following

⁸¹ Document OBJ 923 FWY/160 Tab 7: Bellamy & Child, *op cit*, paragraph 10.111

in the market, and undertakings may be forced to price at a particular level because that is the competitive level in the market in question⁸². Accordingly, pricing broadly equal to that of the conventional bus network would not appear to be predatory pricing. With regard to discriminative pricing, NGT does not intend to engage in the type of discriminative pricing that would fall foul of the Chapter II prohibition because, any variations in ticket pricing would apply to travellers (as opposed to customers who are themselves undertakings in their own right) and would follow conventional lines.

- 3.30 An undertaking in a dominant position is not obliged to supply anything to a competitor. A refusal to give access to (or supply) an essential facility can be an abuse of a dominant position but an essential facility is something that it is necessary to have access to in order to serve a particular market. As FWY has access to the existing road network and is actually serving the market by that means, it cannot be said that the facilities that the Promoters propose to construct amount to an essential facility to which they are obliged to give FWY (or anyone else) access.
- 3.31 Conventional buses would benefit from significantly more priority than at present⁸³, thereby enhancing the ability of bus operators to keep to scheduled journey times. NGT would be given a very high degree of priority so that, wherever possible, NGT would not stop at traffic signals. There are objective factors⁸⁴ that explain why existing bus services cannot be given the same level of priority as NGT. Therefore, what is envisaged is not anti-competitive. The ability of existing bus operators to provide services would not be reduced as a result of the signalling arrangements but would be improved. As the inability to give existing bus services the same level of priority as NGT is objectively justified, the end result is not anti-competitive.
- 3.32 The fact that an operator proposes to offer customers '*new higher quality*' and '*greater punctuality and substantially better journey times than bus services*'

⁸² Document OBJ 923 FWY/160 Tab 7: Quotation set out in Bellamy & Child, *op cit*, paragraph 10.080

⁸³ Document APP-6-2: Mr Robertson PoE paragraphs 3.9 to 3.30

does not mean that that operator must perforce charge premium fares. In conditions of undistorted competition, operators must normally charge a price that reflects the prevailing level of competition in the market.

- 3.33 A '*whole corridor bus service integration strategy*' or '*integrated ticketing across the wider network*' concerns the hypothetical introduction of a West Yorkshire QCS. A QCS can be introduced only pursuant to statute. If a QCS might be adopted in a form that would be anti-competitive, it would then be either lawful or unlawful. If the latter, it should not have got through the statutory process in the first place.
- 3.34 If the Promoters let the contract for the operation of NGT and take the revenue risk, the Promoters would themselves be responsible for setting NGT fares and would set the revenues so raised against the cost of running NGT, which would be undertaken by the operator selected by the Promoters. There are sufficient statutory safeguards against the risk of WYCA's position as one of the Promoters skewing the formulation or operation of the QPS or QCS.
- 3.35 A conflict of interest, or the risk of WYCA being drawn into anti-competitive behaviour, would arise only if WYCA (i) allowed itself to be used as a conduit for the transmission of confidential information concerning factors relevant to competition from one competitor to another, or was a party to some other form of agreement or arrangement between competitors caught by the Chapter I prohibition; or (ii) used its position to favour NGT over competing operators. The possibility of (i) and (ii) occurring would exist in any event, even in the absence of NGT, and already exists so far as every local transport authority in the country is concerned. The risk of either possibility eventuating can be addressed by simple and commonsense means.

Response on behalf of FWY (OBJ 923)

The material points⁸⁵ were:

⁸⁴ Document APP-6-2: Mr Robertson PoE paragraphs 3.22 to 3.30

⁸⁵ Document OBJ 923 FWY/159: FWY Closing Submissions Appendix 8- response by King & Wood Mallesons LLP 28 October 2014

- 3.36 The analysis for the Applicants does not consider the issue of whether the Promoters are acting as 'undertakings'. The conclusion that no dominant position is created, and hence that there can be no Chapter II infringement, is based on a wider definition of the relevant market than proper analysis would suggest. A complete analysis of the possible competition law issues would have considered Article 106 of the Treaty on the Functioning of the European Union (TFEU). Any such consideration would have concluded that the Order raises a number of potentially difficult issues. Moreover, there is recent case law from the Court of Justice of the European Union (CJEU) which, if applied to this case, increases the likelihood of the Order and resulting NGT being found contrary to EU competition law; and whether the proposals for NGT, including the reservation of road infrastructure for use by a trolley vehicle service, infringe the prohibition against illegal State aid found in the TFEU. As a consequence, the conclusions reached cannot and should not be relied upon.
- 3.37 It is incomplete to state that making the Order would not necessarily give rise to a competition law infringement contrary to Chapter I of the Competition Act 1998 because it would not necessarily give rise to collusion or cooperation between two or more undertakings, in that it fails to consider the pre-requisite for the application of Chapter I, namely that the conduct is carried out by an 'undertaking'. An undertaking comprises any natural or legal person carrying on commercial or economic activities relating to goods or services, irrespective of their legal status⁸⁶. Accordingly, the question to have been considered should have been whether the Promoters would be regarded as undertakings within the meaning of competition law.
- 3.38 Competition law takes a functional approach to determining whether an entity, when engaging in an activity, does so as an undertaking within the meaning of competition law⁸⁷. The key question appears to be whether the entity is

⁸⁶ Document OBJ 923 FWY/160 Tab 8: Case C-41/90 *Höfner and Elser v Macrotron* [1991] ECR I-1979 [1993] 4 CMLR 306 and Document OBJ 923 FWY/160 Tab 11: Case T-319/99 *Fenin v Commission* [2003] ECR IT-357, upheld on appeal, Case C-205/03 P [2006] ECR I-6295, [2006] 5 CMLR 559

⁸⁷ Document OBJ 923 FWY/160 Tab 13: Case C-67/96 *Albany International BV v SBT* [1999] ECR I-5751 Opinion of Advocate General Jacobs

engaged in an economic activity⁸⁸, as opposed to one of a more public law nature or one involving elements of solidarity. A health authority that purchased certain services from undertakings and which sought to recover its costs as far as possible from service users was considered to have been acting as an undertaking by the Competition Appeal Tribunal⁸⁹. In this case, there is material from which it is possible to conclude that the Promoters are likely to be acting as undertakings⁹⁰. The question that should, therefore, have been considered is whether the Promoters were acting as undertakings, as well as the resulting question of whether any agreement they concluded with a NGT operator could be an anti-competitive agreement within the meaning of the Chapter I prohibition. In so far as these issues were not considered, the conclusion reached in relation to the Chapter I prohibition is undermined.

3.39 In concluding that the Order and NGT would not infringe the Chapter II prohibition because it would not create a dominant position which forces the operator of NGT to engage in abusive conduct, the analysis is incomplete. In the case of the Chapter II analysis, the incompleteness concerns the analysis of the market⁹¹. Having defined the market broadly, the conclusion given is that the operator of NGT could not be dominant, thereby disposing of a scenario which could bring about an infringement of the Chapter II prohibition. Had a proper market definition exercise been performed, it would have concluded that the relevant market was narrower. This incomplete market definition completely undermines the conclusion that the NGT operator would not be dominant.

3.40 Market definition must be considered afresh in every case and it is trite law that a previous finding of dominance cannot be relied upon in subsequent

⁸⁸ Richard Whish *Competition Law*, Seventh edition, Chapter 3 pages 84 to 91

⁸⁹ Case *Bettercare v The Director General of Fair Trading* Case No 1006/2/1/01 [2002] CAT 7, [2002] CompAR 299

⁹⁰ Document APP-4-2 Mr Henkel PoE paragraph 4.12: ‘...the Promoters will be responsible for setting NGT fares. The revenue collected from fares will be set against the cost of delivering the service’

⁹¹ Document APP/190: Legal Opinion of K P E Lasok QC paragraph 7: states that the relevant market is for ‘passenger transport services...irrespective of the mode of transport’, and includes taxis and private cars

cases⁹². Nevertheless, market definition exercises provide a useful starting point. Of relevance in this regard is the finding of the Competition Commission in its 2011 report into local bus services⁹³, that private cars did not form a competitive constraint on bus operators nor did taxis⁹⁴. The effect of this was to exclude private cars and taxis from the definition of the market.

- 3.41 It is not obvious why a similar conclusion would not be reached in this case and the 2011 Competition Commission report provides a strong indication that the market has been defined too widely. In any event, before reaching any conclusions on market definition, it is necessary to carry out market studies and research to understand, inter alia, consumer preferences. No such studies or research appear to underpin the market definition given.
- 3.42 Accordingly, the incomplete approach to market definition completely undermines the basis for the conclusions that (i) the NGT operator would not be in a dominant position and (ii) the Order could not bring about an infringement of the Chapter II prohibition. Considerable further work, including market research, would be required before any such conclusions could be reached.
- 3.43 There is a failure (expressly)⁹⁵ to consider whether the Order and NGT breach competition law provisions other than the Competition Act 1998. Article 106 of TFEU, in so far as relevant, precludes Member States from creating or maintaining in relation to undertakings to which they grant special or exclusive rights, any measures that are contrary to the competition rules of the EU, including the rules that preclude abuse of dominant positions.
- 3.44 As a threshold issue, to be caught by EU law, a measure must be capable of affecting trade between Member States. This is not necessarily a high

⁹² Document OBJ 923 FWY/160 Tab 17: T-125/97 and T-127/97 and Case *Coca-Cola Company v Commission* [2000] ECR II 1733

⁹³ Document G-4-72: Competition Commission, *Local Bus Services Market Investigation A report on the supply of local bus services in the UK (excluding Northern Ireland and London)* 20 December 2011

⁹⁴ Document APP/190: Legal Opinion of K P E Lasok QC paragraphs 7.50 to 7.51

⁹⁵ Document APP/190: Legal Opinion of K P E Lasok QC paragraph 8 may obliquely considered

hurdle⁹⁶. Moreover, it appears to be suggested⁹⁷ that EU competition law principles should apply in the same way to wholly domestic situations ie those without the requisite effect on intra-Community trade.

- 3.45 It is clear that the traffic priority rules and the dedicated traffic lanes that NGT would enjoy would be special or exclusive rights within the meaning of Article 106 of TFEU. It is also clear that the effect of reserving road space to the trolley vehicle service would be to reduce the road space available to competing bus services. As such, NGT would clearly '*affect the structure of the market*' '*by creating unequal conditions of competition between companies*'⁹⁸. The CJEU has recently confirmed that precisely such measures are precluded by Article 106 of TFEU. As no consideration was given to Article 106 of TFEU, the conclusion reached as to the compatibility of the Order and NGT with competition law was incomplete.
- 3.46 No consideration is given as to whether the proposals for NGT are contrary to the EU state aid rules⁹⁹, which concern advantages provided to undertakings by or through state resources. The question of whether allowing black cabs, but not private hire vehicles, to use bus lanes in London during certain times of day was considered by the Court of Appeal, who required the guidance of the CJEU under Article 267 of TFEU. The opinion of the Advocate General, which was handed down on 24 September 2014, concluded that such favourable treatment of black cabs was capable of constituting state aid¹⁰⁰. The CJEU ruling on the point will be of relevance to the question of the compatibility of the Order and resulting NGT with the EU state aid rules.

it, but that analysis is incomplete

⁹⁶ For example Document OBJ 923 FWY/160 Tab 16: Case C-280/00 *Altmark* [2003] ECR I-7810: European Court found the requisite effect on trade in cases involving bus services in a particular part of Germany

⁹⁷ Document APP/190: Legal Opinion of K P E Lasok QC paragraph 8

⁹⁸ Document OBJ 923 FWY/160 Tab 10: Case C-553/12 P *DEI* 17 July 2014: European Court found the requisite effect on trade in cases involving special rights to extract lignite in Greece paragraphs 46 and 68

⁹⁹ The general state aid rules are in Document OBJ 923 FWY/160 Tabs 4 and 5: Articles 107 and 108 of TFEU; the transport specific provision is Article 93 TFEU

¹⁰⁰ Document OBJ 923 FWY/160 Tab 1: Case C-518/13 *R (Eventech Ltd) v The Parking Adjudicator* Advocate General Wahl 24 September 2014

- 3.47 If NGT does, potentially, involve a grant of aid, it may not be implemented until the European Commission has been given the opportunity to consider its compatibility with the EU state aid rules. The only relevant exception to this directly effective notification and standstill obligation concerns '*public service compensation for the operation of public passenger transport services*'¹⁰¹. However, this has been omitted, which undermines the robustness of the conclusions reached.
- 3.48 As described above, a number of important competition law issues that the Order and NGT may raise were not considered, which undermines the conclusions reached on the Chapter I and Chapter II prohibitions.
- 3.49 In addition to the incompleteness of the Chapter I and Chapter II analysis, no firm conclusion could be reached about the compatibility of the Order and NGT with competition law without considering Article 106 of TFEU¹⁰² and the EU state aid rules. Recent developments in the case law have increased the risk of the Order and NGT being considered contrary to Article 106 of TFEU and the CJEU is currently considering the compatibility with the state aid rules of a scheme that shares certain features with NGT.
- 3.50 Accordingly, before any conclusion is reached on whether to authorise the Order and resulting NGT, it is important that all relevant potential competition law issues should be thoroughly and properly explored. These issues include carrying out the market research and studies required to form a proper view on market definition, considering the applicability of Article 106 of TFEU and, in relation to the EU rules on state aid, considering whether the Scheme is such that the obligation to notify the European Commission is triggered.

The Applicants' Final Response

- 3.51 The Applicants have indicated at the Inquiry that they will respond directly to the Secretary of State. This does not form part of this Report.

¹⁰¹ Document OBJ 923 FWY/160 Tab 14: Article 9 of Regulation 1370/2007 [2007] OJ L315/1

¹⁰² Document OBJ 923 FWY/160 Tab 3

Inspector's Conclusions on Competition Law¹⁰³

- 3.52 At the close of the Inquiry the Applicants had not replied to the final points made by FWY regarding competition law, but indicated that their response would be directed to the Secretary of State. Therefore, I am not in a position to consider those points that the Secretary of State should have before him in my conclusions. **[3.51]**
- 3.53 The Promoters, which include WYCA, would have ownership and control over NGT, with a commercial incentive to protect the significant investment in the Scheme, and would be responsible for all public transport, creating a potential conflict of interest. Also, NGT would be offered a higher priority at signal junctions, exclusive use of segregated sections of road and a higher standard of stops than buses. As such, the bus operators could face unfair competition from the NGT, which would be in a dominant position on the corridors that it would serve. These matters would be open to bus operators taking legal action in terms of Competition Law. **[3.1 to 3.15]**
- 3.54 The prohibitions of anti-competition conduct are given in Chapter I and Chapter II of the Competition Act 1998. In this respect, the TWA Order would not necessarily give rise to anti-competitive conduct and would only infringe the Chapter II prohibition if it created a dominant position and constrained the behaviour of NGT to force it to engage in abusive conduct. NGT would not necessarily create a dominant position, as it would not create a monopoly and any position would be dependant upon unpredictable future events. I am satisfied that the proposed ticket pricing and potential behaviour of the competing bus operators would not show that the NGT was dominant. However, if in the future NGT obtained 55% of the share of that market and held on to it for a material time, it would be an indication of dominance. **[3.16 to 3.18, 3.25 to 3.29]**
- 3.55 There is a degree of uncertainty over what constitutes the 'relevant market' in terms of where the NGT would have to compete and over which it could give

¹⁰³ In these conclusions, references thus [] are to previous paragraphs in this report.

rise to a dominant position. As such, it could require the carrying out of market research and studies in order to form a proper view. **[3.19, 3.39 to 3.42, 3.50]**

3.56 In terms of an 'essential facility', which is the infrastructure that is essential to enable a competitor to compete, access to the relevant market should not be contingent upon access to the park and ride sites, segregated sections or signal priorities, as it would be normal to give them and not abusive. Furthermore, the bus operators would continue to have access over the highway. However, under Article 106 of the TFEU these could amount to special or exclusive rights, reducing the road space that would be available to competitors, and create unequal conditions of competition between companies. As the Promoters could be regarded as 'Undertakings' within the meaning of Competition Law, this could lead to litigation depending upon the agreement that would be reached with the NGT operator. **[3.20 to 3.24, 3.30 to 3.35, 3.36 to 3.38, 3.43 to 3.45]**

3.57 Whilst I have not seen any reply from the Applicants to the points made by FWY, I am concerned that there is uncertainty over whether the operation of the NGT would be anti-competitive in terms of the Competition Act 1998 and/or Article 106 of the TFEU. Furthermore, there is a question as to whether the Scheme would involve the grant of state aid, contrary to the EU state aid rules in Articles 107 and 108 of the TFEU. Therefore, based on the evidence that was before me, I would advise that there could be grounds for taking legal action under competition law should the TWA Order be made and NGT be operated in accordance with the Order and proposals. **[3.46 to 3.50]**

Waiver of Legal Privilege

Submissions for FWY (OBJ 923)

The material points¹⁰⁴ were:

- 3.58 The Applicants have indicated that legal advice had been received from DLA Piper which advises that discussing FWY's response to LTVS with FWY in order to model and design the Scheme would have been unlawful because it would favour FWY over other operators¹⁰⁵. FWY have asked for any such advice to be disclosed and it has not been.
- 3.59 The Promoters have partly revealed and expressly relied upon the substance of what was suggested was contained in legal advice¹⁰⁶. As the Promoters have waived their privilege in respect of part of the advice, they have waived privilege attaching to the entirety of that advice¹⁰⁷. Previous case history and the above actions are enough to require the disclosure of the legal advice.
- 3.60 In addition, as the Promoters are public bodies, the legal advice is 'environmental information' for the purposes of the Environmental Information Regulations 2004 (EIR2004)¹⁰⁸. Under Regulation 12(1) of the EIR2004 environmental information must be disclosed on request unless one of the exceptions applies and *'in all circumstances the public interest in maintaining the exception outweighs the public interest in disclosing the information'*. The legal advice being withheld does not fall within the scope of exception under

¹⁰⁴ Document OBJ 923 FWY/159: FWY Closing submissions Appendix 7- Waiver of Legal Privilege regarding advice that Mr Henkel said he received from DLA namely that Metro should not engage in discussions with bus operators as to potential impact of NGT on bus services and operations

¹⁰⁵ Mr Henkel in cross examination

¹⁰⁶ Mr Henkel in cross examination

¹⁰⁷ Document OBJ 923 FWY/163 Cases *Dunlop Slazenger International Limited v. Joe Bloggs Sports Limited* [2003] EWCA Civ 901 and *Chandris Lines v Wilson & Horton* [1981] 2 NZLR 600 at [26], Informal tribunal in *Kirkaldie v Information Commissioner and Thanet* DC 4 July 2006 and Document OBJ 923 FWY/161 Tab 11: *Paragon Finance v Freshfields* [1999] 1 WLR 1183 F-G L Bingham

¹⁰⁸ Document OBJ 923 FWY/161 Tab 1: The Environmental Information Regulations 2004 Regulation 2(c)

Regulation 12(5)(b)¹⁰⁹ and none of the exceptions in the EIR2004 expressly cover legal professional privilege.

- 3.61 Taking together the United Nations Guidance¹¹⁰ and the express presumption in favour of disclosure, not all the matters which have traditionally been regarded as enjoying legal professional privilege are covered by the 'course of justice' exception. As the legal information in question was not provided in respect of litigation but expressly relied upon in arriving at an administrative determination, in the interest of transparency and having regard to the spirit and provisions of the EIR2004, the information should be disclosed.
- 3.62 In any event, the Promoters have not been able to show that they would suffer an adverse effect if the advice were disclosed or be able to satisfy the public interests test. It cannot be in the public interest for an administrative decision to be made expressly on the basis of legal advice and for that legal advice not to be fully disclosed, particularly if the decision becomes the subject of a legal challenge.

The Applicants' Response

The material points¹¹¹ were:

- 3.63 There has been no waiver of legal privilege relating to the content of advice given. A distinction is to be drawn between a reference to the effect of a document and reliance on the content¹¹². The submissions relate to a reference case not a deployment case¹¹³.
- 3.64 The time for a party to seek disclosure was at the Inquiry before making

¹⁰⁹ Document OBJ 923 FWY/161 Tab 8: Case *Wheeler v Le Marchant* [1881] 17 Ch D 675: Litigation privilege is broader in scope than legal advice privilege which applies to 'client-lawyer' communications

¹¹⁰ Document OBJ 923 FWY/161 Tab 2: The United Nations interpretation Guide to the Aarhus Convention

¹¹¹ Document APP/221: Closing Submissions on behalf of the Applicants page 168 paragraphs 848 to 850

¹¹² Document OBJ 923 FWY/163: *Dunlop Slazenger International Limited v. Joe Bloggs Sports Limited* [2003] EWCA Civ 901 at paragraph 11

¹¹³ Mr Henkel referred to advice he had received in order to explain why Metro had not engaged in detailed discussions with individual bus companies

closing submissions, by making an application for an order that the document be produced¹¹⁴. No such application was made.

3.65 No request was made under the EIR2004.

3.66 Disclosure of the advice given is not necessary to enable a decision to be made on the TWA Order¹¹⁵.

3.67 The Secretaries of State can safely proceed to making the TWA Order without considering the content of the advice given¹¹⁶.

Inspector's Conclusions on Waiver of Legal Privilege

3.68 I have based my conclusions on the effect that this matter would have upon the making of the TWA Order. In this respect, FWY only confirmed in writing that it was seeking disclosure in its closing submissions. It did not make an order for such disclosure at the Inquiry and no request had been made under the EIR2004.

3.69 I am satisfied that the disclosure of the advice given is not necessary to enable the Secretaries of State to make their decisions on the TWA Order, planning permission and associated consents. Therefore, although the administrative decision made appears to have relied on the basis of legal advice which has not been fully disclosed, this matter is not relevant to this Inquiry and only would become relevant if the decision made becomes the subject of a legal challenge.

¹¹⁴ Pursuant to section 250(2) of the Local Government Act 1972

¹¹⁵ FWY challenged the assumption made in the business case relating to bus operator reaction and gave evidence as to its likely reaction

¹¹⁶ Advice given to Mr Henkel regarding Metro engaging in detailed discussions with individual bus companies

Conservation of Biodiversity

Submissions for FWY (OBJ 923)

The material points¹¹⁷ were:

- 3.70 All public authorities have a statutory duty to have regard to the purpose of conserving biodiversity '*so far as is consistent with their functions*' set out in the Natural Environment and Rural Communities Act 2006 (NERCA). The duty is headed, '*duty to conserve biodiversity*' and requires that the decision-maker treat conservation of biodiversity as presumptively desirable and to properly inform his or herself about the nature and extent of the impacts¹¹⁸.
- 3.71 There has been a clear failure adequately to inform the Secretaries of State about the numbers of birds and bats that would be affected by the NGT project and accordingly it is not clear whether the effects could be mitigated adequately.
- 3.72 Article 1 of the Birds Directive¹¹⁹ applies to all naturally occurring wild birds. Article 2 requires that '*Member States shall take the requisite measures to maintain the population of the species referred to in Article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements*'. Article 3 states: '*In the light of the requirements referred to in Article 2,*

¹¹⁷ Document OBJ 923 FWY/159: FWY Closing submission paragraphs 294 to 306

¹¹⁸ Document OBJ 923 FWY/162: Section 40 of the Natural Environment and Rural Communities Act 2006; Cases *North Norfolk DC v Secretary of State for Communities and Local Government* [2014] EWHC 279 (Admin) at [52] and [65] ('presumptively desirable'); *East Northamptonshire DC v Secretary of State for Communities and Local Government* [2014] EWCA Civ 137, [2014] 1 P&CR 22 at [24] ('should ...be given careful consideration by the decision-maker for the purpose of deciding whether there would be some harm, [and] should be given 'considerable importance and weight' when the decision-maker carries out the balancing exercise.');

Thompson v First Secretary of State [2004] EWHC 1492 Admin at [32] ('Obviously in those circumstances the extent of the harm — how much harm would be occasioned — is relevant. As it seems to me, in carrying out the balancing exercise it is essential that the Inspector, so far as possible, should have before him all material facts and all necessary material information.'). Public authorities are obliged to ask themselves the right questions and take reasonable steps to acquaint themselves with the relevant information to enable them to answer it correctly (*Secretary of State for Education and Science v Thameside Metropolitan Borough Council* [1977] AC 1014 at 1065B)

¹¹⁹ Document OBJ 923 FWY/162: Directive 2009/147/EC of the Parliament and Council, 30

Member States shall take the requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Article 1. 2. The preservation, maintenance and re-establishment of biotopes and habitats shall include primarily the following measures: (a) creation of protected areas; (b) upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones; (c) re-establishment of destroyed biotopes; (d) creation of biotopes.'

- 3.73 No assessment has been done of the populations of the relevant species and how they would be affected by the NGT project, and no attempt has been made to count how many birds of the protected species would be affected. It is therefore impossible to determine whether the proposed tree planting and new 'pocket park' would be adequate to establish a sufficient area and diversity of habitats for the birds concerned. There is accordingly a clear breach of section 40 of the NERCA if the Order is made without that assessment having been done, and clear potential for breach of Articles 2 and 3.
- 3.74 Article 5 provides: '*...Member States shall take the requisite measures to establish a general system of protection for all species of birds referred to in Article 1, prohibiting in particular: (d) deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant having regard to the objectives of this Directive*'.
- 3.75 Such a system of protection requires that harm be effectively prevented in advance¹²⁰. There is no provision or derogation on grounds of imperative reasons of overriding public interest. If birds are discovered which are required to be disturbed in order to construct the NGT project, and disturbance would be significant, then it is too late if the Order has already been made to

November 2009 on the conservation of wild birds

¹²⁰ Document OBJ 923 FWY/162 Cases C-383/09 *Commission v France* at paragraph 20; C-103/04 *Commission v Greece* at paragraphs 39-40; and C-183/05 *Commission v Ireland* at paragraphs 30 and 34

prevent this and the Directive would be breached.

- 3.76 Very similar provisions apply under the Habitats Directive to bats. Article 12 of the Directive states: *'Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV (a) in their natural range, prohibiting: (a) all forms of deliberate capture or killing of specimens of these species in the wild; (b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration; (c) deliberate destruction or taking of eggs from the wild; (d) deterioration or destruction of breeding sites or resting places.'*
- 3.77 Derogation is possible if a licence is granted by the SofS¹²¹, after consulting Natural England (NE), on the basis that there are 'Imperative Reasons of Overriding Public Interest (IROPI) *'including those of a social or economic nature'*, there is *'no satisfactory alternative'* and *'the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'*¹²². The SofS must, in determining the TWA Order application, consider whether he would grant such a licence. He has a duty to 'secure compliance' with the requirements of the Habitats Directive¹²³. This goes beyond merely having regard to the Directive. Securing compliance means preventing harm, not relying on criminal punishment after the harm has been done¹²⁴.
- 3.78 There is no requirement that a disturbance be 'significant' before it is prohibited. The Supreme Court has held that there has to be a *'sufficient negative impact'* on the species as a whole rather than individual members of

¹²¹ The SofS is the 'relevant licensing authority' pursuant to the Conservation of Habitats and Species Regulations 2010 Regulation 56(3)(a)

¹²² Document OBJ 923 FWY/162 Tab 5: Habitats Directive Article 16; and Conservation of Habitats and Species Regulations 2010 Regulation 53 paragraphs (1), (2)(e), (9) and (11)

¹²³ Document OBJ 923 FWY/162 Tab 11: Conservation of Habitats and Species Regulations 2010 Regulation 9(1)

¹²⁴ For example Document OBJ 923 FWY/162 Tab 22: *Commission v France*, Case C-383/09 at [20]-[21] and [37] and Case C-103/00; Document OBJ 923 FWY/162 Tab 21: *Commission v Greece* at [34]-[40] where prohibitions on activities did not prevent them being carried on and the member state were held not to be in compliance

the species¹²⁵, but has since held that '*The starting point in interpretation is ...the different language versions of the text, to understand their purpose and scheme. But regard must be had to the objectives of the relevant provisions of Union law as a whole and its state of evolution, and recourse to the travaux préparatoires may be an important aid to identification of the correct meaning. ...Where the legislature has agreed a clearly expressed measure, reflecting the legislators' choices and compromises in order to achieve agreement, it is not for courts to rewrite the legislation, to extend or 'improve' it in respects which the legislator clearly did not intend*¹²⁶. This subsequent approach of the Supreme Court is correct.

- 3.79 Accordingly, if the SofS considers that there would be 'disturbance' to some degree, he must then consider whether there are sufficient grounds for derogation. He cannot come to a view about the significance of the populations concerned, or weigh up whether IROPI are established, without being presented with any quantitative information about the total number of individual creatures of each species affected. He cannot conclude that there is no satisfactory alternative which would cause less harm, since it would be possible to deliver significant improvements with other alternatives without damaging mature trees, demolishing the buildings known to be used as bat roosts or taking such a large area of land for park and ride. Nor can he guarantee that a favourable conservation status would be maintained with the information that has been provided.

The Applicants' Response

The material points¹²⁷ were:

- 3.80 The submission that the Supreme Court's decision in 'Morge' was wrong is rejected and cannot be accepted by the Secretaries of State.

¹²⁵ Document L-APP-6: Supreme Court Case *R(Morge) v Hampshire CC* [2011] UKSC 2; [2011] 1 WLR 268 at [19] Lord Brown

¹²⁶ Document OBJ 923 FWY/163 Tab 34: Supreme Court Case *R (Bucks CC) v Secretary of State for Transport* [2014] UKSC 3; [2014] 1 W.L.R. 324 at [169] and [171] Lord Neuberger

¹²⁷ Document APP/221: Applicants' Closing paragraphs 519 to 521

- 3.81 Together with the criminal offence created by Regulation 41 of the Conservation of Habitats and Species Regulations 2010, the derogation procedure established by these Regulations, secures compliance with the Habitats Directive. The correct approach to the determination of the current application is as per the Supreme Court's decision in 'Morge'. The assessment undertaken in the Ecology chapter of the ES is sound. There is no basis whatsoever for an assertion that approving the Order would constitute a breach of section 40 of the NERCA.
- 3.82 The SofS has ample information on which to assess the Scheme's likely ecological impacts. Likewise the assertion that the SofS cannot assess now whether there are IROPI only arises at the derogation (ie licensing) stage. The question for the SofS now is whether the proposed development would be likely to offend Article 12(1) and unlikely to be licensed under the derogation powers¹²⁸. Given that NE do not object to the Scheme, there is no reason to suppose that a licence would not be granted.

Inspector's Conclusions on Conservation of Biodiversity

- 3.83 The main concerns raised by FWY appear to me to be regarding the deficiencies in the level of information that has been relied upon to identify the effect of the Scheme on breeding birds and bats. In this respect, the ecology chapter of the ES includes information on which to assess the Scheme's likely ecological impacts and NE has not objected to the Scheme, subject to the imposition of appropriate planning conditions. The evidence that has been given does not prove that the approach to be taken in the determination of the current application should not be as per the Supreme Court's decision in Morge or that approving the Order would constitute a breach of section 40 of the NERCA. As such, insufficient information has been provided to show that the Scheme would be likely to offend Article 12(1) and therefore be unlikely to be licensed under the derogation powers.

¹²⁸ Approach set out in Documents L-APP-6 and L-APP-7: *Morge* and *Prideaux*

The Legality of the Appropriation of Public Open Space

Submissions for the Friends of Woodhouse Moor (OBJ 1623)

The material points¹²⁹ were:

- 3.84 The proposals for NGT require the use of 9 parcels of land held by LCC as public open space. In order to use that land, advice was received suggesting that the land would need to be appropriated under section 122 of the Local Government Act 1972 (LGA1972)¹³⁰. An Officer's Report (OR) dated 18 December 2013 summarises objections that were received from the consultation and recommends appropriation of the land. On 8 January 2014 the LCC Director of City Development approved appropriation under his delegated powers. It appears that the decision to appropriate the land was properly authorised.
- 3.85 The three main requirements that must be satisfied in order to appropriate land under section 122 of LGA1972 are:
- The land must already belong to the Council;
 - It must be appropriated for a purpose for which the Council is authorised by statute to acquire land; and
 - The land must no longer be required for the purpose for which it is currently held.
- 3.86 The Courts have held that the correct approach of whether land is '*no longer required*' is¹³¹:

¹²⁹ Document OBJ/1623-101: Legal opinion in respect of Woodhouse Moor and other open spaces: Advice written by Alexander Greaves, 7 October 2014

¹³⁰ Local Government Act 1972 Section 122 provides that '*(1) Subject to the following provisions of this section, a principal council may appropriate for any purpose for which the council are authorised by this or any other enactment to acquire land by agreement any land which belongs to the council and is no longer required for the purpose for which it is held immediately before the appropriation; but the appropriation of land by a council by virtue of this subsection shall be subject to the rights of other persons in, over or in respect of the land concerned.*'

¹³¹ Case R (Lorraine Elizabeth Maries) v The London Borough of Merton [2014] EWHC 2689 (Admin) King J at [59] summarised the principles from the Court of Appeal decision in *Dowty Boulton Paul Ltd v Wolverhampton Corporation (No 2)*

- 1) Whether land is still or is no longer required for a particular purpose, meaning no longer needed in the public interest of the locality for that purpose, is a question for the local authority, subject to Wednesbury principles, and not the court.
- 2) The statute is concerned with the relative needs or uses for which public land has been or may be put. It does not require it to fall into disuse before the authority may appropriate it for some other purpose.
- 3) The authority is entitled when exercising its appropriate power to seek to strike the balance between comparative local (public interest) needs between the need for one use of the land and another with the wider community interests at heart. It is for it to keep under review the needs of the locality and is entitled to take a broad view of local needs.

3.87 When land is appropriated for development, the same degree of 'requirement' or 'necessity' should be shown as with compulsory purchase¹³². It is irrelevant who the local authority proposes will carry out the activity or purpose specified, and it need not be carried out by the local authority itself. The OR and the Decision indicate that the open spaces were appropriated for '*planning purposes to facilitate the carrying out of the development proposed in the NGT TWA Order in accordance with section 226 of the Town and Country Planning Act 1990*'¹³³. LCC were entitled to conclude that there was sufficient necessity to facilitate the development of NGT to satisfy this requirement and it is therefore not unlawful for LCC to appropriate land to facilitate development which has not yet received consent.

3.88 Section 12 (1) of the TWA 1992 provides that an order under section 1 or 3 authorising a compulsory purchase shall be subject to Special Parliamentary Procedure (SPP) to the same extent as it would by virtue of Section 18 or 19

¹³² *R v Leeds City Council, ex p Leeds Industrial Cooperative Society Ltd* [1997] 73 P & CR 70 at 77

¹³³ Town and Country Planning Act 1990 section 226 (1) provides that: '*A local authority to whom this section applies shall, on being authorised to do so by the Secretary of State, have power to acquire compulsorily any land in their area (a) if the authority think that the acquisition will facilitate the carrying out of development, re-development or improvement on or in relation to the land.*'

of the Acquisition of Land Act 1981¹³⁴. Whilst it is clear from the OR and minutes that LCC have sought to appropriate the land so as to avoid the need for SPP, its reasons for this approach (to avoid the risk and delay posed by SPP) are perfectly understandable and do not necessarily mean that the appropriation was unlawful¹³⁵. There is nothing to suggest that LCC acted in bad faith when deciding to appropriate the land. The flaws which arise from this are more properly characterised as amounting to an irrelevant consideration, or pre-determination of the issue as to whether the open spaces were no longer required in the public interest.

- 3.89 With regard to the flaws, there is a flawed consultation and pre-determination¹³⁶. There is an additional consultation requirement where the land in question is currently held as public open space¹³⁷. LCC published notice of its intention to appropriate the land in the Yorkshire Post on 19 and 26 October 2013. The public were given until 9 November 2013 to respond. 152 objections were received. The timing of the consultation appears to indicate that it was not undertaken when the proposal was still at a formative stage and the objections were not conscientiously taken into account¹³⁸.

¹³⁴ Acquisition of Land Act 1981 Section 18 or 19 provide that open space which falls within a compulsory purchase order must be subject to SPP unless the appropriate Minister certifies that equivalent land will be given in exchange or the land in question does not exceed 250 square yards

¹³⁵ Kelly's Application for Judicial Review [2000] NI 103: took the view that a public body will not have acted unlawfully merely because of some subsidiary unauthorised purpose where the dominant purpose accorded with the purpose for which the powers were conferred was lawful

¹³⁶ R (Lewis) v Redcar and Cleveland BC [2009] 1 WLR 83 per Pill LJ at [68] provides the test for pre-determination as to whether the fair-minded observer would conclude that there was a real risk that minds were closed.

¹³⁷ Local Government Act 1972 Section 122 2A provides that '*A principal council may not appropriate under subsection (1) above any land consisting or forming part of an open space unless before appropriating the land they cause notice of their intention to do so, specifying the land in question, to be advertised in two consecutive weeks in a newspaper circulating in the area in which the land is situated, and consider any objections to the proposed appropriation which may be made to them.*'

¹³⁸ R v North and East Devon HA ex p Coughlan [2001] QB 213 summarised the requirements for consultation as: '*(i) It is undertaken when the relevant proposal is still at a formative stage; (ii) Adequate information is provided to the consultees to enable them to properly respond to the consultation exercise; (iii) Consultees are afforded adequate time in which to respond; and (iv) The decision-maker gives conscientious consideration to the consultees' response.*'

- 3.90 The NGT Project Board was anxious to avoid having to acquire the open spaces under the TWA Order, as that would trigger the need for replacement land or SPP¹³⁹. It appears that the Board had already decided how it would demonstrate that the open spaces were no longer required¹⁴⁰. This suggests not only that the decision to appropriate the land in order to avoid SPP had already been taken, but also that it had been made at a stage when the consultation had only just begun. The statement that a solution to any objections had already been dealt with suggests that the OR did not really give conscientious consideration to the subsequent public objections. This would have been passed onto the Director of City Development who ultimately made the decision.
- 3.91 In terms of pre-determination, it is clear that, despite the obvious desire to appropriate the land, it was clearly felt that it would be difficult to argue that the land at Woodhouse Moor was surplus. Also, it appears that following meetings with legal advisors the solution to this difficulty had been found before the consultation to ascertain the usage and need for the open spaces had barely begun. Finally, the OR dealing with Woodhouse Moor is poorly reasoned which is indicative of an attempt to massage the objections and shoe horn them into a conclusion that had already been decided.
- 3.92 It appears from the OR that, in making the decision to appropriate the open spaces, a number of irrelevant considerations were taken into account. LCC's wish to avoid SPP should not have formed part of the decision, and the decision of whether the open spaces were needed should not be made on the basis of whether there were adequate mitigation measures. If it could be demonstrated that LCC adopted a stance that the loss of a small part of a much larger area of open space was sufficient to demonstrate that the smaller

¹³⁹ Document H-7 Minutes of Meeting 16 September 2013 paragraph 4f: *'concerns that it will be difficult to designate the land on Woodhouse Moor as surplus'*, and Andrew Wheeler *'reiterated that the only other option was to consider Special Parliamentary Procedure which would introduce a greater risk to the project.'*

¹⁴⁰ Document H-7 Minutes of Meeting October 2013 paragraph 4f: after concern was raised that it would be *'difficult to argue the case for land being classed as surplus'*, Andrew Wheeler *'advised that this (was) being dealt with through mitigation, citing the improvements to*

area of land was not needed as recreational space per se, it would be an unlawful approach. It appears that a number of relevant representations relating to the loss of open spaces have been wrongly discounted, as it is not immediately clear from the OR why 69 objections referring in general terms to the loss of open space were discounted¹⁴¹.

3.93 The conclusion reached by LCC that the loss of the open spaces required for public recreation can be compensated through the provision of additional planting and environmental improvements to the remaining open spaces overcomes the threshold concerning consideration of whether a decision is irrational¹⁴². Moreover, the suggestion that activities currently undertaken on the land due to be appropriated could '*readily continue on the remaining land*' is not relevant, as this could always be possible to show provided that only part of the open space was being appropriated.

3.94 The development of the open spaces is contrary to local and national planning policies¹⁴³. LCC appear to be of the view that these policies would still be applicable to the open spaces¹⁴⁴. It seems logical to assume that appropriation would not affect the application of these policies. Whilst the decision to appropriate the open spaces was made in order to facilitate the development of NGT, the decision to grant the TWA Order and permit the Scheme must logically still take into account the fact that it will result in a loss of public open space. The best view is that the policies will continue to apply to open space that has been appropriated to facilitate development. Accordingly, there is no preclusion from taking the loss of open space into account when making the decision, and there is an obligation to consider it

Woodhouse Moor as an example.'

¹⁴¹ Officer's Report paragraph 3.3

¹⁴² *R v Ministry of Defence ex p Smith* [1996] QB 517 at 554 per Sir Thomas Bingham MR: '*Irrationality is a high threshold concerning consideration of whether it is beyond the range of responses open to a reasonable decision-maker*'

¹⁴³ Document D-2-9: Leeds UDP Policy N1- '*Development of land identified on the proposals map and city centre inset map II as *protected green space*, will not be permitted for purposes other than outdoor recreation, unless the need in the locality for green space is already met and a suitable alternative site can be identified and laid out as green space in an area of identified shortfall*' and Document : NPPF paragraph 74

and weigh any policy conflict against the other policies and benefits of the Scheme.

- 3.95 In conclusion, the open spaces were appropriated by LCC and it was not unlawful for them to be appropriated in advance of the TWA Order being made. The desire to avoid SPP does not, on its own, make the open spaces unlawful but the decision to appropriate the open spaces is likely to have been taken unlawfully. Finally, the appropriation does not preclude the loss of open space from being taken into account when deciding to make the TWA Order.

The Applicants' Response

The material points¹⁴⁵ were:

- 3.96 The open spaces were appropriated by LCC on 8 January 2014 pursuant to section 122 of the LGA1972. LCC advertised the proposed appropriation in the Yorkshire Evening Post on 19 and 26 October 2013 in accordance with the consultation requirements of section 122(2A) of the LGA1972. 152 objections were received. LCC resolved to appropriate the open space taking the objections into account. The decision to appropriate was lawfully made pursuant to the OR dated 13 December 2013¹⁴⁶ and the decision of the Director of City Development acting under delegated powers on 8 January 2014.
- 3.97 It was not unlawful for LCC to appropriate the open spaces in advance of the TWA Order being made. The desire to avoid SPP, which is not conceded by the Promoters, does not on its own make the appropriation of the open spaces unlawful. It is not agreed that the decision to appropriate the open spaces is likely to have been undertaken unlawfully, but in any event the appropriation has occurred as a matter of law. No legal challenge was brought, and it is now too late to bring one. Arguments that the appropriation was

¹⁴⁴ OR paragraph 4.1.6

¹⁴⁵ Document APP/221: Applicant's Closing Submissions in response to FWM's legal opinion in respect of the appropriation: Advice written by Alexander Greaves, 7 October 2014

¹⁴⁶ Document G-4-64

inappropriate and/or unlawful are without merit and irrelevant to the determination of the applications before this Inquiry.

- 3.98 The appropriation of the open spaces does not preclude the Inspector from taking the loss of the public open space into account when deciding to recommend that the TWA Order is made. The fact that the land is open, even though held for planning purposes, can be taken into account¹⁴⁷.
- 3.99 The appropriation took place in January 2014, which does not post date the TWA Order¹⁴⁸. Therefore, the time period for judicial review has expired.

Inspector's Conclusions on the Legality of the Appropriation of Public Open Space

- 3.100 It has been accepted by both parties that the open spaces were appropriated by LCC and it was not unlawful for them to be appropriated in advance of the TWA Order being made. There is no reason to believe that LCC acted in bad faith when it decided to appropriate the land. The alleged flaws in the consideration of public objections following consultation, the pre-determination on the basis of the need for the open spaces and the considerations that were taken into account in making the decision to appropriate the open spaces are insufficient to prove that that decision was taken unlawfully. In any event, as the appropriation took place in January 2014, the time period for judicial review has expired.
- 3.101 I agree with both of the parties that the appropriation of the open spaces does not preclude the Secretaries of State from taking the loss of the public open space, and that the land is open, into account when deciding whether the TWA Order is made.

¹⁴⁷ Document B-5: open space technical appendix Table 4.2: The assessment of impact on open space in the ES included consideration of impact on Woodhouse, Monument and Cinder moors including the land which has been appropriated: and Document APP/142 Figure 4.4

¹⁴⁸ Document OBJ 923 FWY/159: FWY Closing Submissions paragraph 537

4. THE CASE FOR THE APPLICANTS

The material points¹⁴⁹ were:

Introduction

- 4.1 There is little or no dispute that existing public transport provision is deficient¹⁵⁰ and that there is a need for improved public transport provision on the NGT corridors¹⁵¹. This position is held by a large number of those who appeared at the Inquiry. As a result, doing nothing is not an acceptable option. There is no other funded and deliverable alternative means of addressing the acknowledged need and meeting the Scheme objectives.
- 4.2 There are a significant number of supporters of the Scheme, including a diverse range of people and organisations such as the Civic Trust and the Leeds Chamber of Commerce¹⁵² who in turn represent a large number of businesses and people, Leeds University, Leeds Teaching Hospitals NHS Trust, Opera North, the local Members of Parliament, and the Leeds City Region Local Enterprise Partnership (LEP) board¹⁵³.
- 4.3 The Secretaries of State's Matters to be addressed are given below.

Matter 1-The aims and objectives of, and the need for, the proposed Leeds Trolley Vehicle System, between Holt Park to the north of Leeds, and Stourton to the south, via the City Centre (the Scheme)

- 4.4 The Scheme objectives are more detailed than, but complementary to, the three objectives of the 2011 to 2026 Third West Yorkshire Local Transport Plan (LTP3), developed by WYITA. The objectives of NGT are to:

¹⁴⁹.Document APP/221: Applicants' Closing Submissions

¹⁵⁰ Document C-1 Table 3.7 Identifies the problems and opportunities

¹⁵¹ OBJ 923 Mr Cheek and Mr Turner cross examination accepted this in giving evidence on behalf of FWY

¹⁵² Document A-01-3 paragraph 5.4

¹⁵³ Document C-2-10

1. Support and facilitate the sustainable growth of Leeds, recognising the importance of its City Centre to the future economy of the Leeds City Region;
2. Maximise growth of the Leeds economy by enhancing its competitive position and facilitating future employment and population growth;
3. Improve the efficiency of the City's public transport and road networks;
4. Support and facilitate targeted regeneration initiatives and economic growth in the more deprived areas of Leeds;
5. Reduce transport's emissions of CO₂ and other greenhouse gases;
6. Promote quality of life through a safe and healthy built and natural environment; and
7. Contribute to enhanced quality of life by improving access for all to jobs and services¹⁵⁴.

4.5 In addition to the objectives, the Promoters have the following Vision Statement for the Leeds NGT Scheme:

'New Generation Transport: creating a modern, reliable and integrated transport system for Leeds and the City Region.

One of the city's key transformational projects, the NGT trolleybus system is key to creating an integrated rapid transport network for Leeds to support the city's future development, transform public transport and offer a real and attractive alternative to travel by car.

*NGT will be modern, accessible, energy efficient and clean, providing a high quality transport system that offers passengers improved journey times and a frequent, reliable service. It will connect people to key employment sites, education, health and leisure facilities, acting as a catalyst and driver for economic growth and regeneration.*¹⁵⁵

4.6 A concise statement of these aims and objectives is given as follows: *'NGT is to be a modern, environmentally friendly public transport system for Leeds, offering frequent services in comfortable, high capacity trolley vehicles. NGT*

¹⁵⁴ Document A-01-2: Statement of Aims paragraph 3.2

¹⁵⁵ Document A-01-2: Statement of Aims paragraph 3.3

*will link key destinations in the city such as the Universities, the Arena, Trinity and the Royal Armouries. Journeys to the city centre will be up to 15 minutes quicker than existing buses. Passengers will be able to rely on regular and punctual arrival of 10 NGT vehicles per hour at safe and secure NGT stops with CCTV, lighting and passenger information systems. Car drivers will have the option of accessing NGT at the dedicated Park and Ride facilities at the outer ring-road in north Leeds and adjacent to Junction 7 of the M621 in south Leeds*¹⁵⁶.

- 4.7 At the heart of those objectives is the desire and aim to support and facilitate the sustainable growth of Leeds, by enhancing its competitive position. The link between transport infrastructure and economic prosperity has been long established and recognised¹⁵⁷. One of the ways in which Eddington's seminal report identified transport as supporting prosperity is by supporting deep labour markets and business to business connections in agglomerated urban areas¹⁵⁸.
- 4.8 Leeds, within the West Yorkshire agglomerated urban area, is a city with more jobs than employees¹⁵⁹, and experiences a net inflow of commuters¹⁶⁰. Although Leeds is identified as a city where public transport plays a significant role in commuting¹⁶¹, there is much more that can and should be done to encourage public transport use by both existing and future commuters.
- 4.9 The proportion of people accessing Leeds City Centre by public transport (bus or train) between 2004 and 2011 has remained at around 39%, while bus share of that proportion has declined from 28% to 22%¹⁶². Rail share has increased, but there is no rail alternative on the NGT corridors.

¹⁵⁶ Document A-01-2: Statement of Aims paragraph 3.4

¹⁵⁷ Document G-4-70 The Volterra report paragraph 4.2, Document G-4-62 The Eddington Report paragraphs 1.7 and 1.11

¹⁵⁸ Document G-4-62 Eddington Report paragraph 1.40

¹⁵⁹ Document C-1 paragraph 3.41 (460,000 jobs and 395,000 employees)

¹⁶⁰ Document C-1 paragraph 3.45

¹⁶¹ Document G-4-62 Eddington Report paragraph 1.62

¹⁶² Document APP-1-2: Farrington PoE paragraph 5.15 and Appendix C to REB 2: OBJ 1354, pages 9 and 10: Leeds Central Cordon: 2012 Traffic Flows, , inbound morning peak bus share reduced from 26.1% in 2000 to 21.2% in 2012, and outbound in the evening peak from 26.3%

- 4.10 There is therefore a strong economic imperative to introduce enhanced public transport services to sustain existing economic activity and to facilitate future growth.
- 4.11 Investing in infrastructure is a key part of the Government's economic strategy¹⁶³. Leeds is the only city in the top 30 'Best Cities to locate Business Today'¹⁶⁴ and the largest city in the UK¹⁶⁵ that does not have a rapid transport system. This demonstrates the correlation between growth and effective infrastructure.
- 4.12 The aim of improving the quality of life of the citizens of Leeds, and contributing to regeneration and growth are the core aims of the Promoters in advancing NGT. The formal Scheme objectives are identified and set out at Table 3.8 in the January 2014 Business Case Review¹⁶⁶. They were derived following a careful review of the relevant policy documents¹⁶⁷, and reflect the aims of the policies and priorities set by the relevant public authorities in Leeds and the Leeds City Region following appropriate consultation.
- 4.13 The means of meeting those objectives is set out in the relevant planning and transport policy documents. Those documents have been settled following extensive public consultation and deliberation. The plan led system lies at the heart of decision making¹⁶⁸, and therefore a scheme which addresses the deficiencies in a way which is consistent with established policy should be approved.
- 4.14 The UDP Review was adopted after the funding for the Supertram was withdrawn, but the decision was taken to maintain protection for the (north,

in 2000 to 23% in 2012

¹⁶³ Document APP 1-2 paragraph 6.1

¹⁶⁴ Document APP-1-3 Appendix 5: Transport Systems of the Best Cities to Locate a Business

¹⁶⁵ Document APP-1-2 paragraph 6.9

¹⁶⁶ Document C-1 page 3-35

¹⁶⁷ Document C-1-15 NGT Strategic Fit- a Review paragraph 2.7

¹⁶⁸ Document E-4-21 the NPPF first core planning principle set out at paragraph 17

south and east) routes¹⁶⁹, and to retain the park and ride allocations¹⁷⁰. Those routes and park and ride sites are those followed and proposed for NGT.

- 4.15 The NGT proposals are supported in the draft Core Strategy(CS)¹⁷¹. By the time that the SofS makes his decision the CS is likely to have been adopted¹⁷².
- 4.16 The NGT proposals are also consistent with and advance the objectives of the relevant economic policies. Economic policy is considered at the city region level. Leeds City Region (LCR), which has been identified for the purpose of fostering economic prosperity, comprises 10 local authority districts: Barnsley, Bradford, Calderdale, Craven, Harrogate, Kirklees, Leeds, Selby, Wakefield and York. It is the largest city region in the UK¹⁷³, home to 3 million people; and has the most financial and service sector workers outside of London and the largest number of manufacturing jobs of any LEP area¹⁷⁴, the Government having approved the creation of the LCR LEP. In September 2012, the Government and LCR signed a 'City Deal', securing the transfer of powers and funding from national to local government, in accordance with the Government's localism agenda¹⁷⁵. The City Deal focuses on, amongst other things, skills, inward investment and transport.
- 4.17 Leeds is the second largest metropolitan local authority in England¹⁷⁶. It contributes 31% of the total LCR GVA¹⁷⁷ and more in terms of Gross Value Added (GVA) per head than any other LCR district (£22,700 per head compared to £18,500 for LCR as a whole)¹⁷⁸; employs 113,000 people in the finance and business sectors, more than any other city outside London¹⁷⁹

¹⁶⁹ Document D-2-9 page 124: UDP Review policy T13

¹⁷⁰ Document D-2-9 policies T16 and T17

¹⁷¹ Document D-1-2 spatial policy 11, Map 9 and the Key Diagram

¹⁷² Document APP/198: the document was agreed to be adopted at the LCC meeting on 12 November 2014

¹⁷³ Document APP-1-2: Farrington PoE paragraph 5.1

¹⁷⁴ Document G-4-98 page 35: more people employed in manufacturing than any other LEP area

¹⁷⁵ Document APP-1-2 paragraph 3.18.

¹⁷⁶ Document APP 1-2 page 12 paragraph 5.4

¹⁷⁷ Document C-1-15, paragraph 3.2

¹⁷⁸ Document APP-1-3 Appendix 3

¹⁷⁹ Document APP-1-2 paragraph 5.6

(36,500 creative industries employees, the largest centre outside London, and 340,000 service sector employees¹⁸⁰); and is expected to provide 44,600 (32%) of the Yorkshire and Humber region's new jobs between 2013 and 2023¹⁸¹. It is already home to over 25% of all the jobs in Leeds District¹⁸² and has very significant potential to create new jobs over the same period and beyond¹⁸³; and its population is forecast to grow by just under 12% (a little under 90,000 people) over the next 6 years, significantly higher than both the regional and national forecasts (7% and 8.6% respectively)¹⁸⁴.

- 4.18 The LEP has developed a Strategic Economic Plan¹⁸⁵ (SEP) in response to the Government's invitation to all LEPs to agree Local Growth Deals for their areas. The SEP sets out the LEP's long term vision for the City Region Economy, and also forms the basis for the LEP's Growth Deal negotiation with central Government¹⁸⁶. One of the key priorities identified in the SEP is to develop the infrastructure for growth. The NGT project is identified as one of the key actions/activities under Priority 4¹⁸⁷.
- 4.19 In line with the Government's thinking to consider creating new Combined Authorities to oversee the new localised powers and funding as to the proper administration of local governance, the West Yorkshire Combined Authority came into being on 1 April 2014¹⁸⁸.
- 4.20 West Yorkshire plus Transport Fund (WYTF) is one element of the City Deal and envisages funding for extension(s) to NGT, including to the Aire Valley as line 3 should the current TWA Order be made for lines 1 and 2¹⁸⁹. However,

¹⁸⁰ Ibid

¹⁸¹ Document APP-1-3 Appendix 8

¹⁸² Document APP-1-2 paragraph 5.11

¹⁸³ Document APP-1-3 Appendix 9: Employment Background Paper 2012, page 3

¹⁸⁴ Document APP-1-2 paragraph 5.5 and Document C1 paragraph 3.38.

¹⁸⁵ Documents APP-1-3 Appendix 6 (January 2014 draft) and G-4-98: Strategic Economic Plan March 2014

¹⁸⁶ Document G-4-98 page 3

¹⁸⁷ Document G-4-98 pages 28, 92, and 129

¹⁸⁸ The West Yorkshire Combined Authority Order 2014: SI 2014/864

¹⁸⁹ Document G-4-26: West Yorkshire plus Transport Fund Prospectus

as DfT legacy funding forms part of the baseline for the fund, no allocation within the fund is made for the north and south lines.

- 4.21 The Scheme objectives, and the Scheme proposals, are closely aligned to and fit with the relevant planning, economic and transport policies for Leeds and the LCR.
- 4.22 The NGT route corridor has been selected following rigorous analysis of all the City's transport corridors¹⁹⁰. Leeds suffers from serious road congestion¹⁹¹. All the City's radial routes suffer from peak hour congestion adding to journey times by 80% or more compared to daytime free flow travel times. The A660 is amongst the worst affected routes¹⁹² with congestion adding more than 100% to journey times in both the morning and evening peaks¹⁹³. Capacity constraints on the network prevent any further growth in peak hour traffic (both am and pm), and as a result any growth that has occurred has been in the hours that shoulder the peaks¹⁹⁴.
- 4.23 There is a clear need for improved public transport in Leeds in general and on the NGT corridor in particular. The identified public transport deficiencies on the A660 corridor are punctuality¹⁹⁵, reliability and journey time, which are matters that are top of the agenda for passengers¹⁹⁶. Operating speeds have declined significantly between 2009 and 2013, most services having seen a decline of 10 to 14%¹⁹⁷. Journey speeds vary considerably¹⁹⁸. Fwy's buses have consistently failed to meet the Traffic Commissioner's reliability targets¹⁹⁹. Buses in Leeds have experienced a significant reduction in average scheduled speeds between 2009 and 2013 and service No 1 is the slowest

¹⁹⁰ Document C-4-2 pages 21 to 26: Investing in Public Transports: A Framework for Leeds (2009) and Document C-1-15: the updated Strategic Fit Report (2014)

¹⁹¹ Document C-1-15 figure 4.4

¹⁹² Document C-4-2 page 140

¹⁹³ Document C-1-15 Table 4.3

¹⁹⁴ Document APP-1-2 :Farrington PoE paragraph 6.17

¹⁹⁵ OBJ 923 Mr Cheek in cross examination

¹⁹⁶ OBJ 923 Mr Turner PoE paragraph 4.26

¹⁹⁷ OBJ 923 Mr Turner PoE paragraph 1.18

¹⁹⁸ Document C-1-11 Modelling Service Punctuality Report page 6 figure 2.1

¹⁹⁹ OBJ 923 Mr Turner cross examination, Document OBJ/923/13: Mr Turner Rebuttal PoE

service²⁰⁰. Also, buses suffer from a perception problem, which in itself is a 'major barrier' to increased patronage²⁰¹.

4.24 Current bus services are underperforming, do not meet the Traffic Commissioner's targets, are unreliable, suffer from poor perception and are in need of improvement²⁰². Objectors have accepted the need for improvement in transport infrastructure²⁰³. The recognition of the need for public transport investment is very long standing²⁰⁴. FWY, as the main bus operator on the NGT corridor, has conceded that improved infrastructure can increase demand, and that NGT would be superior in ride quality to the buses currently running on the NGT corridor. It has had ample opportunity to address the deficiencies all parties agree exist. Despite FWY's investment²⁰⁵, those deficiencies persist and it has conceded that *'the bus companies have not managed to resolve the problems'* despite *'having tried as much as possible'*²⁰⁶.

4.25 It is also necessary to enhance capacity in order to serve planned employment and housing growth in the City Centre and along the corridor. Continuing with the existing deficient bus based system is not sufficient. Rapid transport intervention on the NGT corridor would serve key employment, educational, commercial, retail and leisure facilities including the following²⁰⁷:

paragraph 4.6 and Document 923/06 Mr Alexander PoE paragraphs 3.10 to 3.12

²⁰⁰ OBJ 923 Mr Turner PoE paragraph 1.18

²⁰¹ OBJ 923 Mr Turner cross examination and Document 923/07 Appendix F page 91

²⁰² OBJ 923 Mr Turner accepted under cross examination

²⁰³ OBJ 1719 Mr Bonsall cross examination: congested in the morning and evening peaks during the combined University and school term times (approximately 450 hours a year). This does not take into account special events such as sporting events at Headingley. OBJ 1354 Weetwood RA Document OBJ 1354/ page 13 and paragraph 8; OBJ 1720 Mr Kemp cross examination; and OBJ 1644 Mr Foren cross examination

²⁰⁴ Document D-2-5: Inspector's Report on the UDP paragraph 160.16 – 160.17; and Document G-4-1: The Secretary of State's decision on Supertram paragraph 10 (Inspector's report at Document D-6-2)

²⁰⁵ OBJ 923 Mr Turner in cross-examination referring to investment in vehicles, improvements in training, improvements in service levels eg the introduction of night services on Route 1 and the introduction of higher frequency services to Holt Park in January 2013, improved information eg on FWY website, its phone app and on some buses

²⁰⁶ OBJ 923 Mr Turner cross examination

²⁰⁷ Document APP-1-2: Farrington PoE paragraph 5.7

- Holt Park Active²⁰⁸
 - Holt Park Asda;
 - Headingley employment, including facilities in the centre, Headingley Office Park etc;
 - Headingley Cricket Ground/Headingley Carnegie Rugby Stadium;
 - Woodhouse Moor, with more than 2 million annual visits;
 - The University of Leeds, with 31,000 students from 141 different countries and over 7,000 staff;
 - Leeds Beckett University (formerly Leeds Metropolitan), with 28,000 students and 2,900 staff, linking two main campus sites at Headingley and north City Centre;
 - Leeds College of Art, with 1,900 students; and
 - Notre Dame Sixth Form College, with 1,600 students.
- 4.26 The North Line would also serve new housing developments, including those at the former Leeds Girls' High School site and the former Bodington Halls of Residence, and would offer those living in new housing developments off the route an opportunity to use the park and ride facility at Bodington.
- 4.27 The South Line would give access to the redevelopment areas identified in the relevant planning documents, including the South Bank Planning Statement²⁰⁹. Among the facilities and development sites that would be served are²¹⁰ New Dock, formerly Clarence Dock; College of Building; Leeds City College; and City Centre Park.

Matter 2-The justification for the particular proposals in the draft TWA Order including the anticipated transportation, regeneration, environmental and socio-economic benefits of the Scheme

- 4.28 The proposal before the SofS has been arrived at after much consultation and thought; has been subject to detailed assessment and scrutiny; is fully costed; is fully funded; and is deliverable.

²⁰⁸ Document APP-1-2: Farrington PoE paragraph 5.19

²⁰⁹ Document D-6-6

- 4.29 The position taken by previous decision makers must be taken into account. A decision maker is free upon consideration to disagree with the judgment of another, but before doing so ought to have regard to the importance of consistency and give reasons for departure from the previous decision²¹¹. When considering Leeds Supertram, the SofS concluded that improved public transport facilities in Leeds are needed²¹². The Inspector who considered objections to the Leeds UDP did not consider buses to be the answer to the identified problems²¹³. The Leeds Supertram Inspector rejected an argument advanced by the A660 Joint Council²¹⁴ that enhanced bus services would provide an alternative means of addressing the transport need²¹⁵ and the SofS agreed with the Inspector in making the Order²¹⁶.
- 4.30 The Scheme would address the issue of reliability and punctuality, which 50% of those responding to the surveys in Leeds considered to be an important feature of a new public transport system²¹⁷. By introducing sections of segregated route and by affording very high priority at junctions, and providing dedicated stops, associated with efficient ticketing systems and lower dwell times, the trolley vehicle would provide a reliable and punctual service. Actual in vehicle journey times would be reduced²¹⁸; there would be a transfer from car to public transport²¹⁹; there would be a net increase of 3.89 km of cycle track provision along the route alignment²²⁰; and the width of combined cycle and NGT lane would exceed the 4m minimum referred to in LTN 02/08²²¹.

²¹⁰ Document APP-1-2: Farrington PoE paragraph 5.3

²¹¹ *North Wiltshire DC v Secretary of State (1993) 65 P & CR 137* at page 145

²¹² Document G-4-1 paragraph 10

²¹³ Document D-2-5 paragraph 160.17

²¹⁴ Document D-6-2 paragraph 43.1

²¹⁵ Document D-6-2 paragraphs 69.3 and 69.6

²¹⁶ Document G-4-1 paragraph 10

²¹⁷ Document C-4-3 Figure 3.5

²¹⁸ Document C-1-13 Table 4.1 which forms part of the run time assessment

²¹⁹ Document C-1 Table 12.4: combined totals for new park and ride and the car/active mode and Mr Chadwick in cross examination estimated the proportion of forecast transfer from car as being in the 'mid teens'

²²⁰ Document B-9 paragraph 6.3 and Table 6.1 on page 195

²²¹ Document G-4-74 paragraph 6.2.2: Widths below 4m generally result in buses pulling out

- 4.31 The monetised appraisal does not consider safety benefits to cyclists and pedestrians of the extra facilities designed to up-to-date standards which are integral to NGT²²² and are likely to lead to lower accident rates²²³. A number of changes have been made in response to suggestions made by the Leeds Cycling Campaign and other cycling interests, who have been actively engaged in how the Scheme can be redesigned²²⁴. The Scheme would bring overall benefits to cyclists²²⁵.
- 4.32 With regard to the NGT and existing buses having separate stops, it would not be practical to combine them as, on a large part of the route up to 20 existing buses run each hour²²⁶, which is the maximum in the relevant guidance²²⁷. Also, a particular length and geometry of stop is required for trolley vehicles and there is the need for distinct branding and ethos²²⁸. It would not be 'physically possible or practical' to run NGT and 'regular' buses from the same stops, even assuming a reduced bus service as per the Promoters' business case²²⁹, given the number of services, the fact that NGT has been specified to offer level boarding and the length of the NGT vehicles. Further, NGT would offer opportunities for interchange, as there would be 41 conventional bus stops within 100m of the 27 NGT stops²³⁰, and provide a clear and understandable transport system for visitors to Leeds and those who do not currently use the bus services.
- 4.33 The advantages of a trolley vehicle include lack of kerb-side emissions, and quieter operation²³¹, and these characteristics would make it more appropriate

of the lane when overtaking cyclists

²²² Document APP-7-2: Mr Chadwick PoE paragraph 3.102

²²³ Document APP-3-2: Mr Smith PoE paragraph 7.8.8 last sentence

²²⁴ Document A-01-3 Annex 5 pages 79, 80, 81 and 82

²²⁵ OBJ 1470 Dr Reather cross examination: overall a good thing for cyclists

²²⁶ Document 923/03: Mr Turner PoE Table 7 on page 13

²²⁷ Document APP/114 page 15 paragraph 6

²²⁸ Evidence given by Mr Smith for the Applicants

²²⁹ OBJ 923 Mr Cheek cross examination

²³⁰ Document REB-1 OBJ/1644 paragraph 2.1.1

²³¹ Document OBJ/1644 SOC1: A660 Joint Council statement of case, Appendix 3 the Athens transport system paragraph 3.7

in environmentally sensitive areas such as archaeological sites and pedestrianised areas.

- 4.34 The Bus Rapid Transit (BRT) standard is an initiative to establish a common definition of bus rapid transit throughout the world and help ensure a more uniform delivery of benefits²³². However, there are a number of limitations, including it not being well adapted to differing circumstances in different countries. The NGT system has been scored as falling in the 'Bronze' category ie a system which 'solidly' meets the definition of a BRT and is mostly consistent with international best practice²³³. The A660 Joint Council's scoring²³⁴ which indicates that the basic standard is not met is based upon a misapplication of the standard²³⁵. Many of the changes to highway layout would be beneficial²³⁶.
- 4.35 The wider economic impacts of the Scheme are not included in the business case assessment of benefits²³⁷. The Urban Dynamic Model (UDM) has been used to assess those wider benefits. The NGT would increase the attractiveness of those areas which it serves as places to live and work²³⁸, and it is estimated that approximately 3,700 additional jobs would be created²³⁹.
- 4.36 Wider regeneration benefits would be likely to arise throughout the City and particularly in South Leeds. On the southern route, the South Bank Planning Statement identifies development sites immediately adjacent to the NGT route²⁴⁰; the HS2 proposals offer further development opportunities²⁴¹; and

²³² Document APP/181 page 1

²³³ Documents APP/181 and REP5/102: Mr Smith and Mr Boodoo BRT standard scoring

²³⁴ OBJ 1644 Mr Foren in cross examination explained that it was carried out by Mr McKinnon

²³⁵ Document APP 181 page 3

²³⁶ OBJ 573 Mr Broadbent cross examination gave examples of The Headrow, Hyde Park Road, and the changes shown on Document A-11 TD 044

²³⁷ Document C-1-18 paragraph 1.5: The conventional approach to transport demand and benefit forecasting as set out in WebTAG is to consider the impacts of a transport intervention assuming that, other than at the margin, there is no change to the geographic distribution of population and employment

²³⁸ Document C-1-18 paragraph 4.29

²³⁹ Document C-1-18 Table 4.1

²⁴⁰ Document D-6-6 page 27

²⁴¹ Document G-4-100: Opportunities for Leeds South Bank diagram on the 5th page and Mr Farrington in evidence explained the position of the station is not fixed and therefore there is

the Belle Isle and Middleton Neighbourhood Framework identifies a range of development opportunities²⁴². On the northern route, the opportunity sites include the Leeds Girls' High School site²⁴³, Bodington Hall residential development site, and Holt Park²⁴⁴.

- 4.37 The perceived permanence of the system should be regarded as a positive feature, with attention being drawn to this feature in the 2009 Major Scheme Business Case (MSBC)²⁴⁵, although the benefits associated with permanence were not modelled²⁴⁶. The Steer Davies Gleave (SDG) paper on permanence recognizes that the growth of many major cities has been influenced by the presence of transport systems with a degree of permanence²⁴⁷. The fact that there is evidence of a transport system along a particular route, when a vehicle is not present, gives a clear indication of the existence and availability of a transport system along that route. It is the combination of OLE, and stations/stops which create the impression of permanence which is so important to investment and other decisions.
- 4.38 The provision of a transport system with a degree of permanence has very considerable advantages. Those considering investment can proceed with a degree of confidence that public transport infrastructure will continue to be in place over a lengthy period. Although the existing bus network routes can be in place over extended periods, the flexibility of the bus, and the flexibility afforded to bus operators under the current system of bus regulation (to withdraw services on 56 days' notice), does not give potential investors, businesses or residents the same degree of confidence that would be achieved if more permanent transport infrastructure were to be put in place. The

no basis for saying that NGT will be a considerable distance away

²⁴² Document D-6-5: pages 9, 20, 21 and 32

²⁴³ Document B-12 page 21 (DAS)

²⁴⁴ Document D-6-16

²⁴⁵ Document C-4, paragraph 5.14, Table 8.2 on page 8-3, and paragraph 12.39

²⁴⁶ Document C-4 paragraph 12.39

²⁴⁷ Document C-1-12 paragraph 2.9

withdrawal of the ftr²⁴⁸ vehicle from service 4 is an example of the fact that bus based services do not offer the same degree of permanence²⁴⁹.

Matter 3-The main alternative options considered by the Promoters (including alternative modes to bus, and alternative means of propulsion) and the reasons for choosing proposals comprised in the Scheme.

- 4.39 The solutions to the transport problems faced by Leeds that have been identified on certain corridors, including the northern and southern NGT route corridors, have included NGT on four corridors²⁵⁰. In the Business Case, reference is made to wider consideration of alternatives²⁵¹ but the evaluation follows the relevant guidance in considering the 'Preferred Option' against the Next Best Alternative (NBA) and the Low Cost Alternative (LCA). The purpose of that exercise is respectively, to confirm that any specific impacts of Promoters' choice of technology are justified relative to other ways of delivering the project benefits, and to confirm that the scale of investment in the Preferred Option is justified, in particular that the majority of the benefits of the Preferred Option are not to be delivered for the minority of the costs²⁵².
- 4.40 The main alternatives are set out and considered in the Business Case in conventional form, where the Preferred Option, the NBA and the LCA are evaluated. The approach taken complies with WebTAG guidance²⁵³. Hybrid vehicles were considered as alternatives in the NBA (articulated plug-in hybrid bus fleet) and the LCA (double deck hybrid)²⁵⁴.
- 4.41 The alternatives considered by the Applicants that are set out in the ES²⁵⁵, together with the main reasons for their choice taking into account the

²⁴⁸ Modern articulated bus introduced in Leeds by FWY in 2007

²⁴⁹ Document C-1-12 paragraph 1.5

²⁵⁰ Document C-4-2 pages 14 to 16 and 21 to 27

²⁵¹ Document C-1 section 5

²⁵² Document C-1 paragraph 5.4 and Mr Chadwick in cross examination

²⁵³ Web based Transport Analysis Guidance: OBJ 923 Mr Turner acknowledged in cross examination

²⁵⁴ Document C-1 Table 5.1

²⁵⁵ Document A-08-b Chapter 3

environmental effects²⁵⁶, include 4 modes: light rail (tram), ultra-light rapid transit, trolleybus and bus²⁵⁷; and route options and the design development process was carried out in 8 distinct stages²⁵⁸.

- 4.42 The Review of Technology Alternatives that was carried out is a thorough, rigorous, logical and transparent assessment and was not restricted to considering alternative means of transport but took a more ordered approach. Required system outputs based upon the Scheme objectives were specified²⁵⁹. The performance of options was assessed against the Scheme objectives and against delivery constraints. The sub-mode options report provides an up-to-date assessment of bus sub modes in order to ensure that the sub mode selected for NGT was suitable and met the Scheme objectives²⁶⁰. These reports have included a thorough analysis against both Scheme objectives and delivery constraints.
- 4.43 A review of existing public and other transport provision on all radial corridors in Leeds was undertaken. The findings of that review, published in March 2009²⁶¹, was that a rapid transit solution would be appropriate on three corridors in Leeds, including the current north and south lines and the then proposed east line²⁶². Those corridors were selected as they were the busiest and most crowded bus corridors with a high proportion of standing passengers; they were the most congested highway corridors experiencing significant peak delay; it was considered that there was scope to achieve a significant reduction in public transport journey times; and there was potential for a significant improvement in journey time reliability.
- 4.44 The progression of Design Freeze (DF) drawings demonstrates that each and every part of the route has been the subject of careful consideration. An

²⁵⁶ Document E-1-22: paragraph 2 of Schedule 5 to the Transport and Works Act (Applications and Objections Procedure) (England and Wales) Rules 2006

²⁵⁷ Document A-08-b paragraph 3.6

²⁵⁸ Document A-08-b paragraph 3.14

²⁵⁹ Document C-1-1 section 4

²⁶⁰ Document C-1-16 paragraph 1.2

²⁶¹ Document APP-2-2 Haskins PoE paragraph 5.9 and Document C-4-2

²⁶² Document C-4-2 page 22

overview of such alternative route alignments is set out in the papers presented to the Plans Panel²⁶³. They include consideration of alternative highway widening proposals in Headingley Lane, alternative routes in the vicinity of Whitfield Way, and alternative routes on Woodhouse Moor, with a route running on the Moor avoiding widening of the highway due to traffic flows and allowing for tree planting to mirror the existing tree belt on the west side of the road.

- 4.45 The responses to the following demonstrates the careful and detailed consideration which has been given to each section of the route:
- Headingley Land²⁶⁴.
 - Headingley Lane in the vicinity of Headingley Hill, where the Promoters have considered options which would take land from the north or the south or both, or which do or do not include provision for cyclists and the response on Ford House includes five alternative options²⁶⁵.
 - The Headingley Lane Options Report²⁶⁶ contains a detailed analysis of four options.
 - A detailed comparison of the DF2 and the DF7 proposals in the vicinity of St Columba's Church has been carried out and considered²⁶⁷.
 - Three alternative options were considered in the Whitfield Way area²⁶⁸.
 - The changes from the DF7 P3 to P4 drawings²⁶⁹.
- 4.46 Alternative forms of mitigation have been considered, including that taken to the park and ride site at Bodington, where six grass sports pitches and a cricket wicket will need to be removed. At first the mitigation considered was replacement at King Lane. This approach was changed at the request of Leeds University, who asked that alternative provision be focused on Bodington, Weetwood and Lawnswood. As a result, the replacement facilities are to be

²⁶³ Document G-1-4

²⁶⁴ Document REB-1 OBJ/1611

²⁶⁵ Document REB-1 OBJ/1608 Appendix A

²⁶⁶ Document G-4-90 a to d

²⁶⁷ Document G-4-91

²⁶⁸ Document REB-1 OBJ/1558 Appendix B and as set out in the Plans Panel Report

²⁶⁹ Document A11: P4 drawings

provided at Lawnswood by providing artificial pitches capable of more intensive use²⁷⁰.

- 4.47 No realistic, deliverable alternative to NGT has been put forward, let alone one which is capable of being funded. Further, the NGT proposals do not fall within section 13(2) of the TWA 1992²⁷¹; the objects of the Order could not be achieved by other means.

Matter 4-The extent to which the Scheme would be consistent with the National Planning Policy Framework (NPPF), national transport policy, and local transport, environmental and planning policies

- 4.48 The requirement imposed by section 38(6) of the Planning and Compulsory Purchase Act 2004, that planning applications be determined in accordance with the development plan unless material considerations indicate otherwise, does not apply when making a section 90 of the Town and Country Planning Act 1990 direction²⁷². However, this does not carry with it the implication that the plan led approach is not to be followed. The core principle in the NPPF is not expressed as only applying in cases where section 38(6) applies and the TWA Guide to Procedures²⁷³ makes plain that it is the policy of the SofS that decisions on deemed planning applications will be taken in line with the plan led system.
- 4.49 The Scheme is a plan led development. The principle and route of the NGT have been determined²⁷⁴. The plans are produced following a process laid out in statute, including independent scrutiny by an Inspector, and are intended to guide decisions on development management decisions. The Secretaries of State should place great weight on the development plan documents.

²⁷⁰ Document A-08b paragraph 3.27

²⁷¹ Document E-1-15: section 13(2)- '*Where an application has been made to the Secretary of State under section 6 above and he considers that any of the objects of the order applied for could be achieved by other means, he may on that ground determine not to make the order*'

²⁷² Document L-APP-9: Case R (*Samuel Smith Old Brewery (Tadcaster)*) v Secretary of State for Energy and Climate Change [2012] EWHC 46 (Admin) paragraphs 70 to 81

²⁷³ Document E-4-14 paragraph 1.28

²⁷⁴ Document APP/174 paragraph 80

- 4.50 The development also accords with other important core principles set out in paragraph 17 of the NPPF and would make a contribution to facilitating growth to make the fullest possible use of public transport²⁷⁵. The route of the rapid transit system has been identified and protected in the plan, in accordance with the approach set out at paragraph 41 of the NPPF. The policies were developed in full knowledge that the form of rapid transit may require the installation of OLE in areas which are of heritage value. The policy was approved and promoted on the basis that the benefits would outweigh such harm.
- 4.51 Policies T12²⁷⁶ and T13 (now found in the UDP Review) and a diagram²⁷⁷ showing the north and south routes were included in the 1993 deposit version of the Leeds UDP Review. The Inspector who considered objections to the UDP noted that congestion was already a problem on radial routes into the City including on the A660²⁷⁸, and considered that the then Supertram proposals had the potential to overcome that congestion. The Inspector also considered the potential impact on heritage assets, including that which would arise from the installation of OLE. Whilst recognising that detailed consideration would fall to a TWA Order Inquiry and that the lines, masts and stations would have an impact on the local townscape, he observed that light rail routes, including modern trams, have been introduced, accepted and even admired in other UK and European town centres of equal if not greater architectural merit²⁷⁹.
- 4.52 Policies T12 and T13 were retained in the 2006 UDP Review notwithstanding the fact that Supertram was cancelled in November 2005. A specific decision was taken and is recorded in the UDP that the identification of the route should remain in the plan as it was envisaged that other public transport schemes would come forward²⁸⁰. The route for the public transport system

²⁷⁵ Document APP-8-2: Mr Speak PoE paragraphs 4.1 to 4.14

²⁷⁶ Document D-2-4 page 92

²⁷⁷ Document D-2-4 Diagram 2

²⁷⁸ Document D-2-5 paragraph 159.8

²⁷⁹ Document D-2-5 paragraphs 159.9 and 160.19

²⁸⁰ Document D-2-9 paragraphs 6.2.9 to 6.2.11

was shown on the proposals map and the current north and south routes are consistent with that route with the addition of the route from Belle Isle to the Stourton Park and Ride site as adjusted to take account of the HS2 proposals.

- 4.53 In addition, the park and ride sites at Stourton and at Bodington are identified in UDP Review policy T17. The policy will be carried forward by the CS when adopted. Policies T13, T16 and T17 will be saved²⁸¹.
- 4.54 Spatial policy 11 in the emerging CS²⁸² sets out specific support for a range of infrastructure improvements and other interventions in accordance with LTP3. The key diagram gives further details of the scope of these improvements and interventions and shows the route of NGT. NGT is defined in the glossary as being the name of the proposed trolleybus Scheme. Therefore, this policy supports the NGT. Also, priority (i) in the policy includes investment in a rapid transit scheme to increase radial route capacity. NGT is such a scheme and therefore accords with that priority.
- 4.55 The route of NGT is identified on both Map 9 and the key diagram²⁸³, which identify current proposals. NGT is consistent with and supported by the emerging CS, which is to be considered at the meeting of the LCC to be held on 12 November 2014 where it will be proposed for adoption²⁸⁴.
- 4.56 The LTP gives similar support for NGT. The development of a rapid transit network including NGT is identified as one of the key themes and priorities²⁸⁵, and NGT is identified as a major scheme which is one of the priorities for the three years following publication of the LTP²⁸⁶.

²⁸¹ Document D-1-4

²⁸² Document D-1-2 page 27

²⁸³ Document APP/159

²⁸⁴ Document APP/198 paragraph 3; Documents D-1-2, and D-1-3: The pre-submission changes; Document APP/175: The March 2014 proposed main modifications which do not propose substantive changes to policy SP11; and APP/174 paragraphs 79 and 80: The CS Inspector did not recommend changes to the NGT proposal, and noted that the principal and route of NGT had been determined

²⁸⁵ Document D-6-11 page 72

²⁸⁶ Document D-6-11 page 93

- 4.57 In terms of the overall planning balance and in determining the listed building consent applications²⁸⁷, any harm which would arise from the proposals falls into the category of 'less than substantial'. The impact arising from the Scheme on designated heritage assets would not call into question their continued designation or listing, or reduce their significance by very much. Notwithstanding the considerable importance and weight that must be given to the harm that the Scheme would cause to heritage assets, that harm is very clearly outweighed by the public benefits the Scheme would bring.
- 4.58 The conclusions on planning policy are:
- The proposals derive specific support from the development plan, in particular policies T12, T13, and T17 of the UDP.
 - The emerging CS also provides strong support, as NGT is endorsed in Spatial Policy 11 and on the key diagram and Map 9. If the CS is adopted before any decision is made on the TWA Order application, that support will be contained in the development plan.
 - Other material policies such as the LTP²⁸⁸, the Leeds City Region Transport Strategy²⁸⁹ and the SEP²⁹⁰ all support the proposals. There is overwhelming planning and other policy support.
 - The proposal is consistent with the NPPF, and has very strong local policy support.

Matter 5-The likely impact on the public, businesses and the environment of constructing and operating the Scheme.

(a) noise, dust, vibration and disturbance, including the impacts of construction traffic

- 4.59 The Scheme's impact in terms of noise and vibration is fully assessed in the ES²⁹¹, not only in terms of the construction and operational impact of NGT itself but also in terms of the impact of traffic displaced by NGT²⁹².

²⁸⁷ These are dealt with in more detail in Appendix D to this report: Report on the Listed Building and Conservation Area Consents

²⁸⁸ Document D-6-11 pages 71, 79 and 93

²⁸⁹ Document APP/102 pages 81 and 110

- 4.60 As with any engineering project of this scale there would inevitably be impacts associated with the construction of the Scheme²⁹³. These are assessed in the ES on a worst case basis, making the assessment particularly robust²⁹⁴. Scheme construction would be managed and the noise impact mitigated in accordance with all relevant legislation, standards and guidelines. In particular, working hours would be controlled, appropriate machinery would be used and best practice employed²⁹⁵.
- 4.61 With regard to operational noise, as would be expected and as a result of the diversion of traffic, some receptors would benefit whilst others would experience an increase in noise levels. The impacts are as shown in the noise contour plans contained within the ES²⁹⁶. The Scheme is expected to reduce noise from the bus vehicle movements along the existing traffic route by introducing a quieter vehicle. However, noise from the passage of vehicles along the segregated sections of the route would expose the closest receptors to this new source of noise. The Scheme would also introduce changes to traffic noise in general through changes to public highways along the route in order to accommodate it. Slight or moderate adverse residual effects due to traffic noise are predicted in the opening year for 1342 dwellings and 25 other sensitive receptors. Moderate or large adverse effects are predicted for 604 dwellings and four other sensitive receptors, and large or very large residual effects are predicted for 274 dwellings and three other sensitive receptors. In the longer term, 15 years after commencement of operations, slight or moderate adverse effects are expected at 619 dwellings and seven other sensitive receptors, and moderate or large adverse effects are expected at 280 dwellings and three other sensitive receptors²⁹⁷.

²⁹⁰ Document G-4-98 pages 28 and 92

²⁹¹ Documents A-08e-2 and B4: *Technical Appendix I – Noise and Vibration*

²⁹² Document APP-13-2: Mr Forni PoE paragraphs 2.3 and 2.4

²⁹³ Document APP-13-3: Mr Forni PoE Appendix 1

²⁹⁴ For example Document APP-13-2 Mr Forni PoE paragraph 4.10

²⁹⁵ For example Document APP 13-2 Mr Forni PoE paragraphs 6.3 and 7.5 and Mr Forni cross examination by Mr Jones

²⁹⁶ Document B-7-3 (opening year); Document B-7-4 (long term)

²⁹⁷ Document A-08b paragraph 7.266

- 4.62 The Scheme would not cause significant vibration effects²⁹⁸. All the roads that the NGT would use would be re-surfaced to remove any effects due to vibration from vehicles running over manholes and pot holes²⁹⁹ before operation. They would then be regularly maintained during the operation³⁰⁰.
- 4.63 With regard to dust, the construction of the Scheme would be governed by a CoCP³⁰¹. The CoCP includes mitigation measures designed to secure dust suppression, such as standard practices for road sweeping, the removal from site as soon as possible of materials that have the potential to produce dust (unless they are to be re-used on site), to prevent idling construction vehicles and to minimise construction journeys. Detailed measures are included within the Air Quality Technical Appendix³⁰². The ES concludes that the dust impact at construction stage would not be significant³⁰³.

(b) Air quality and carbon

- 4.64 The Scheme's air quality impact is detailed in the Air Quality Technical Appendix to the ES³⁰⁴. It is predicted to be likely to have an adverse impact on air quality in some locations as a result of the changes that would occur to existing traffic flows but it would be beneficial in others. Overall the impact would not be significant in environmental terms³⁰⁵.
- 4.65 The ES assessment was undertaken in line with that presented in the Scoping Opinion and the DfT and LCC consultation responses thereto³⁰⁶. Emissions factors were modelled as per Department for the Environment, Food and Rural Affairs (Defra) current guidance to local authorities, using Defra's *Emission Factor Toolkit*³⁰⁷. Modelled outputs assess the 2020 with and without scheme

²⁹⁸ Document APP-13-2 Mr Forni PoE paragraph 8.12

²⁹⁹ Mr Forni in examination in chief

³⁰⁰ Mr Forni in cross examination

³⁰¹ Document A-08g-2

³⁰² Document B-2

³⁰³ Document A-08g-2 at paragraph 4.15

³⁰⁴ Document B-2

³⁰⁵ Document B-2 page 55 paragraph 5.1

³⁰⁶ Document B-2 page 12 paragraphs 2.15 to 2.16

³⁰⁷ Document B-2 page 15 paragraph 2.28

scenarios³⁰⁸. The model has been verified in accordance with Defra guidance and subjected to appropriate sensitivity analysis, again in accordance with Defra predictions as to the likely reduction in vehicle emissions and background concentrations³⁰⁹.

- 4.66 The construction of the Scheme would be likely to give rise to a minor adverse effect, but not significant for the purposes of the ES³¹⁰.
- 4.67 In terms of operational effects, the assessment has been carried out with reference to a range of discrete receptors³¹¹. At all receptors Nitrogen Dioxide (NO₂) concentrations would remain below the relevant air quality objective. The Scheme would cause a negligible to minor adverse impact at one receptor; the impact at all other receptors would be negligible³¹². The Scheme would increase NO₂ concentrations at 198 residential properties but decrease concentrations at 464 properties³¹³.
- 4.68 The Scheme's impact in terms of both PM_{2.5} and PM₁₀³¹⁴ would be negligible at all modelled receptors³¹⁵.
- 4.69 The Scheme's carbon impact is set out in Technical Appendix B to the ES³¹⁶. As with any civil engineering project of this scale the construction phase would give rise to greenhouse gas (GHG) emissions. The CoCP would minimise carbon emissions from plant and traffic, for example by avoiding the use of diesel-powered generators and minimising energy use.
- 4.70 With regard to the operational phase, powering the NGT vehicles would give rise to emissions that are minimal in the context of existing transport emissions. There would be a very small increase in the overall road traffic

³⁰⁸ Document B-2 page 16 paragraph 2.38

³⁰⁹ Document B-2 page 16 paragraphs 2.39 to 2.42 and table 2.5 including footnotes (a)-(c)

³¹⁰ Document B-2 page 34 paragraph 4.17

³¹¹ Document B-2 page 24 paragraph 4.19 and table 4.2

³¹² Document B-2 page 24 paragraph 4.19

³¹³ Document B-2 page 52 paragraph 4.2

³¹⁴ Particulate Matter (particles diameter of 2.5 micrometres or less and 10 micrometres or less)

³¹⁵ Document B-2 tables 4.5 and 4.6 and paragraph 4.23 for output of sensitivity analysis

³¹⁶ Document A-08c-2

emissions (as small as 0.2% over baseline conditions resulting from the redistribution of existing traffic patterns to accommodate NGT³¹⁷). NGT would itself be more efficient than other modes of transport, especially private cars. Each NGT vehicle would be able to accommodate up to 160 people, resulting in fewer emissions per passenger kilometre than other transport modes.

(c) Water resources and water quality

4.71 No significant residual effects on the water environment are predicted across the route during either the construction or operational phase³¹⁸. A Flood Risk Assessment (FRA) accompanied the ES as a supporting document and was submitted with the TWA Order Application³¹⁹.

(d) Landscape, townscape and visual amenity, including proposals for the removal and replacement of trees, the effects on the character and appearance of the conservation areas and on listed buildings

- 4.72 The Scheme's landscape and visual impact is assessed in the ES³²⁰, the detail of the Scheme being set out in the three volume design statement³²¹ and illustrated in a series of photomontages for year 1 and year 15³²².
- 4.73 NGT would broadly follow the alignment of the Leeds Supertram scheme. The extent of the impact is identified in the Leeds Supertram decision³²³.
- 4.74 The assessment³²⁴ is based on the methodology set out in the Guidelines for Landscape and Visual Impact Assessment 2nd Edition 2002 (GVLIA2)³²⁵. There is no national planning policy basis to support the use of the DfT's WebTAG documentation. The ES was produced following a Scoping Report which was submitted to the DfT and makes clear that the GVLIA guidance is to

³¹⁷ Document APP-15-2 Mr Leather PoE paragraph 4.22 and Document B1 paragraph 5.2

³¹⁸ Document A-08b pages 170 to 180; and Document APP 13-2 paragraphs 4.64 to 4.70

³¹⁹ Document A-08g-4

³²⁰ Document A-08-e1: *Technical Appendix H, Landscape, Townscape and Visual Amenity*

³²¹ Document A-08k Volumes 1 and 2; and Document B12 Volume 3 *Character Area Regeneration Synergy*

³²² Document B-7 Chapter 2: Photomontages

³²³ Document D-6-1

³²⁴ Document A-08b, Document A-08e-1 and Document A-08a: Non-Technical Summary

be used³²⁶. The assessment analyses NGT's impact by reference to 44 character areas (29 along the north route, 15 for the south). The Scheme would not be significant in landscape and visual impact terms in respect of any of the 15 southern character areas³²⁷, and would only have significant impacts in respect of 9 of the northern character areas³²⁸.

- 4.75 If the assessment is made against the recently published GVLIA 3rd edition³²⁹, the impacts are reduced further³³⁰. The most significant impacts would be felt at Bodington Park (park and ride replacing playing pitches), the off-highway section behind the Arndale Centre and at Hyde Park Corner³³¹. The impact in those areas is already contemplated by the provision made in the UDP for park and ride sites³³² and for the route which by passes Headingley³³³, the principle of which was confirmed by the SofS's decision on Supertram³³⁴.
- 4.76 The Scheme would bring about a net gain in terms of tree numbers³³⁵. The majority of the individual trees that would be lost (indicated as a total of 453) are Category C (indicated as 246), with 22 groups to be felled and 11 groups to be partially felled³³⁶. Tree loss and replacement planting is shown on the landscape drawings³³⁷. The replacement policy is detailed in the design statement³³⁸. It comprises a 3:1 replacement for individual trees lost, 'super replacement specimens' where particularly high value trees are to be removed

³²⁵ Document G-4-2

³²⁶ Document A-08b Annex A page 62 and page 105; and Document APP 10-2 page 25 paragraph 5.3

³²⁷ Document APP-10-2: Mr Walker PoE paragraph 10.9

³²⁸ Document APP-10-2: Mr Walker PoE paragraph 10.8 this assessment is against GVLIA 2nd edition

³²⁹ Document G-4-22

³³⁰ Document APP-10-2: Mr Walker PoE paragraph 10.8

³³¹ Document APP-10-2: Mr Walker PoE paragraph 10.8

³³² Document D-2-9 policy T17

³³³ Document D-2-9 policy T13, and Document D-2-8 Proposals Map 16

³³⁴ Document D-6-1, Document D-6-2 and Document G-4-1

³³⁵ Document APP-10-2: Mr Walker PoE paragraphs 6.1 to 6.11 and 10.12; and Document APP/183 quantifying tree losses in Conservation Areas

³³⁶ Document A-08i: Arboricultural Assessment

³³⁷ Document APP-10-3: Mr Walker PoE Appendices

³³⁸ Document A-08k: in particular 2-10 in relation to the size of proposed replacements

and an area match for groups and woodland being removed³³⁹. All retained trees would be appropriately protected³⁴⁰.

- 4.77 The Scheme would be taken forward in accordance with the design principles and standards set out in the Urban Design and Access Statement³⁴¹ to ensure a high quality design. The care with which the Scheme has been designed over time is clear from the extent of the design iterations through which the Scheme has gone³⁴² and the care with which individual sections of the Scheme have been considered³⁴³. There is a commitment to ensuring that OLE is fixed to buildings where practicable and to integrate lighting, signage and OLE poles where they would be used. The Scheme therefore would achieve a sound balance between townscape and operational objectives³⁴⁴.

(e) Conservation Areas and Listed Buildings

- 4.78 The impact on CAs and listed buildings has been described in the ES³⁴⁵.

(f) Archaeology

- 4.79 The location, date and significance of likely archaeological remains is set out in the ES³⁴⁶ and the results of the assessment, based upon standard desk based methodology, set out in the Historic Environment chapter³⁴⁷. The ES concludes that *'there are no significant effects on buried archaeology'*³⁴⁸. The West Yorkshire Archaeology Advisory Service (WYAAS) consider that

³³⁹ Document APP-10-2: Mr Walker PoE paragraph 6.7

³⁴⁰ Document APP-10-2: Mr Walker PoE paragraph 6.10

³⁴¹ Document A08k

³⁴² Document APP-10-2: Mr Walker PoE paragraphs 3.1 to 3.19

³⁴³ Document APP-10-3: Mr Walker PoE Appendix 2 For example-approach advocated by Mr Walker in respect of affected properties at Otley Road

³⁴⁴ Document APP-10-2: Mr Walker PoE paragraph 10.21

³⁴⁵ Document A-08b: main statement; Document A-08c-7: technical appendix; Document B-1, January 2014 update and Document B-13, July 2014 and is dealt with in this report in Appendix D

³⁴⁶ Document A-08c-7 Chapter 3 (baseline)

³⁴⁷ Document A-08c-7 Chapter 4 (impact)

³⁴⁸ Document A-08c-7 page 60.

appropriate mitigation measures could be secured by condition and have agreed the wording of the suggested condition³⁴⁹.

(g) Attaching overhead line equipment to buildings

4.80 OLE fixings would be un-intrusive³⁵⁰ and are commonplace in many continental European cities and in the UK, including Manchester, Nottingham, Sheffield and Edinburgh. Their precise location would be finalised pursuant to conditions essentially identical to those previously imposed by the SofS³⁵¹.

(h) Land use, including effects on commercial property and the viability of businesses, and community facilities

4.81 The large majority of the route would run on existing highway, meaning that impacts on land use would be very limited. The route as a whole, including the off-line section at Headingley, accords with the development plan allocation and there is clear policy support for both park and ride sites³⁵². There would be limited impact on other land uses, for example resulting from the set back of boundary walls and the need to relocate existing playing fields. The impacts on commercial property, including local businesses, and the impact on community facilities would be limited, carefully managed by way of the CoCP³⁵³ and are fully appraised in the ES³⁵⁴.

(i) Open space and recreational facilities

4.82 LCC has appropriated 9 parcels of land previously held by them as public open space pursuant to section 122 of the LGA1972.

4.83 NGT's impact on open space and recreational facilities falls into three categories:

³⁴⁹ Document REB-4 OBJ/1719 Appendix A: WYAAS letter dated 10 April 2014

³⁵⁰ Document B-13 page 42; Document G-4-52 for NGT information paper A3:Land & Property Building Fixings and Overhead Line Equipment; Document A-08K *Urban Design and Access Statement* page 50.

³⁵¹ For example Document APP/195: Manchester City Crossing, 2013

³⁵² Document D-2-9 policy T17

³⁵³ Document A-08g-2

³⁵⁴ Document A-08c-3: *ES Technical Appendix C - Community*

- Permanent land take;
 - Temporary land take; and
 - Creation of new facilities.
- 4.84 The Scheme's impact has been fully and carefully assessed³⁵⁵. LCC assesses the quality of its open space by reference to the Leeds Quality Park (LQP) standard, itself based squarely on the national Green Flag standard³⁵⁶. One of the Council's key aims is to ensure that all community parks meet the Green Flag Standard by 2020³⁵⁷.
- 4.85 With mitigation, NGT would improve the overall quality of the majority of the existing parks and green spaces that it would affect³⁵⁸. It would not worsen the overall quality of any of the spaces in question. Additionally, it would create a new pocket park at Headingley³⁵⁹. Headingley currently suffers from a very significant shortfall of open space³⁶⁰. NGT would also result in the creation of new open space at Stourton Park and Ride³⁶¹.
- 4.86 NGT would deliver new sports pitches for the University of Leeds to replace those to be lost to the Bodington Park & Ride facility. Four new 3G artificial grass pitches would be provided³⁶² to replace the 6 grass pitches that would be lost at Bodington. As 3G pitches can be used much more intensively than grass pitches, they would each be able to sustain more than 70 hours a week compared to a maximum of 36 hours use a week for the 6 grass pitches, more than making up for the reduced number of pitches³⁶³. The introduction of 3G pitches is in line with the Football Association's (FA's) national policy³⁶⁴.

³⁵⁵ Document B-5: Open Space Technical Appendix J; Document B-7 page 130ff; and Document APP-11-1, Document APP-11-2 and Document APP-11-3

³⁵⁶ Document D-6-14: A Parks and Green Space Strategy for Leeds

³⁵⁷ Document D-6-14 Strategy proposal 14

³⁵⁸ Document APP-11-2: Mr Flesher PoE page 8, table 2.2

³⁵⁹ Document A-12: Drawing M4931 118

³⁶⁰ Document B-5 (Open Space Technical Appendix) Table 2.1 on page 10 and paragraph 2.10 on page 11; and figure 4.6 for location of new pocket park

³⁶¹ Document A-12: Drawing Nos M4931/142 to 144

³⁶² Document A-12: Drawing No 312694/TD/009B

³⁶³ Document APP-11-2: Mr Flesher PoE paragraph 2.15

³⁶⁴ FA National Facilities Strategy 2013 to 2015 Page 13: '3G (Artificial Grass Pitches) are essential in the promotion of coaching and player facilities'; page 36: 'The latest Artificial Grass

- 4.87 As with any scheme of this type, NGT would require construction compounds. The impact on a number of different open spaces along the route would be temporary with no long term adverse impact³⁶⁵.

Matter 6-The effects of the Scheme on statutory undertakers and other utility providers, and their ability to carry out undertakings effectively, safely and in compliance with any statutory or contractual obligations

- 4.88 Relevant requests for information have been made to the statutory undertakers to ascertain the presence of equipment³⁶⁶. Major issues identified to date are set out in the Construction Implementation Strategy³⁶⁷.
- 4.89 The draft Order contains well precedented provisions to protect the interests of statutory undertakers³⁶⁸. Those provisions include arrangements to ensure that the utility providers would be able to continue to provide services when land would be acquired³⁶⁹ or streets would be stopped up³⁷⁰.
- 4.90 Generally, statutory undertakers' equipment would be able to remain in situ as, unlike with a tram scheme, there would be no requirement to move equipment installed in the highway and falling within the swept path of a trolley vehicle³⁷¹. The potential for interference with equipment installed in the highway has been carefully considered, the statutory undertakers have been consulted and an independent estimate of the costs of diverting any equipment has been obtained³⁷². A 20% premium has been added to that

Pitches are capable of delivering a high quality football experience and in addition are capable of carrying much greater activity than natural grass. An increasing number of leagues are allowing games to be played on these surfaces and many grassroots clubs compete to access them for training purposes'; and page 37: the provision of a network of new Artificial Grass Pitches is identified as one of the FA's priorities.

³⁶⁵ Document APP-11-2: Mr Flesher PoE page 13 table 2.4

³⁶⁶ Document A-08g-3 paragraph 3.1

³⁶⁷ Document A-08g-3 paragraph 3.6

³⁶⁸ Document A-01-4 Article 60 and Schedule 11

³⁶⁹ Document A-01-4 paragraph 1 of Schedule 11

³⁷⁰ Document A-01-4 paragraph 2 of Schedule 11

³⁷¹ Document APP 3-2: Mr Smith PoE paragraph 8.1.5; and Document A-08g-3 page 23ff: analysis in the Construction Implementation Strategy

³⁷² Mr Smith in evidence

independent cost assessment³⁷³. In addition a contingency has been allowed³⁷⁴.

- 4.91 28 statutory undertakers were identified in the Book of Reference as having apparatus or rights within the areas covered by the Scheme. Of these, 9 objected to the application for the Order, of which three have withdrawn their objection, and terms have been agreed with a further two³⁷⁵. One statutory undertaker made a representation. No statutory undertaker has appeared at the Inquiry. The Promoters have entered into negotiations with each of those parties whose representation or objections are outstanding. There are no works or other actions proposed which would prevent those, or any other, statutory undertakers from continuing to carry out their undertaking.
- 4.92 The Scheme would have no adverse effect on the ability of statutory undertakers and other utility providers to continue to provide services and to carry out their undertakings effectively, safely and in compliance with any statutory or contractual obligations.

Matter 7-The effects of the proposed trolley vehicle system on motorists, cyclists and pedestrians of constructing and operating the Scheme

a) the effects of the proposed trolley vehicle system on other public transport services, highway capacity, traffic flow, vehicle parking, pedestrian and cyclists' movement and road safety

- 4.93 The proposals would enhance public transport provision on the north and south corridors³⁷⁶. The overall effect of NGT would be to add an additional public transport service to those wishing to travel on the route corridors. The additional service would be provided whilst also providing enhanced facilities for buses and for cyclists.

³⁷³ Mr Smith cross examination by Longley, and Mr Smith re-examination: Allowance is made for utility costs; and Document C-1 Table 19.1

³⁷⁴ Document C-1 Table 19.1 on page 19-2, and Mr Smith re-examination

³⁷⁵ Document APP/210 paragraph 5

³⁷⁶ Document APP-3-2: Mr Smith PoE page 7 Table: summary of the extent to which the trolley vehicles will be segregated from other vehicles and the extent to which space will be shared with other public transport vehicles and motorised vehicles

- 4.94 NGT would be served by 27 dedicated stops and 41 bus stops would lie within 100 m of these stops³⁷⁷. The analysis in the transport assessment demonstrates how the provision for those 27 additional stops would improve accessibility³⁷⁸.
- 4.95 It is not practical or appropriate to serve existing buses and the Trolley Vehicle from the same stops as:
- There is a practical limit to the number of services per hour that a single stop can comfortably accommodate. The current Metro guidance indicates that the limit is 20 services per hour³⁷⁹.
 - The geometry of an NGT stop is not the same as a conventional bus stop. The stop must allow all three doors to be opened on an articulated vehicle.
 - It is necessary to provide separate stops to maintain NGT's unique offer and identity.
 - Different standards apply to NGT stops and conventional bus stops. An NGT stop will have a kerb height of 300mm³⁸⁰, whereas a conventional stop has a 'one size fits all' kerb height of 180mm³⁸¹.
- 4.96 There is a limit to the number of services that can efficiently be served from a single stop³⁸². In addition, a key test for NGT is whether the Scheme objectives are satisfied and the benefits are realised³⁸³. The provision of NGT branded stops would advance scheme objectives and thereby secure benefit realisation. Achievement of the Scheme objectives (such as Objective 4) would lead to improvement of the efficiency of the City's public transport network³⁸⁴.
- 4.97 With regard to existing buses, the effect of the Scheme would be to:

³⁷⁷ Document APP-3-2: Mr Smith PoE paragraph 10.3, and Mr Smith cross examination

³⁷⁸ Document B-9 page 221 Table 8.1

³⁷⁹ Document APP/114 page 15

³⁸⁰ Document A-08-k paragraph 2.5

³⁸¹ Document APP/114 paragraph 2(a)(i)

³⁸² Mr Cheek accepted in cross examination

³⁸³ Mr Henkel in cross-examination and in re-examination

³⁸⁴ Mr Henkel in re-examination

- Increase the length, and extend the times of operation, of bus lanes³⁸⁵ on the corridor³⁸⁶.
- Give additional priority at junctions.
- Increase the A660 corridor bus lane lengths in the southbound direction by 7.4% and in the northbound direction by 95%.
- Increase the operational hours of bus lanes to cover all days and all hours.
- Increase bus lane widths³⁸⁷.

4.98 Bus run times would be reduced when compared with the 'do minimum' scenario³⁸⁸. The reduction in run times, albeit small, together with the increase in bus lane provision would be of significant advantage to the travelling public. If the intentions indicated by FWY that service Nos 1 and 6 would be retained at the frequency at which they run, and service Nos 28 and 97 would be reviewed were NGT to be introduced³⁸⁹, the consequences of NGT's introduction would increase frequency and choice. FWY have not pointed to any service reductions that would be likely to occur on the wider network³⁹⁰. Such an approach would not be consistent with that taken by FWY when making submissions to the Competition Commission Inquiry where, in that context, it argued that the correct unit of analysis is the route³⁹¹ and that there is no material advantage from scale at the local level³⁹². Therefore, there is no evidence that NGT would have any adverse impact on buses at the wider network level other than that which has been assessed in the Business Case³⁹³.

4.99 For the purposes of the Business Case, the assumptions made as to the likely impact on buses serving the relevant corridors were set out, and sensitivity

³⁸⁵ Document B-9 paragraph 8.2.1.1

³⁸⁶ Document APP/120

³⁸⁷ Document APP/120

³⁸⁸ Document C-1-13 Table 4.1

³⁸⁹ Mr Alexander in evidence

³⁹⁰ Mr Turner in evidence suggested that the impact would be on the wider bus network

³⁹¹ Document G-4-84 paragraph 6.3

³⁹² Document G-4-84 paragraph 6.4

³⁹³ Document APP/186

tests were carried out and identified, in the 2009 MSBC³⁹⁴ and in subsequent iterations of the Business Case. These include the consequences for the Benefit/Cost Ratio (BCR) in the event that the services on the routes of Nos 1 and 6 would not be reduced³⁹⁵.

- 4.100 FWY has not put forward a clear case as to how its response would differ from that set out in the assumption and has very little idea as to how it might respond in the event that NGT goes ahead. It confirmed that it might bid for the contract to operate NGT³⁹⁶. In this context, FWY bid to operate Supertram and put forward ftr as an alternative.
- 4.101 In terms of consultation with the bus operators, FWY and the other bus companies were consulted³⁹⁷, including at a bus operator forum in June 2009 and subsequent meetings, and a seminar. It was open to FWY to point out that the assumption made as to reduction in services as set out in the 2009 MSBC³⁹⁸ was inappropriate and it did not do so.
- 4.102 In relation to late night services, the fact that NGT is not planned to run late at night would not stop night buses from operating and there is no reason to suppose that they would not continue to do so³⁹⁹.
- 4.103 Public transport users would be able to buy multi-operator tickets (subject to bus operators accepting them) and could, if they so wished, travel into the City Centre on NGT and back out on a night bus.
- 4.104 The management of traffic at all of the junctions along the route has been very carefully considered⁴⁰⁰. The technical evidence shows that none of the junctions would be unsafe for vehicles, pedestrians or cyclists. In addition to being safe, the junctions would be able to accommodate forecast traffic flows

³⁹⁴ Document C-4 paragraph 11.15 (south route) and paragraph 11.17 (north route)

³⁹⁵ Document C-1 paragraph 17.18 and Table 17.9 on page 17-8

³⁹⁶ Mr Turner cross examination

³⁹⁷ Document A-01-3 section 7

³⁹⁸ Document C-4 paragraph 11.17

³⁹⁹ Mr Alexander evidence that services will be retained

⁴⁰⁰ Document B-9: Transport Assessment and Documents APP-6-1, APP-6-2 and APP-6-3: Mr Robertson PoE and Appendices

without materially affecting congestion at the junction whilst at the same time giving NGT vehicles priority through junctions along the route.

- 4.105 In terms of assessment methodology, the key comparison is between the 'Do Minimum' (DM) scenario, which models traffic flows as they would be in 2020 without NGT, and the 'Do Something' (DS) scenario, which models traffic flows as they would be in 2020 with NGT operational⁴⁰¹. The forecast traffic flows for 2020 for the DM and DS scenarios are based on traffic counts undertaken in 2012/13 which have been adjusted by reference to the annual growth rate for 2016 to 2031 derived from the Leeds Transport Model (LTM) produced by AECOM⁴⁰². The LTM outputs are a reasonable representation of likely traffic flows at a strategic link level⁴⁰³. They do not provide precise outputs for every link at every junction, but the traffic flows for each junction have been individually assessed to ensure that they are realistic⁴⁰⁴. By way of example, where the LTM does not provide a flow output for an individual road, the flows for that road have been assessed by reference to nearby roads that are modelled in the LTM⁴⁰⁵. Forecast flows at the junctions for 2020 have been derived using detailed information from traffic counts and data from the LTM⁴⁰⁶.
- 4.106 With regard to junction capacity, each signalised junction has been assessed using TRANSYT⁴⁰⁷, whilst 'give-way' junctions have been modelled using ARCADY and PICADY as appropriate⁴⁰⁸. For signalised junctions, TRANSYT outputs a 'Degree of Saturation' (DoS) on each approach. The DoS, which is given as a percentage, is the forecast traffic flow divided by the maximum flow possible on a particular link (given the modelled green signal time). A DoS of 90% is used as a target figure, as this allows for cycle by cycle variation in

⁴⁰¹ Document APP-6-2: Mr Robertson PoE paragraphs 4.2 and 4.3

⁴⁰² Document APP-6-2: Mr Robertson PoE paragraphs 4.8 to 4.9 and Figure 1

⁴⁰³ Document APP-6-2: Mr Robertson PoE paragraph 4.7 and Mr Robertson evidence in chief

⁴⁰⁴ Mr Robertson evidence

⁴⁰⁵ Mr Robertson cross examination and Document APP/117

⁴⁰⁶ Document APP-6-2: Mr Robertson PoE paragraph 4.6

⁴⁰⁷ Document G-4-23 TRANSYT user guide; Document APP-6-2 paragraph 4.11; and Document APP-6-3 appendix 2

⁴⁰⁸ Document APP-6-2: Mr Robertson PoE paragraph 4.16

traffic demand. When DoS gets close to 100%, although all the flow gets through the signals, significant queues can build up due to the variability of traffic arrival. Over 100% DoS means that the queue keeps growing until the flow reduces towards the end of the peak period⁴⁰⁹. All of the junction assessments show that each junction along the route would function well and would handle forecast traffic in the DS scenario⁴¹⁰.

- 4.107 In terms of NGT priority, LCC currently manages traffic signals in the City using the Strategic Traffic Management (STM) software. STM is currently used to provide selective vehicle priority at around 400 traffic signals in Leeds, Calderdale, Sheffield and Bradford⁴¹¹. LCC already uses STM to provide bus priority at just under 100 junctions in Leeds, including 12 on the NGT route⁴¹². NGT would be given a very high level of priority, with the aim to ensure that, wherever possible, NGT would not stop at traffic lights. This would be possible due to predictable travel times and predictable dwell times at stops assisting in ensuring that green signals could be manipulated for each NGT vehicle with the minimum of impact on other road users. Additionally, the frequency of NGT vehicles would help allow compensation measures to be put in place before manipulation for the next NGT vehicle would have started⁴¹³.
- 4.108 Buses would get more priority than they currently do, with bus priority being implemented at significantly more junctions and pedestrian crossings than at present. Buses would also benefit from the priority given to NGT, for example by allowing buses to go through a junction on the same green as a trolley vehicle⁴¹⁴. It would not however be possible to provide buses with the same degree of priority as NGT, particularly as buses are too frequent to allow STM to try to get all of them through each junction without stopping and to allow sufficient recovery time to compensate other road users. Buses are also too

⁴⁰⁹ Document APP-6-2: Mr Robertson PoE paragraph 4.12

⁴¹⁰ Document B-9: Transport Assessment and Document APP 6-3: Mr Robertson PoE Appendices

⁴¹¹ Document APP-6-2: Mr Robertson PoE paragraph 3.5

⁴¹² Document APP 6-2: Mr Robertson PoE paragraphs 3.9 and 3.12

⁴¹³ Document APP 6-2: Mr Robertson PoE paragraph 3.14

⁴¹⁴ Document APP 6-2: Mr Robertson PoE paragraph 3.21

unpredictable, both in terms of journey times and dwell times at stops, to allow priority to be given in the way that it would be given to NGT.

Additionally, bus stops could be located too close to junctions which, coupled with unpredictable dwell and stop times, means that STM may not have enough time to manipulate a green signal for the bus in the time it takes to get from the stop to the junction in question.

- 4.109 It would not be possible to give the same level of priority to significantly more NGT vehicles, as the higher the number of NGT vehicles that are prioritised through a junction the greater the impact on other road users due to the need to compensate for that priority once the vehicle has gone through the junction. Operating a 'hurry-call'⁴¹⁵ system along similar lines to that operated in respect of the Croydon tram would not work on the NGT route given the disruption it would cause to other road users.
- 4.110 Other road users would benefit from the junction and road layout improvement that NGT would bring⁴¹⁶. For the majority of the route it has been possible to provide an NGT/bus/cycle lane and a lane for general traffic⁴¹⁷. Exceptions include a short stretch of the A660 northbound between Drummond Road and Thornbury Avenue⁴¹⁸, where the presence of mature trees and Yorkshire Water equipment result in insufficient space to provide an additional lane over a short stretch of some 100m before the junction. The current Traffic Regulation Orders (TROs) prevent waiting and loading outside Kindercare Nursery at that point⁴¹⁹ and as a result the proposed TROs (which would continue to prevent parents taking children to the nursery from parking on the A660) would impose no additional restriction⁴²⁰. Parents would

⁴¹⁵ Document OBJ 923 FWY/115: hurry-call in Croydon, particularly answers to questions 2 and 5

⁴¹⁶ For example Document A-12 Drawing No 312694/TD/010: Lawnswood roundabout; Document A-11 Drawing No 312694/TD/016: Road layout in front of the Arndale Centre; and Document A-12 Drawing No 312694/TD/021: Improvements at Hyde Park Corner

⁴¹⁷ Document APP/120

⁴¹⁸ Mr Smith in cross examination by Helen Pickering and Document A-11 Drawing No 312694/TD/013

⁴¹⁹ Document APP/107

⁴²⁰ Mr Smith in re-examination

continue to be able to park in the side roads when dropping children off at the nursery.

- 4.111 The impact of the proposals on queuing at individual junctions has been set out and considered⁴²¹. Any assertions that NGT would have a materially adverse impact on congestion and submissions based upon it are not supported by the evidence. Although the Business Case includes an analysis of impacts on business road users and identifies a small negative impact on those users in peak periods, that negative impact would be far outweighed by benefits to non-business users⁴²².
- 4.112 Congestion in general would not increase⁴²³. The capacity in relation to individual junctions and resultant queues is assessed junction by junction. In many places there would be an increase in capacity with some reduction in queuing. In other places, local re-routing would lead to an increase in traffic flow because the junctions would have capacity to accommodate that increased flow. The following are examples of some of the most critical junctions:
- a) The DS at Lawnswood roundabout is forecast to have more traffic attracted to use the junction as it would be much easier to negotiate due to the signals and TRANSYT shows the A660 southbound approach as having the highest saturation, at 98%⁴²⁴.
 - b) At the Alma Road/Shaw Lane junction the derived traffic flows for 2020 show increased flows, which have been used in the TRANSYT analysis. The maximum DoS in the AM peak in both the DM and DS is 107%. The operation of the junction is forecast to improve marginally in the PM peak. The maximum DoS reported in the DM scenario is 113% which reduces to 103% in the DS. Queue detection for southbound traffic would be used to allow the traffic signals to manage the queues and reduce congestion in

⁴²¹ Document B-9: Transport Assessment and Mr Robertson's evidence

⁴²² Document APP-7-2: Mr Chadwick PoE paragraphs 3.64--3.71, and Document C-1 Table 17.1

⁴²³ Document APP-6-2: Mr Robertson PoE paragraphs 8.2 to 8.4

⁴²⁴ Document APP-6-2: Mr Robertson PoE paragraph 5.43

front of the Arndale Centre, whilst maintaining traffic through Otley Road at North Lane at current levels. The bus gate at Shaw Lane and Alma Road would be coordinated, so the majority of traffic would either go through the signals on a green or stop at no more than one signal. This would mean main road traffic would not incur any more signal delay than at the moment⁴²⁵.

- c) The NGT Scheme would not alter the capacity restraints at the Otley Road/North Lane junction the capacity would remain unchanged making it a critical junction indetermining how much traffic would use the A660⁴²⁶.
- d) At the Woodhouse Lane/Portland Way junction the forecast DS traffic flows are slightly higher than the DM flows, reflecting some re-routing as a result of the network changes. The result is that this junction is a capacity restraint with DS between 91% and 96% on critical links in both peak periods⁴²⁷.

4.113 Those travelling on NGT would be afforded unimpeded passage. In that sense NGT would be 'congestion busting'⁴²⁸. A concern expressed by Leeds Cycling Campaign⁴²⁹ about safety for cyclists at the Shaw Lane/St Anne's Road/Otley Road junction is not raised by those who conducted the safety audit⁴³⁰.

4.114 In terms of vehicle parking, in order to facilitate punctual running of NGT and to maintain traffic flow it would be necessary to make some changes to the existing on street arrangements. The Transport Assessment includes a summary of the changes that would be made to on street parking on the north line⁴³¹ and on the south line⁴³². Of a total of 18,890 chargeable parking spaces in the City Centre the proposals would result in the loss of 61, or

⁴²⁵ Document APP-6-2: Mr Robertson PoE paragraphs 5.84 and 5.85

⁴²⁶ Document APP-6-2: Mr Robertson PoE paragraph 4.10

⁴²⁷ Document APP-6-2: Mr Robertson PoE paragraph 5.171

⁴²⁸ Document OBJ 1354 WRA/112: Closing statement on behalf of the WRA page 2

⁴²⁹ Document OBJ/1470 SOC paragraph 13

⁴³⁰ Document APP/106: comments on Document A-11 Drawing No 312694/TD/016 pages 18 and 19, and Document APP/169 (response to the P4 plans)

⁴³¹ Document B-9 Table 9.3

⁴³² Document B-9 Table 9.4

0.32%⁴³³. Current provision for coach parking would generally be maintained⁴³⁴.

- 4.115 Higher priority kerbside functions, such as servicing and parking for people with disabilities would be unaffected or capacity would be increased⁴³⁵. In the Far Headingley area⁴³⁶, analysis shows that there would be a loss of parking spaces but not to such an extent as to be material over the length of the route⁴³⁷.
- 4.116 With respect to pedestrian facilities, where appropriate, footways would be widened and extended and high quality materials would be used for re-surfacing⁴³⁸. The total number of controlled pedestrian crossing facilities would be increased from 124 to 187 along the route alignment⁴³⁹, thereby enhancing safety and supporting connectivity⁴⁴⁰. Where possible 'straight-over' pedestrian crossings are proposed. Where, in order to achieve satisfactory junction performance it is necessary to do so, staggered crossing facilities are proposed⁴⁴¹.
- 4.117 The use of shared space is becoming increasingly common and is encouraged by guidance such as that provided in LTN 01/11⁴⁴². The introduction of NGT provides an opportunity to introduce further areas of shared space to Leeds. Those living and working in cities with trams have become accustomed to sharing space to the benefit of pedestrians and the users of public transport. In terms of concerns about speed and the little noise made by trolley vehicles, LTN 01/11⁴⁴³ recognises that sharing is a function of reduced traffic flows and

⁴³³ Document APP-3-2: Mr Smith PoE paragraph 7.7.7

⁴³⁴ Document B-9 paragraph 9.2.3

⁴³⁵ Document APP-3-2: Mr Smith PoE paragraph 7.7.8

⁴³⁶ Document OBJ 1354 WRA/106

⁴³⁷ The figure given in WRA/106 is 67 spaces, revised to 74 in Weetwood RA 'Script of Evidence' page 4; Document REB-2 OBJ/1354 paragraph 2.18 and Appendix B: The Mott MacDonald figure is 80, based upon each space being 6m in length

⁴³⁸ Document APP-3-2 Mr Smith PoE: Section 10 Footway widths in response to objections

⁴³⁹ Document APP-3-2: Mr Smith PoE paragraph 7.3.14

⁴⁴⁰ Document APP-3-2: Mr Smith PoE paragraph 7.3.16

⁴⁴¹ Document APP-3-2: Mr Smith PoE paragraph 7.3.8

⁴⁴² Document G-4-77

⁴⁴³ Document G-4-77 page 1 paragraphs 2.13 to 2.17

speed and advises that it is the design speed that is important⁴⁴⁴, as at lower design speeds drivers tend to give way to pedestrians. The advice is that a design speed of no more than 20 mph is desirable and less than 15 mph preferable. The Scheme has been designed so as to comply with the guidance in LTN 01/11.

4.118 The trolley vehicles would be fitted with audible warning devices, and would run at relatively low speeds through areas where space would be shared with pedestrians. With regard to LCC's road safety audit advising that the speed of trolley vehicles passing through existing pedestrianised areas in the City Centre⁴⁴⁵, which include Millennium Square, should be no more than 10 mph, the run time assessment assumes that the average speed between Cookridge Street and the Arena would be 8.8 mph⁴⁴⁶. The run time assessment also assumes relatively low speeds in the section which runs along Whitfield Way⁴⁴⁷, where the stopping sight distances⁴⁴⁸ would ensure that there would be no unacceptably adverse impact on safety, given the unrestricted visibility and low speed of the trolley vehicles⁴⁴⁹.

4.119 In terms of footway widths, given the competing priorities, it is inevitable that at some points the amount of land available for footways would decrease. The part of the A660 which lies between Churchwood Avenue to Drummond Road is subject to significant constraints such that it would be necessary to reduce the footway width from between 3 to 3.5m to between 2 to 3m. LTN 02/08⁴⁵⁰ advises that the minimum recommended width for urban footways is 2m, which would be met. The 'toddler's carriages' of the type used by Kindercare Nursery are 1.8m long and 0.7m wide, and therefore could easily be accommodated as they could pass other traffic on the footway when it is 2m wide, and could be turned on a 2m wide footway or in other locations where

⁴⁴⁴ Document G-4-77 page 1 paragraph 2.15

⁴⁴⁵ Document APP/106 page 2

⁴⁴⁶ Document C-1-13: Summary run time results north line northbound

⁴⁴⁷ Document C-1-13: Summary run time results south line southbound

⁴⁴⁸ Document APP/124

⁴⁴⁹ Mr Smith cross examination

⁴⁵⁰ Document G-4-74 paragraph 8.5.2

the footway would be wider. The width of the footway would not give rise to any unacceptable impact on either safety or convenience.

- 4.120 The re-arrangement of Woodhouse Lane and Blenheim Walk would improve conditions for pedestrians. Woodhouse Lane, in the vicinity of the two universities, would be restricted to public transport and service vehicles. The shared surface would provide a greatly improved pedestrian environment. Pedestrians wishing to cross Blenheim Walk from the Leeds College of Art would be able to use the two pedestrian crossings provided. The level of convenience would be no different to that which exists at present. The current arrangements require a pedestrian to use two crossings⁴⁵¹.
- 4.121 In terms of cycling, the Scheme would lead to a net increase of 3.89 km of cycle lanes⁴⁵², with improvements to junctions. There would be a provision of 1.12 km⁴⁵³ of dedicated cycle lanes on the off existing highway sections of the route and 2.4 km⁴⁵⁴ of shared footpath/off highway sections and combined bus/NGT and cycle lanes.
- 4.122 At present many bus/cycle lanes are 3m in width, and there is little provision for buses and cyclists travelling northbound on the A660. As a result of the Scheme the northbound bus lane provision would increase from 1,080m to 2,106m⁴⁵⁵, and the average width of bus/cycle lanes would increase from approximately 3.5m to between 4.2m and 4.6m. A trolley vehicle 2.55m wide, allowing for wing mirrors, would leave a width of 1.25m for cyclists on a 4.2m wide lane, which would be an improvement on what is currently available⁴⁵⁶. The extended hours of operation of bus lanes⁴⁵⁷ would also benefit cyclists.

⁴⁵¹ Document APP-6-3: Mr Robertson PoE Appendices page 2: Leeds City Council Scheme and proposed Scheme

⁴⁵² Document APP-3-2: Mr Smith PoE paragraph 7.2.10, summary table

⁴⁵³ Document APP-3-2: paragraph 7.2.10

⁴⁵⁴ Document APP-3-2: paragraph 7.2.10

⁴⁵⁵ Document APP/120

⁴⁵⁶ Mr Smith in cross examination

⁴⁵⁷ Document APP/120

- 4.123 A bus lane of 4m or more in width could not be provided on Woodhouse Moor in the northbound bus lane, where it is proposed that a 3.65m wide lane would be provided over a distance of approximately 100m⁴⁵⁸. It would be an improvement on current conditions as the existing bus lane would be widened⁴⁵⁹. This has been discussed with the Leeds Cycle Forum, LCC, Sustrans and the Leeds Cycling Campaign who have expressed a preference for improvements to the inbound bus lane.
- 4.124 With regard to the benefit of providing segregated routes for cyclists, the appropriate guidance is to be found in LTN 02/08⁴⁶⁰, which was endorsed in Manual for Streets 2⁴⁶¹, and is up-to-date. Table 1.2 sets out the hierarchy of provision. Junction treatment and reallocation of carriageway space are to be considered before the provision of cycle tracks away from roads. Table 1.1 provides guidance on the type of cycle facility which is appropriate in different circumstances⁴⁶². In roads, such as those under consideration in this case, with a large number of side road junctions or property accesses, on-road provision is said to be more attractive as it reduces the potential for conflict at those locations. Guidance on combined bus/cycle lane widths⁴⁶³ indicates that the minimum acceptable width is 4m. The combined/cycle bus lane widths to be provided, at 4.2m, would exceed the minimum referred to in LTN 02/08.
- 4.125 The opportunity to remedy many causes of accidents on the NGT corridor has been taken in the course of designing the Scheme⁴⁶⁴. The simplistic approach, based upon an assumption that if the total vehicle km travelled increases accident rates will necessarily increase proportionally, should not be followed, as it fails to take account of the improvements which would be made to

⁴⁵⁸ Document A-11 Drawing TD 23, Mr Smith cross examination by Mr Broadbent: A cyclist travelling at 20 kph would take about 18 seconds to pass along this section

⁴⁵⁹ Mr Smith cross examination

⁴⁶⁰ Document G-4-74

⁴⁶¹ Document G-4-16 paragraph 6.2.1

⁴⁶² Document G-4-74 page 9, as referred to by Mr Smith in evidence in chief and cross examination

⁴⁶³ Document G-4-74 page 33 paragraph 6.2.2

⁴⁶⁴ Document APP-3-2: Mr Smith PoE paragraphs 7.8.3 and 7.8.6 to 7.8.9

highway design⁴⁶⁵. A road safety audit was carried out in July 2013, and the majority of recommendations have been accepted⁴⁶⁶. That audit was not based upon the latest DF7 P4 drawings and so a further audit was conducted and a further response prepared⁴⁶⁷. The Stage 1 safety audit, and the response made to them, demonstrates how much care and attention has been given to safety.

- 4.126 The redesign of the junctions along the NGT alignment, and the closure of certain junctions, such as the Weetwood Lane/Otley Road intersection, would improve safety at many of the locations where clusters of accidents have been identified⁴⁶⁸. The introduction of pedestrian crossings where no provision or uncontrolled crossings exist would also bring about improvements to safety.

(b) The effects of closing, diverting or altering the layout of the streets as detailed in Schedules 3, 4 and 5 to the draft TWA Order

- 4.127 In order to accommodate NGT on the existing and proposed highway network and to ensure the safety and convenience of other users of the highway, it is necessary to regulate the use of the highway by TRO or in some cases to stop up existing highways either permanently or temporarily. Highways to be permanently stopped up are set out in Schedule 4 to the draft Order⁴⁶⁹ and the reasons have been given⁴⁷⁰.

- 4.128 Before making an order to extinguish any existing public right of way the SofS will have to be satisfied that an alternative right of way has or will be provided or that the provision of an alternative right of way is not required⁴⁷¹. Each public right of way which it is proposed should be extinguished has been identified⁴⁷², distinguishing between the two categories referred to in section

⁴⁶⁵ Document APP-3-2: Mr Smith PoE paragraph 7.8.8

⁴⁶⁶ Document APP-3-2: Mr Smith PoE paragraph 7.8.9 and Document APP/106: Designer's response to the Stage 1 safety audit

⁴⁶⁷ Document APP/169

⁴⁶⁸ Document APP-3-2: Mr Smith PoE paragraph 7.8.10

⁴⁶⁹ Document APP/205 identifies the one change to the proposed stopping up provisions

⁴⁷⁰ Document APP-3-3: Mr Smith PoE Appendix 3

⁴⁷¹ Document E-1-15: The Transport and Works Act 1992, Section 5(6)

⁴⁷² Document APP-3-3: Mr Smith PoE Appendix 3

5(6) of the TWA 1992 and identified in Schedule 4 to the draft Order⁴⁷³, and setting out in relation to the first category, the alternative provided, and in relation to the second category, why no alternative is required.

- 4.129 The stopping up of Weetwood Lane end would enable the provision of a public space or plaza and the provision of St Chad's NGT stop. The suggestion that Weetwood Lane end be stopped up was originally put forward by a member of the local community and incorporated in the draft Far Headingley, Weetwood and West Park Neighbourhood Design Statement⁴⁷⁴. Therefore, even in the absence of NGT, there would be grounds for stopping up Weetwood Lane end on environmental grounds and for restricting turning movements. Given the cluster of collision accidents along Otley Road between Cottage Road and Hollin Road⁴⁷⁵, there is a safety advantage in restricting the number of junctions and introducing signal controls. By closing Weetwood Lane end, and introducing signal controls at the St Chad's Road/Otley Road junction, there would be an improvement to safety and the aspiration of the Far Headingley Village Society⁴⁷⁶ to create a vehicle traffic free area would be achieved.

(c) the effects of the traffic regulation measures specified in Schedule 10 to the draft TWA Order, including the proposed restrictions on parking, loading and access

- 4.130 The plans submitted with the draft Order have been replaced by a new set of Traffic Regulation and Rights of Way plans⁴⁷⁷. The TROs would be required to allow the NGT Scheme to be implemented, either to protect the operation of the trolley vehicle system or to maintain safe operation of the amended highway layout⁴⁷⁸.

⁴⁷³ Document A-01-4 pages 68-70

⁴⁷⁴ Document D-3-6 pages 79 and 80

⁴⁷⁵ Document APP-3-2: Mr Smith PoE paragraph 6.5.1

⁴⁷⁶ Document OBJ 1354 WRA/111: WRA Script page 5

⁴⁷⁷ Document A-01-3 and the explanatory note in Document APP/105

⁴⁷⁸ Document APP-3-2: Mr Smith PoE paragraph 7.10.2

(d) any complementary traffic management or other measures proposed by the Promoters to mitigate the effects of the Scheme on road users (including cyclists and pedestrians)

4.131 Article 43(2) of the draft Order is included to give the Promoters the necessary power to regulate traffic so far as may be necessary or expedient for the purposes of, in connection with, or in consequence of, the construction maintenance or operation of the LTVS. This power is subject to the limitations that consent be obtained from the traffic authority, and that notice be given to the traffic authority and chief officer of police, and the proposals be advertised⁴⁷⁹. In addition, Article 43(3) provides that the powers conferred by Articles 43(1) and (2) may be exercised at any time prior to the expiry of 12 months from the opening of the authorised LTVS for public use.

Matter 8-The likely impacts of the Scheme on ecological interests (such as bats), including whether implementation of the Scheme is likely to damage or destroy a breeding site or resting place of any species protected under the Conservation of Habitats and Species Regulations 2010 ("the 2010 Regulations"); and, if so, whether appropriate mitigation measures have been designed and what Natural England's view is (in the light of those proposed mitigation measures) of the likelihood of their granting licences under the 2010 Regulations when applied for by the Promoters.

4.132 The assessment of the Scheme's ecological impacts⁴⁸⁰ was carried out in accordance with the Ecological Impact Assessment Methodology and other relevant guidance⁴⁸¹. A full range of surveys was carried out between 2009 and 2013. It is clear from the baseline assessment that in terms of the

⁴⁷⁹ Document A-01-4: Draft Order Article 43(5)

⁴⁸⁰ Document A-08d: Technical Appendix; Document A-08b: Main Statement and Documents APP-10-3: Mr Walker PoE Appendix Landscape plans, and APP-12-1, APP-12-2 and APP-12-3: Prof Purseglove PoE and Appendices

⁴⁸¹ Document A-08b: Scoping Report Annex A paragraphs 5.6.7 to 5.6.8; Document G-4-3: Document E-3-7 and Document APP-12-2: Mr Purseglove PoE paragraph 3.7 and summarised in Document A-08d table 2.1

Scheme's potential impacts detailed consideration need only be given here to breeding birds and bats⁴⁸².

- 4.133 Construction impacts would be minimised by utilising best working practices secured via the CoCP and the CEMP⁴⁸³. The CoCP would include standard measures to control air pollution, reduce noise disturbance, protect sensitive ecological features and protect the water environment. The CEMP would cover, amongst other things, tree replacement, compensation for habitat loss, including replacement bird and bat boxes, and lighting design. Detailed watching briefs would be maintained.
- 4.134 60 new bird boxes and 60 new bat boxes would be installed to replace lost roosting and breeding sites, notably at Headingley Hill. These would be maintained and monitored⁴⁸⁴. There would be significant replacement planting of broadleaved semi-natural woodland trees, resulting in an additional 5.5 hectares across the Scheme⁴⁸⁵. There would be some loss of scrub, semi-improved natural grassland, improved grassland and introduced scrub, but none of these are of high ecological importance⁴⁸⁶. There would be a net gain of standing water, ornamental planting and of wildflower mix⁴⁸⁷. Each of these are appropriate means of enhancing bat habitat⁴⁸⁸.
- 4.135 The proposed mitigation would reduce the Scheme's construction impact on breeding birds to a 'not significant' effect on non-Schedule 1 breeding birds. The proposed planting and new bird boxes would be long term beneficial.
- 4.136 NGT would affect the foraging grounds of a pipistrelle bat maternity roost at Headingley Castle and would require the removal of two transient roosts (one at 6 Wood Lane, one in the toilet block at Lawnswood playing fields).

⁴⁸² Document APP-12-2: Prof Purseglove PoE Table 4.2 and paragraphs 4.8 (breeding birds) and 4.11 (bats)

⁴⁸³ Document A-08g-2: Code of Construction Practice

⁴⁸⁴ Document APP-12-2: Prof Purseglove PoE paragraph 5.10

⁴⁸⁵ Document APP-12-2: Prof Purseglove PoE paragraph 5.8

⁴⁸⁶ Document APP-12-2 paragraph 5.8

⁴⁸⁷ Document A-08d paragraph 4.37 and tables 4.2 and 4.3

⁴⁸⁸ Document APP-12-2: Prof Purseglove PoE paragraph 5.8

Following mitigation (new bat boxes and mitigatory planting), the Scheme would have a negligible impact on bats⁴⁸⁹.

- 4.137 Article 12(1) of the Habitats Directive requires member states to establish 'a system of strict protection' for a number of animal species, by prohibiting, among other things, the deliberate disturbance of these species and the deterioration or destruction of their breeding sites and resting places. The Directive is given effect in domestic legislation by the Conservation of Habitats and Species Regulations 2010 (the 2010 Regulations). Under the 2010 Regulations a licence may be granted to permit derogations from the protection afforded to European Protected Species provided that three tests (the Derogation tests) are met⁴⁹⁰. NE has not objected to the Scheme. Whilst NE has not said that it would grant the necessary licences, it is standard practice not to give an indication in advance of an application for a licence.
- 4.138 Regulation 53(2)(e) states that a licence may be granted for '*preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment*'.
- 4.139 Regulation 53(9)(a) states that the appropriate authority shall not grant a licence unless they are satisfied '*that there is no satisfactory alternative*'.
- 4.140 Regulation 53(9)(b) states that the appropriate authority shall not grant a licence unless they are satisfied '*that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*'.
- 4.141 Given the protection offered to European Protected Species by the 2010 Regulations case law, the role of the planning decision maker (here the SofS) is limited. In particular, if a proposed development is found acceptable when judged on its planning merits, planning permission for it should normally be

⁴⁸⁹ Document APP-12-2: Prof Purseglove PoE paragraphs 6.16 to 6.17

⁴⁹⁰ Document E-1-24: Conservation of Habitats and Species Regulations 2010 regulation 53 (2)(e), (9)(a) and (9)(b)

given unless, in the planning authority's view, the proposed development would be likely to offend Article 12(1) and be unlikely to be licensed under the derogation powers⁴⁹¹.

- 4.142 The NGT proposals would not be likely to offend the Article 12(1) prohibition on deliberate disturbance⁴⁹². However, the Article 12 prohibition of deterioration or destruction of breeding sites or resting place is engaged⁴⁹³. Following a meeting with NE held on 5 August 2013⁴⁹⁴, NE set out its position in a letter to the SofS⁴⁹⁵. NE identified that the proposed development would be likely to affect bats through damage or destruction of a breeding site or resting point, but it did not object to the proposed development on the basis that proposed mitigation would be broadly in accordance with the requirements of the bat mitigation guidelines. NE confirmed that it did not object to the proposed development and put forward a planning condition to be included in the Order⁴⁹⁶.
- 4.143 NE confirmed that the views expressed in its consultation response did not represent confirmation that a species licence would be issued. It confirmed that: *'It is for the local planning authority to consider whether the permission would offend against Article 12(1) of the Habitats Directive, and if so, whether the application would be likely to receive a licence. This should be based on the advice we have provided on favourable conservation status and Natural England's guidance on how we apply the 3 tests (no alternative solutions, imperative reasons of overriding public importance and maintenance of favourable conservation status) when considering licence applications'*.
- 4.144 Although NE has not been able to give a view as to whether it would be likely to grant a licence in due course, given its decision not to object, there is no

⁴⁹¹ Documents L-APP-6: *R (Morge) v Hampshire CC* [2011] UKSC 2 per Lord Brown at [29] and L-APP-7: *R (Prideaux) v Buckinghamshire County Council* [2013] EWHC 1054 (Admin) per Lindblom J at [96]

⁴⁹² Document APP-12-2: Prof Purseglove PoE paragraph 6.7

⁴⁹³ Document APP-12-2: Prof Purseglove PoE paragraph 6.6

⁴⁹⁴ Document A-08d paragraph 2.14, page 6

⁴⁹⁵ Document REP 3: letter sent by email dated 30 October 2013

⁴⁹⁶ Document APP-8-3 Appendix 5: Incorporated into the draft planning conditions as condition

reason to suppose that a licence would not be granted⁴⁹⁷. A decision to make the TWA Order and direct that planning permission be deemed to be granted may therefore be lawfully made.

Matter 9-The measures proposed by the Promoters for mitigating any adverse impacts of the Scheme

4.145 A comprehensive register of all mitigation measures for the construction and operational phase is given in Annex E of the Main Statement of the ES⁴⁹⁸ and that mitigation can be secured by planning condition. Where significant environmental effects would still remain after application of incorporated mitigation, they are termed 'significant residual (environmental) effects' and these are described in the ES Main Statement in each topic chapter.

(a) the Construction Implementation Strategy and Code of Construction Practice

4.146 The Construction Implementation Strategy⁴⁹⁹ provides a general overview of the works to be undertaken for construction of the Leeds NGT and anticipated construction duration. The report also indicates the amount of disruption that could be expected during construction and seeks to identify potential problems, constraints and means of alleviation⁵⁰⁰. It is to be read in conjunction with the CoCP⁵⁰¹, which sets out minimum standards of construction practice expected by the Promoters during the construction of the infrastructure for the NGT system. The assessment has taken the mitigation measures as outlined in the CoCP into account such that they form part of the NGT Scheme and would be implemented by the construction contractor⁵⁰².

The CoCP sets out, as a practicable minimum, a series of measures to reduce

28 (with minor amendments to the wording) in March 2014

⁴⁹⁷ Documents L-APP-6 and L-APP-7: *Morge* per Lord Brown at [30] and Baroness Hale at [45] and *Prideaux* at [97] and [117 to 120]

⁴⁹⁸ Document A-08b

⁴⁹⁹ Document A-08g-3

⁵⁰⁰ Document A-08g-3 paragraph 1.1

⁵⁰¹ Document A-08g-2

⁵⁰² Document APP-13-2: Mr Forni PoE paragraph 3.11; and Document A-08b page 68 paragraph 6.28

the environmental effects during the construction period, taking into account measures identified within the ES. It would cover environmental and safety aspects affecting the interests of residents, businesses, all road users and the general public in the vicinity of the works, and would apply throughout the whole construction period⁵⁰³, which is given in the Construction Implementation Strategy as being 2.5 years beginning in 2017 and the system being operational in 2020⁵⁰⁴.

(b) the proposed Construction Environmental Management Plan and Construction Traffic Management Plan

4.147 The CEMP would be secured by condition⁵⁰⁵ and would deal with the detailed environmental mitigation measures to be implemented through the construction process and the construction contractor and Promoters would monitor the implementation of the CEMP during the construction period⁵⁰⁶.

4.148 The CoCP would require the contractor to prepare a CTMP in consultation with the highway authority and emergency services. It would be produced, coordinated and implemented by the contractor and include:

- Temporary or permanent road closures and diversions;
- Any interference with a carriageway or footway
- Temporary traffic control measures
- Temporary and permanent access to the works;
- Temporary road layouts;
- Routes to be used by / restrictions imposed upon construction traffic;
- Monitoring of lorry use; and
- Site specific controls⁵⁰⁷.

(c) the proposed diversions for rights of way stopped up under the draft TWA Order, including whether they would satisfy the requirements of section 5(6)

⁵⁰³ Document A-08b paragraph 6.28

⁵⁰⁴ Document A-08g-3 sections 6.1 and 6.2 and Appendix C

⁵⁰⁵ Document APP-8-3: Mr Speak PoE Appendix 5 draft condition 3

⁵⁰⁶ Document APP-13-2: Mr Forni PoE paragraph 3.13 and Document A-08b page 68 paragraph 6.29

⁵⁰⁷ Document APP-3-2: Mr Smith PoE page 112 paragraph 8.2.7

of the TWA 1992, that a public right of way should not be extinguished unless either an alternative right of way has been or will be provided, or the provision of an alternative is not required

4.149 The mitigation measures have been set out⁵⁰⁸.

(d) any measures to avoid, reduce or remedy any major or significant adverse environmental impacts of the Scheme

4.150 The mitigation measures proposed in respect of each topic assessed in the ES are detailed in the respective ES Chapters and are also summarised in the mitigation register in Annex E of the ES Main Statement⁵⁰⁹. Those mitigation measures could be secured by condition.

(e) whether, and if so, to what extent, any adverse environmental impacts would still remain after the proposed mitigation

4.151 The significant adverse environmental impacts remaining after mitigation are set out in each topic chapter of the ES.

Matter 10-The adequacy of the Environmental Statement submitted with the application for the TWA Order, having regard to the requirements of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006, and whether the statutory procedural requirements have been complied with

4.152 The ES⁵¹⁰ meets the requirements of Directive 85/337/EEC as amended⁵¹¹ and consolidated in 2011/92/EU and the Transport and Works (Applications and

⁵⁰⁸ Document APP-3-3: Mr Smith PoE Appendix 3 pages 1 and 2

⁵⁰⁹ Document A-08b page 196

⁵¹⁰ Documents A-08a Non-Technical Summary; Volume I: Documents A-08b Main Statement and B-1 Supplement relating to the implications of further traffic data; Volume II: Technical Appendices Documents B-2 Air Quality; A-08c-2 Carbon; A-08c-3 Community; A-08d Ecology; A-08c-5 Electromagnetic Compatibility; A-08c-6 Geology and Soils; A-08c-7 and B-1 Historic Environment; A-08e-1 Landscape, Townscape and Visual Amenity; B-4 Noise and Vibration; B-5 Open Space; A-08e-4 Socio-Economics; A-08e-5 and B-1 Traffic and Access; A-08e-6 Waste Management; and A-08e-7 Water Resources; and Volume III: Document B-7 Figures

⁵¹¹ Document E-2-1

Objections Procedure) (England and Wales) Rules 2006⁵¹². It was prepared subsequent to the submission of a Scoping Report⁵¹³. The Scoping Report was subject to formal statutory consultation to ensure the EIA addressed the key appropriate environmental issues and used appropriate methodologies for the EIA process. A Scoping Opinion⁵¹⁴ was provided by the DfT. The ES provides all of the information required in the Scoping Opinion⁵¹⁵. Volume IV of the ES contains supporting documents⁵¹⁶.

- 4.153 Settlement (in relation to effects on buildings) and electromagnetic radiation (in relation to human health) were scoped out of the EIA as it was not anticipated that environmental effects would arise from either.
- 4.154 The assessment undertaken for the EIA was based on the engineering design plans as described in the Technical and Landscape Plans⁵¹⁷, and the construction assumptions as described in the Construction Implementation Strategy⁵¹⁸.
- 4.155 Some revisions to the NGT Scheme design have been made and recorded in the Revised Technical Design Drawings (rev P4), dated March 2014. The changes between the rev P3 and rev P4 design drawings all remain within the scope of the Limits of Deviation and do not materially change the environmental impact of the Scheme. As such, the updated drawings do not change the conclusions of the ES⁵¹⁹. It was not necessary to undertake

⁵¹² Document E-1-22

⁵¹³ Document A-08b Main Statement Annex A

⁵¹⁴ Document A-08b Main Statement Annex B

⁵¹⁵ Document A-08b Main Statement Annex C: response to the Scoping Opinion, outlining where in the ES this information has been provided

⁵¹⁶ Documents A-08g-4: Flood Risk Assessment; A-08h-2: Equalities Impact Assessment; B-8: Health Impact Assessment; A-08h-5: Low Carbon Energy Strategy; A-08g-3: Construction Implementation Strategy; A-08g-2: Code of Construction Practice; A-08i: Arboriculture Assessment; A-08j: Drainage Strategy; A-08g-6 and A-08g-7 Geotechnical design Reports; A-08g-5 and A-08g-8: Geotechnical Investigation Reports; A-08h-4 Land Use Baseline; B-9 Transport Assessment; A-08h-1: Energy Demand Assessment; B-10: Sustainability Assessment; and A-08g-1: Climate Change Management Assessment

⁵¹⁷ Document A-05

⁵¹⁸ Document A-08g-3

⁵¹⁹ Document APP-15-2: Mr Leather PoE paragraph 3.9

further environmental impact assessment work⁵²⁰. All the necessary environmental information has been put before the Inquiry.

- 4.156 The ES contains a description of the likely environmental effects and the mitigation measures that are suggested to prevent, reduce and where possible offset any likely significant adverse impacts on the environment.
- 4.157 The ES is not inadequate. As originally submitted⁵²¹ it satisfied the requirements of Rule 11 and Schedule 1 of the Transport and Works (Application and Objections Procedure) (England and Wales) Rules 2006 (the Application Rules). The courts have emphasized that the ES regime is intended to be an aid to effective environmental decision making, not a legal obstacle course⁵²². They have also deprecated an unduly legalistic approach to what an ES is required to contain⁵²³. The definition of an ES is to be found in rule 4(1) of the Application Rules⁵²⁴.
- 4.158 The Supplement to the ES, Historic Environment Update, July 2014 (Document B-13) forms part of the environmental information to be taken into account by the decision maker. It was commissioned and submitted to address the case that could be made that the original ES was inadequate because it failed to deal with setting and significance in sufficient detail. It provides further information, particularly in relation to the setting of the listed buildings. The assessments presented were carried out prior to the compilation of the original ES⁵²⁵ and so the information on which they were based was previously

⁵²⁰ Document APP-15-2: Mr Leather PoE paragraph 3.9 and Document APP-3-2: Mr Smith PoE paragraph 4.2.1

⁵²¹ Document A 08b: Main Statement and Document A 08c-7: Heritage Technical Appendix

⁵²² Document L-APP-11: Case *Waddenzee* [2004] Env LR 14; and L-APP-5: Case *R (Hart) v Secretary of State* [2008] 2 P&CR 16 per Sullivan J (as he then was) paragraph 72

⁵²³ Document L-APP-3 For example: Case *R (Blewett) v Derbyshire County Council* [2004] Env LR 29, Sullivan J holding that unless any alleged deficiencies were so serious that the document cannot be described as, in substance, an environmental statement for the purposes of the relevant regulations, any suggestion that the decision maker was legally barred from granting permission would be misconceived

⁵²⁴ Document L-APP-12: Case *Wakil v LB of Hammersmith and Fulham* [2013] EWHC 2833 (Admin) at paragraph 125, Lindblom J drew attention to the fact that in the definition of an environmental statement (in that case for the equivalent town planning regulations) the words 'reasonably' appear twice, and thereby qualifies the requirement

⁵²⁵ Document A-08c-7

available. The fuller descriptions of the heritage assets and their settings are also information that was previously available, as they were based on those assessments and other available information, such as listings, but had not previously been presented to the Inquiry. The more detailed descriptions of impacts and effects on individual assets and their settings are new information where previously those impacts and effects were described for groups of assets, but the descriptions are based on the original assessments. Document B-13 was widely advertised and circulated and all objectors had more than ample time to respond to it⁵²⁶.

- 4.159 Construction impact on buses is assessed in the ES⁵²⁷. Construction activities would lead to temporary adverse impacts upon routing for vehicles, along with minor changes to a limited number of bus stop locations. However, these construction impacts are deemed to be low in magnitude and temporary in duration, lasting less than a month in any single location. It is considered that the effects resulting from the construction phase would be reduced where possible through mitigation with diversions, temporary access routes and adoption of the CoCP⁵²⁸.
- 4.160 The ES assessment of noise and air quality is entirely robust.
- 4.161 The proposed LTVS substations have been sited following discussions with Northern Powergrid and are all in close proximity to the highway network⁵²⁹ in which Northern Powergrid maintains its electrical supply network. The cables would be within the Order limits and would be installed in underground ducts, as recognised in the main statement of the ES⁵³⁰. Northern Powergrid has

⁵²⁶ Document APP/154 paragraphs 21 to 22 and Appendix: The stated deadline therein of 18 August 2014 was extended by the Inspector to 4 September 2014 (Document INSP/102) although a number of parties submitted further evidence well after that date, e.g. First, Ms Lightbody's Supplementary Proof not being submitted until 2 October 2014, a little under three months after B-13 was advertised and sent in hard copy to FWY

⁵²⁷ Document A-08e-5 page 19 paragraph 3.54ff (baseline) and page 23 paragraphs 4.6 to 4.9 (construction impact on capacity, routing and journey time) and paragraphs 4.11 to 4.14 (operational impact) and table 4.1

⁵²⁸ Document A-08e-5 page 29 paragraph 5.3

⁵²⁹ Document APP-10-3: Mr Walker PoE Appendices

⁵³⁰ Document A-08b paragraph 2.52

more than 100 substations in the area of the route⁵³¹. The cables would be installed as part of the construction of the Scheme. The construction impacts are fully assessed in each topic chapter of the ES. There would be no significant environmental impact during operation. There is therefore no inadequacy or other deficiency in the environmental information.

- 4.162 It is not likely that works pursuant to the Order would take place in the River Aire, as LCC is developing separate bridge strengthening works⁵³². It is not therefore necessary to assess the impact in the ES. The SofS would be open to request further information⁵³³, or even to modify the Order by excluding the provision⁵³⁴, if he took the view that it was necessary to include an assessment in order for the ES to constitute an environmental statement.
- 4.163 There is no proposal to divert NGT on either a temporary or permanent basis. It cannot be known at this stage when it might be necessary to divert NGT such as around third party road works. It is not possible for an ES to assess something that is entirely unknown.
- 4.164 Operational impacts of the NGT on bus routes are assessed in the Socio-Economic Technical Appendix⁵³⁵.
- 4.165 The Scheme is promoted on the basis that it would be a permanent addition to the City's transport infrastructure. Article 14 of the draft Order imposes a duty on the Promoters to decommission the Scheme in the event that they abandon the construction or permanently cease to operate the system. This is a protective provision which is not required by the Promoters as part of the Scheme but has been included as it is a standard clause⁵³⁶. The Promoters are not seeking powers to carry out works of decommissioning.

⁵³¹ Document OBJ/1454 SOC: Northern Powergrid (Yorkshire) plc Statement of Case Appendix 1

⁵³² Document APP-3-2: Mr Smith PoE page 42 paragraph 5.11.1

⁵³³ Document E-1-22: Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 Rule 17(1)

⁵³⁴ Document APP/205 Schedule 9, work No.10 Bridge End land parcel numbers 16016, 16017, and 16018

⁵³⁵ Document A-08e-4 paragraph 4.24

⁵³⁶ Document E-1-20: Transport and Works (Model Clauses for Railways and Tramways) 2006

4.166 The Inspector's ruling⁵³⁷ that, for the purposes of the Inquiry, Document B-13 is to be treated as supplementary information to the ES and not part of the ES, contemplates that it forms part of the environmental information to which regard is to be had. If the Secretaries of State were to find that, without Document B-13, the ES would be deficient, they are not prohibited from granting consent, as such deficiency (if so found) would be remedied by Document B-13 and/or other environmental information which has been put before the Inquiry.

4.167 Article 8 of Directive 2011/92/EU indicates that it is the results of consultation and the information gathered pursuant to Articles 5, 6 and 7 which shall be taken into consideration in the development consent procedure. That information would include all the environmental information.

Matter 11-The conditions proposed to be attached to deemed planning permission for the Scheme, if given, and in particular whether those conditions meet the tests of DoE Circular 11/95 of being necessary, relevant, enforceable, precise and reasonable

4.168 The appropriate guidance can be found in the NPPF⁵³⁸ and the PPG⁵³⁹ and model conditions in Annex A to Circular 11/95, which otherwise has been cancelled. A comprehensive list of suggested conditions was submitted by the Applicants following the conditions session⁵⁴⁰.

4.169 With to regard 'tailpieces', certain forms have been ruled to be unlawful in recent cases⁵⁴¹. Those tailpieces which are unlawful are those which allow development which is very different in scale and impact from that applied for. In this case, the tailpiece in suggested condition 32⁵⁴² is worded in such a way

Standard clause 15

⁵³⁷ Document INSP/102 paragraphs 1 and 2

⁵³⁸ Document E-4-21 paragraphs 203 to 206

⁵³⁹ Document E-4-24: 'Use of Planning Conditions'

⁵⁴⁰ Document APP/215

⁵⁴¹ Document L-APP-14 for example: Case *R (Warley) v Wealden* [2012] Env LR 4 paragraph 89

⁵⁴² Document APP-8-3: Mr Speak PoE Appendix 5

that it does not fall into this category; only very limited changes could be made. As a result, the tailpiece as drafted would be lawful.

- 4.170 In terms of conditions requiring consultation with particular interested parties, LCC as the authority charged with discharging conditions would advertise the details, would take into account design documents, and local representations and would be presented to the Plans Panel⁵⁴³.
- 4.171 The argument that a condition of the approval of the TWA Order should be to provide information for public consultation on the possible future reuse of the area of land to the north of the junction of Victoria Road and Headingley Lane⁵⁴⁴ has no basis. The Scheme does not propose the future built development of this parcel of land, although it is identified as an area for possible future development. It would not be lawful to impose such a condition.
- 4.172 The request⁵⁴⁵ for a requirement that any details for bus stops be consistent with the guidance given in the Metro Bus Stop Infrastructure Standards⁵⁴⁶, would not be appropriate, but it would be taken into account by LCC when approving details.
- 4.173 One of three suggestions made for conditions⁵⁴⁷ that the trolley vehicles should share stops with buses is, in most instances, impractical as the number of vehicles stopping at the stops would exceed the number which are said to be able to be accommodated in the relevant guidance⁵⁴⁸. It is also not appropriate to seek to regulate such arrangements by a condition attached to a planning permission. The suggested condition that the proposed 24 hour bus lanes should be replaced by more limited operation is not appropriate as the regulation of bus lanes would be effected by TRO. The third suggested

⁵⁴³ Mr Wren of LCC at the Inquiry

⁵⁴⁴ OBJ 1641 SHCA

⁵⁴⁵ OBJ 1719 NWLTF

⁵⁴⁶ Document APP/114

⁵⁴⁷ Document OBJ 1719 NWLTF/128: NWLTF Closing Submissions paragraph 67

⁵⁴⁸ Document APP/114 paragraph 6 on page 15 (between 10 and 20 services per hour can be accommodated)

condition that certain mitigation and improvement to the public realm should be fully specified and costed is not appropriate as costing should not be required by a planning condition.

- 4.174 The request that the period for replacement of trees⁵⁴⁹ be extended from 5 to 10 years⁵⁵⁰ is not necessary, given that the five year maintenance period applies to replacement trees, there is no need to extend the period to 10 years and the model condition⁵⁵¹ contemplates a two year period.
- 4.175 With regard to concerns about the fact that LCC is one of the Promoters and also the authority responsible for the discharge of planning conditions⁵⁵², LCC would have to act as planning authority in discharging its functions. The arrangements for consultation on any details relating to NGT which are submitted to LCC for approval go beyond those that would normally apply, and there is no reason to suppose that LCC would act otherwise than in a lawful and proper manner⁵⁵³.

Matter 12-Whether the Scheme is reasonably capable of attracting the necessary funding, having regard to the Promoters' Business Case Review⁵⁵⁴

- 4.176 Of the estimated total cost of £250.5 million, it is anticipated that £173.5 million would be provided from central Government and the balance from local Government sources. The capital costs⁵⁵⁵ include a significant sum for risk, and for inflation. The costs of infrastructure renewal over the life of the project have been assessed and estimates provided⁵⁵⁶. The service operating cost assumptions are identified⁵⁵⁷ and set out in the operating cost report⁵⁵⁸.

⁵⁴⁹ Document APP-8-3: Mr Speak PoE Appendix 5 Draft condition 9

⁵⁵⁰ Document OBJ 1719 NWLTF/128: NWLTF Closing Submissions paragraph 65(i)

⁵⁵¹ Document E-4-13: Circular 11/95 Annex A Model condition 74

⁵⁵² Document OBJ 1719 NWLTF/128: NWLTF Closing Submissions paragraph 66

⁵⁵³ Mr Wren of LCC at the Inquiry

⁵⁵⁴ Document C-1

⁵⁵⁵ Document C-1 page 10-4 and Table 19.1 on page 19-2: The breakdown of the preferred option implementation cost is set out at Table 10.1

⁵⁵⁶ Document C-1 paragraph 10.18

⁵⁵⁷ Document C-1 Table 11.2

⁵⁵⁸ Document C-1-10

The suggested changes to the assumptions made⁵⁵⁹ are not necessary or justified⁵⁶⁰.

- 4.177 The source of capital funding⁵⁶¹ is the public sector, with the majority of the funding anticipated to come from the DfT and the remainder from local sources. The purpose of the Business Case is to support a request for central Government funding. It is not a document which is required to accompany an application for a TWA Order⁵⁶². It sets out the basis upon which the Promoters will seek funding from the DfT. It is for the DfT acting in its capacity as guardian of public funds to consider the Business Case and determine whether central Government funds can be allocated to the NGT project; that is not the function of this Inquiry.
- 4.178 The funding process to be followed in this case is set out in the DfT guidance⁵⁶³. That guidance is no longer extant, as it relates to a process for allocating funds which no longer applies to projects in general, but it does apply to NGT and continues to set out the procedure to be followed⁵⁶⁴. There are two further stages to follow, conditional approval and full approval. The guidance anticipates that an application for a TWA Order will be made on the basis of 'Programme Entry'.
- 4.179 As required by the 2006 Application Rules⁵⁶⁵, the application was accompanied by an estimate of costs⁵⁶⁶ and a statement of the Applicants' proposals for funding the cost of implementing the Order⁵⁶⁷.
- 4.180 With regard to the funding sources⁵⁶⁸, 69% of the cost (£173.5 million) is to be provided by central Government. The balance is to be contributed by the

⁵⁵⁹ Document OBJ 923 FWY/119

⁵⁶⁰ Document APP/128

⁵⁶¹ Document A-01-10: the funding statement; and Document C-1 page 20-2 Table 20.1

⁵⁶² Document E-1-22: Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 Rule 10

⁵⁶³ Document APP/135 Appendix 1

⁵⁶⁴ Agreed by Professor Bonsall and Mr Cheek in cross examination

⁵⁶⁵ Document E-1-22 Rule 10(3)

⁵⁶⁶ Document A-01-11

⁵⁶⁷ Document A-01-10

⁵⁶⁸ Document C-1: Business Case Review page 20-2 Table 20.1 sets out a summary

Promoters from reserves, by providing land, and through prudential borrowing. The SofS has confirmed Programme Entry⁵⁶⁹. He stated that the Ministers have agreed to provide Metro funding for the Scheme subject to a number of conditions as set out in that letter.

4.181 Programme Entry is only granted after the DfT has satisfied itself that the Scheme is value for money, affordable within the available budget, and deliverable by the authority to time and budget⁵⁷⁰. The guidance from the DfT explains the consequences and effect of Programme Entry⁵⁷¹.

4.182 Paragraph 5.2.8 of the DfT guidance states: '*Programme Entry means that the Department would expect to fund the scheme subject to:-*

- *affordability (including by contributors other than DfT)*
- *any necessary statutory powers being obtained*
- *there being no significant changes to costs, scheme design or expected benefits*
- *any other conditions specific to the scheme*'.

4.183 The SofS's approval for funding, in the form of a departmental contribution of £173.5 million⁵⁷² was approved after very careful consideration and analysis.

4.184 The output of the LTM was not relied upon at the time of submission of the 2009 MSBC. It was the DfT which requested that the LTM be used⁵⁷³. Following, and as a result of, its detailed scrutiny, the DfT did not accept the figures put forward in the Best And Final Funding Bid (BAFFB) submission and questioned the patronage forecast data⁵⁷⁴. The scrutiny of the 2012 Programme Entry Business Case (PEBC) submission was carried out in the context of the DfT's response to the BAFFB. It subjected the 2012 submission

⁵⁶⁹ Document C-6-15: Letter dated 19 July 2012

⁵⁷⁰ Document APP/135 Appendix 1 paragraph 5.2.5

⁵⁷¹ Document APP/135 Appendix 1 paragraph 5.2.8

⁵⁷² Document C-6-15 condition (iv)

⁵⁷³ Document C-6-8 second page: the reference is to 'Metro's new transport model'

⁵⁷⁴ Document C-6-13

to very detailed analysis and examination over a lengthy period and involving many meetings and presentations⁵⁷⁵.

- 4.185 The DfT did not accept the BCR put forward in the 2012 Business Case submission. The approval was given based upon the SofS's assessment of a BCR of 2.7:1⁵⁷⁶.
- 4.186 The Business Case has been reviewed, and the up-to-date analysis indicates that the BCR is now assessed as being 2.9:1. That analysis has been drawn to the attention of the DfT⁵⁷⁷. Although no response from the DfT can or should be expected at this stage of the process, the Promoters have kept the DfT informed as the Business Case has been developed⁵⁷⁸. The DfT has given no indication other than that funding is and will continue to be available.
- 4.187 The central Government contribution is to be made on the basis that the balance of the capital cost (amounting to 31%) would be provided from local sources. The Promoters would contribute £30.4 million from reserves⁵⁷⁹ and capital programme⁵⁸⁰. Land already in the Promoters' ownership would contribute £11.6 million. It is anticipated that the remaining £35 million would be raised through prudential borrowing. This assumption is conservative as other sources may become available to the Promoters⁵⁸¹.
- 4.188 The section 151 officers⁵⁸² of both the promoting authorities have formally written to the DfT declaring that Metro and LCC have the intention and means to deliver the Scheme with the approved DfT funding⁵⁸³. Given the duty

⁵⁷⁵ Mr Chadwick evidence

⁵⁷⁶ Document C-6-15 condition (iii)

⁵⁷⁷ Document G-4-94, 4th page

⁵⁷⁸ Document G-4-94: Letter sent by the NGT team to the DfT in March 2014 and discussions held in February 2014 referred to in the letter: Mr Henkel evidence

⁵⁷⁹ Document C-1 Table 20.1: Metro Capital Reserves/LTP3 £4.9 million

⁵⁸⁰ Document C-1 Table 20.1: LCC Capital Programme/LTP3 £25.5 million

⁵⁸¹ Document C-1 paragraph 20.8

⁵⁸² Local Government Act 1972 section 151 provides: '*Financial administration. Without prejudice to section 111 above, every local authority shall make arrangements for the proper administration of their financial affairs and shall secure that one of their officers has responsibility for the administration of those affairs.*'

⁵⁸³ Document APP/162

imposed upon the section 151 officers, very considerable weight should be given to that declaration.

- 4.189 It is anticipated that the Scheme would not achieve an operating surplus until the third full year of operation and that the initial operating deficit would not be repaid until year 8⁵⁸⁴. The predicted operating surplus is such as to give the Promoters' confidence that they would be able to fund the cumulative loan repayments on prudential borrowing of £35 million⁵⁸⁵.
- 4.190 With regard to The Business Case, the inputs are derived from a range of different sources, which include:
- The LTM
 - The Quality factors report prepared by SDG
 - The Runtime Assessment prepared by SDG
- 4.191 The LTM, the outputs of which the DfT requested to be relied upon in developing the Business Case⁵⁸⁶, like any other similar model, cannot hope to predict outcomes with the degree of precision expected of an oracle, or even of a simple junction model. Models such as LTM work within accepted degrees of tolerance, as reflected in WebTAG⁵⁸⁷, which are those to which it is to be judged. As identified by the DfT, some of the data relied upon at the time of the BAFFB submission was relatively new⁵⁸⁸. The LTM has been developed further since the DfT made those observations.
- 4.192 The first objective of the LTM as deployed in relation to NGT is to consider demand for NGT⁵⁸⁹. It can be expected that output of models such as the LTM can be expected to have a tolerance of plus or minus 30% in forecasting demand for new services such as NGT (not to flows on roads)⁵⁹⁰. Such tolerances are well understood and are the basis for WebTAG guidance on how

⁵⁸⁴ Document C-1 Table 21.2

⁵⁸⁵ Document C-1 paragraph 21.22

⁵⁸⁶ Document C-6-8 page 2

⁵⁸⁷ Also in Mr Hanson's evidence

⁵⁸⁸ Document C-6-13

⁵⁸⁹ Mr Hanson's evidence

⁵⁹⁰ Mr Hanson cross examination

to understand impacts⁵⁹¹. A comprehensive dataset was available, the modelling processes were appropriate, and the outputs were suitable and complied with standards⁵⁹². Uncertainties were small individually and were not substantially larger when added together⁵⁹³. The LTM is fit for that purpose and is fit for the purpose of considering changes in, and the total quantum of, traffic along the A660 corridor⁵⁹⁴.

- 4.193 As with any model it cannot predict the future behaviour of many different factors with absolute certainty, and fitness for purpose has to be considered in that context. The model has a range of outputs, some of which have higher tolerances than others. The suggested tolerance of predicting park and ride trips⁵⁹⁵ does not affect the tolerance of other outputs from the model. Furthermore, the park and ride trips represent a relatively small proportion of total NGT trips and therefore any uncertainty relating to the predictions for those trips would not have a significant impact on the overall patronage predictions.
- 4.194 The LTM is not designed to be used for, and has not been used for, other purposes such as design of junctions⁵⁹⁶, or design of local cycling schemes. It is fit for purpose.
- 4.195 The quality factors set out in the Quality Factors Report⁵⁹⁷ were derived from the Stated Preference (SP) research⁵⁹⁸. The quality factor for the trolley vehicle was derived by examining the preferences revealed when respondents were asked to express an opinion about the difference between an old bus and a very new bus⁵⁹⁹. The increment in quality derived was used to represent the average increment over time between bus (projected to be in Leeds in the future) and the trolley vehicle. That increment is justified based upon the

⁵⁹¹ Mr Hanson's evidence

⁵⁹² Mr Hanson's evidence

⁵⁹³ Mr Hanson in re-examination

⁵⁹⁴ Mr Hanson cross examination

⁵⁹⁵ Mr Hanson suggested + or - 50%

⁵⁹⁶ Document APP-6-2: Mr Robertson PoE paragraph 4.5 refers to the use of 2012 data

⁵⁹⁷ Document C-2-4

⁵⁹⁸ Document C-4-24

attributes of the trolley vehicle and the proposed specification. In addition, the SP research was submitted to the DfT, and on the basis of that information it was content to award Programme Entry⁶⁰⁰.

- 4.196 The Quality Factors Report as submitted to DfT⁶⁰¹ draws express attention to the fact that the boarding penalty was derived on the basis of the following attribute: *'Bus type: from 'old' to 'very new'*". The fact that the quality factor was derived by taking the value (in pence) for the row marked *'Bus type: from 'old' to 'very new'*"⁶⁰² and the methodology employed (to divide that value by the value for in vehicle time for a particular crowding attribute), is clearly set out in the Quality Factors Report. The DfT can have been in absolutely no doubt about the method used and the attribute applied.
- 4.197 With regard to the SP work including information as to willingness to pay for a trolley bus, it is clear from the SP Study⁶⁰³ that one of the exercises conducted related to trolley buses and in the report attention was drawn to how trolley buses were presented in the graphics. Furthermore, specific attention was drawn to the fact that the model presented does not include mode constants for trolley bus and tram⁶⁰⁴.
- 4.198 The Runtime Report breaks each section of the journey down into its distinct elements. The model takes account of vehicle and road characteristics in arriving at cruise speeds, acceleration and deceleration rates. Junction delays have been estimated based on a range of different sources⁶⁰⁵. Dwell times were assessed based upon Transport for London (TfL) research⁶⁰⁶. The output is based upon a systematic and detailed analysis of vehicle and route characteristics and can properly be described as robust.

⁵⁹⁹ Document C-4-24 Table 7.3

⁶⁰⁰ Mr Chadwick cross examination

⁶⁰¹ Document C-2-4 Appendix A page 3 Table 2

⁶⁰² Prof Bonsall in cross examination and Document C-2-4 Table 2 in Appendix A

⁶⁰³ Document C-4-24, paragraph 4.16 reference to exercise 7, figures 4.4 and 4.7

⁶⁰⁴ Document C-4-24 paragraph 7.46

⁶⁰⁵ Document C-1-13 paragraph 2.14

⁶⁰⁶ Document C-1-13 paragraph 2.19

- 4.199 The focus of the decision making process should be on the central issues. The issue to be considered under this heading in the Statement of Matters is whether funding is likely to be available to enable the Scheme to proceed. The answer to that question must be a resounding 'yes'.
- 4.200 The assumptions made are robust, and have, to the appropriate extent, been tested by the DfT in their approval processes. The DfT has granted Programme Entry. When Government monies are relied upon to fund a project, Programme Entry is in general considered sufficient to justify applying for statutory powers. It signifies that the DfT would expect to fund the Scheme subject to affordability, any necessary statutory powers being obtained, there being no significant changes to scheme costs, design, or expected benefits, and the conditions specific to the Scheme⁶⁰⁷.
- 4.201 Programme Entry is designed to give authorities the confidence to proceed with the development of the Scheme, and in particular apply for the necessary statutory powers⁶⁰⁸. This Inquiry is not the appropriate forum in which to test whether the DfT were right to grant Programme Entry.
- 4.202 The fact that, to an extent, the revenue from the Scheme would or could be required to support borrowing (for about 14% of the capital cost), does not call into question the ability to fund the Scheme, neither does the fact that the Promoters have not, at this stage, identified sources of funding should the current assessments prove to be inaccurate and should the Scheme not provide a sufficient operating surplus to fund the anticipated borrowing. The SofS can be assured that the necessary funding would be available to ensure that, if the Order is made, the Scheme would proceed.

Matter 13-Whether there is a compelling case in the public interest for conferring on the Promoters powers compulsorily to acquire and use land for the purposes of the Scheme, having regard to the guidance on the making of compulsory purchase orders in ODPM Circular 06/2004, paragraphs 16 to 23;

⁶⁰⁷ Document APP/135 Appendix 1 paragraph 5.2.8

⁶⁰⁸ Document APP/135 Appendix 1 paragraph 5.2.9

and whether the land and rights in land for which compulsory acquisition powers are sought are required by the Promoters in order to secure satisfactory implementation of the Scheme

4.203 Circular 06/2004 *Compulsory Purchase and the Crichel Down Rules* state at paragraph 17 that:

'A compulsory purchase order should only be made where there is a compelling case in the public interest. An acquiring authority should be sure that the purposes for which it is making a compulsory purchase order sufficiently justify interfering with the human rights of those with an interest in the land affected. Regard should be had, in particular, to the provisions of Article 1 of the First Protocol to the European Convention on Human Rights and, in the case of a dwelling, Article 8 of the Convention.'

4.204 Paragraph 18 states that:

'The confirming minister has to be able to take a balanced view between the intentions of the acquiring authority and the concerns of those whose interest in land it is proposed to acquire compulsorily. The more comprehensive the justification which the acquiring authority can present, the stronger its case is likely to be. But each case has to be considered on its own merits ...'

4.205 Paragraph 19 makes plain that:

'Parliament has always taken the view that land should only be taken compulsorily where there is clear evidence that the public benefit will outweigh the private loss'.

4.206 Case law confirms that for compulsory acquisition of interests in or rights over land to be authorised there must be a compelling case in the public interest. There is a clear overlap here between the need to show that there is a compelling case in the public interest and the need to justify any interference with the human rights of affected property owners⁶⁰⁹.

⁶⁰⁹ Document L-APP-13: Case *Walker v Secretary of State* [2008] EWHC 62 (QB) at paragraphs 51 to 54 Wilkie J accepted the following proposition advanced on behalf of the Secretary of

- 4.207 It is clear in this case that the compulsory acquisition of interests in and rights over land would interfere with the human rights of affected landowners. The relevant human rights are Article 1 of the First Protocol⁶¹⁰ and (in the case of residential properties) Article 8⁶¹¹.
- 4.208 Compensation would be payable where appropriate pursuant to the provisions of the statutory compensation code. The impact on affected landowners would be limited and there is a clear case in the public interest for the acquisition of the interests in, and rights over, land and the interference with the human rights of affected owners and occupiers.

Matter 14-The purpose and effect of any substantive changes proposed by the Promoters to the draft TWA Order and whether anyone whose interest are likely to be affected by such changes have been notified

- 4.209 The SofS has power to make the Order with or without modifications⁶¹². The modifications to the TRO's which the Promoters propose to introduce have been identified⁶¹³, and explained in a note which was submitted to the Inquiry⁶¹⁴.

State: 'It is now well established that the test to be applied in considering whether to approve the CPO namely whether there is a compelling case in the public interest for it to be made in effect satisfies the balancing exercise required when considering whether interference with human rights under Article 8 and/or Article 1 of the first protocol is lawful and does not constitute a breach of the convention (Tesco Stores Ltd v Secretary of State and Wycombe District Council 2000 P&CR 42, Bexley LBC v Secretary of State 2001 EWHC Admin 323, R (Clays Lanes Housing Cooperative) v Housing Corporation 2004 EWCA Civ 1658, Hall v First Secretary of State 2007 EWCA Civ 612)'

⁶¹⁰ Article 1 of the First Protocol provides that: 'Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law'

⁶¹¹ Article 8 provides that: 'Everyone has the right to respect for his private and family life, his home and his correspondence. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others'

⁶¹² Document E-1-15: The Transport and Works Act 1992 Section 13(1)

⁶¹³ Document A-13 identifies the modifications

⁶¹⁴ Document APP/105

4.210 The changes proposed by the Promoters are set out in the filled-up draft Order which was placed before the Inquiry⁶¹⁵. The changes include drafting changes made in response to comments made by DfT and alterations arising out of the rev P4 changes to the plans. None of them are substantive. The modifications proposed enhance the Scheme and can be made without any undue prejudice to any party to the process.

Matter 15-Any other relevant matters which may be raised at the Inquiry

Consultation

4.211 The statement of consultation⁶¹⁶ identifies the extensive consultation that has been undertaken in terms of the time period over which it took place, the different methods used, and the numbers of individuals groups and organisations who were consulted. The consultation documents were not restricted to consideration of the Preferred Option but made reference to alternative vehicles and to other alternatives such as a tram and to possible future routes⁶¹⁷. In addition, consultation took place on the environmental statement which sets out alternatives and the main reasons for the Promoters' choice of the Scheme proposals.

4.212 As is evident from the changes made at the time of the various DFs, the Promoters did not merely listen to those who responded, but took action in response to suggestions made. Although there have been complaints about the display of plans or delivery of leaflets, there is no complaint that people did not know about the proposals or that they did not have an opportunity to attend meetings and talk to NGT staff.

4.213 With regard to complaints that the consultation process was inadequate⁶¹⁸, no one had been prejudiced in any way in presenting their case to the Inquiry, and some objectors considered NGT to be unacceptable in principle⁶¹⁹. In

⁶¹⁵ Document APP/205

⁶¹⁶ Document A-01-3

⁶¹⁷ Document A-01-3 November 2008 leaflet

⁶¹⁸ For example OBJ 1641 SHCA

⁶¹⁹ For example OBJ 1641 Dawn Carey Jones conceded in cross examination

other words, even if there had been knowledge of the Scheme, it would not have prevented an objection to it. Therefore, there is no prejudice to the objector.

- 4.214 Based on the above, there has been no deficiency in consultation such as to deprive those affected by the Scheme of the chance to comment upon it, and to participate in the process.

Regulatory Regime for Trolley Vehicles

- 4.215 There is an adequate regulatory regime relating to the construction and use of trolley vehicles⁶²⁰.

Impact on people with disabilities

- 4.216 The Scheme has been subject to extensive consultation with the equality groups⁶²¹ and the Scheme's impact on disabled people has been carefully assessed⁶²². The Scheme would deliver a number of significant benefits, including quicker and more reliable journeys into and out of the City Centre, from which all user groups will benefit. There is no objective basis on which to conclude that disabled people would be disadvantaged⁶²³. Shared spaces would be designed so as to ensure they function appropriately⁶²⁴. The Chair of the Equality User Group has written in support of the principle of an accessible rapid transit scheme⁶²⁵.
- 4.217 There is no basis upon which it can be concluded that the NGT Scheme would infringe any provision of the Equality Act 2010⁶²⁶. There would be no direct or indirect discrimination against any person. No person would be treated less favourably because of a protected characteristic whether it be age or

⁶²⁰ Document APP/118 in response to question from Mr Bell

⁶²¹ Document A-01-3 paragraphs 6.8 to 6.18

⁶²² Document A-08h-2: Equality Impact Assessment section 6

⁶²³ For example OBJ 798 Mr Torode evidence: confirmed he had not read the Equality Impact Assessment; and OBJ 1818 Emma Stewart evidence

⁶²⁴ Document APP-3-2: Mr Smith PoE paragraph 7.3.12

⁶²⁵ Document SUPP/39

⁶²⁶ Document OBJ/1719 PoE1: Mr Kemp PoE paragraph 3.1 refers to the Equality Act 2010; and Document NWLTF/128: NWLTF Closing Statement paragraph 52: relies on two protected

disability. The Promoters would have to comply with the Equality Act 2010 when implementing the TWA Order.

- 4.218 Section 174 of the Equality Act 2010 empowers the SofS to make public service vehicle accessibility regulations. Such regulations have been made⁶²⁷. The trolley vehicles would be required to comply with those regulations, and special provisions made in relation to accessibility. Given the requirements in those regulations, there is no argument that can be raised on Equality Act points in relation to the vehicles.
- 4.219 Arguments that the LTVS would discriminate unlawfully⁶²⁸ and that operating trolley vehicles as opposed to bus services would amount to an unlawful failure to make reasonable adjustments⁶²⁹ are based (inter alia) upon a contention that exclusive use of NGT stops for NGT vehicles is not a proportionate means of achieving a legitimate aim. The aim of providing punctual reliable and rapid public transport cannot be (and is not) achieved by conventional buses. Further, the provision of dedicated stops is not justified solely by seeking to maintain brand identity⁶³⁰. It is required to allow the service to operate effectively, given in particular the need for articulated vehicles to draw up and facilitate level boarding, and the limit on the number of vehicles which can be accommodated at one stop. The provision of separate stops is required to provide the punctual, reliable and rapid service proposed.
- 4.220 The point that the spacing between stops for NGT would be greater than that for buses, resulting in inconvenience to the disabled and elderly in such a way as to amount to direct or indirect discrimination, could be made in relation to a railway service when compared to a tram or a tram compared to a conventional bus.

characteristics of age and disability

⁶²⁷ Document APP/118 paragraph 2.3: the Public Service Vehicle Accessibility Regulations 2000 (as amended)

⁶²⁸ Document OBJ 923 FWY/159: FWY Closing Submissions paragraph 339(a)(i)

⁶²⁹ Document OBJ 923 FWY/159: FWY Closing Submissions paragraph 393(a)(ii)

⁶³⁰ Document OBJ 923 FWY/159: FWY Closing Submissions paragraph 393(a)(i)

- 4.221 The introduction of the trolley vehicle system would be likely to lead to enhanced accessibility and service for elderly and disabled people, given the provision of enhanced quality stops, level boarding, and ride quality. The effect of the proposals would be to increase the number of on-street 'disabled parking spaces'⁶³¹ and to provide such spaces at the park and ride sites⁶³².
- 4.222 The Promoters, and the SofS, as public authorities, are subject to the public sector equality duty⁶³³. The proposals would remove or minimise disadvantages suffered by persons who share a relevant protected characteristic. In particular the reliability, level boarding, and enhanced accessibility by public transport would advance equality.

Electromagnetic Effects

- 4.223 The impact of NGT in terms of Electromagnetic Compatibility (EMC) has been fully assessed as part of the EIA⁶³⁴. The University of Leeds does not object to the Scheme. It cannot credibly be suggested that NGT would be likely to have an adverse impact on human health. Even when assessed on a worst case scenario⁶³⁵, the level of DC magnetic fields emanating from NGT would be far lower than the 400 mT limit of exposure recommended for the general public in the relevant guidelines⁶³⁶. By way of further comparison, the DC magnetic fields from NGT would be more than 1,000 times lower than the levels experienced at platform level on the third rail DC railways that are used in the UK⁶³⁷.

⁶³¹ Document OBJ 1719 NWLTF/128: NWLTF Closing Statement paragraph 52: Suggestion that there will be a failure to provide for, or a reduction in, parking spaces reserved for those people with disabilities

⁶³² Document B-9 section 9.2, table 9.1 on page 224: there will be a net increase of 5 on street disabled parking spaces. Off highway spaces for people with disabilities will be provided at the park and ride sites at Bodington and Stourton

⁶³³ Equality Act 2010 section 149

⁶³⁴ Document A-08c-5, September 2013 and Documents G-4-34 *University of Leeds EMC Assessment* and G-4-35 *University of Leeds EMC Assessment – mitigation report*

⁶³⁵ Document A-08c-5 paragraph 4.10

⁶³⁶ Document A-08c-5 paragraphs 1.8 to 1.12: *Guidelines on Limit of Exposure to Static Magnetic Fields*, published in *Health Physics* 96(4), paragraphs 504 to 514

⁶³⁷ Document APP-14-2: Mr Webb PoE and Document G-4-34

4.224 With regard to electro-magnetic interference with third party electric and electronic equipment (EMI), at the construction stage, there is potential for EMI to be caused by the use of temporary electrical supplies, the use of construction machinery and plant, and the use of communication equipment (e.g. radios)⁶³⁸. This is common to any construction project and all plant, machinery and equipment would comply with applicable standards⁶³⁹. In practice, there would be no significant EMI risk⁶⁴⁰. At the operational stage, NGT would have much lower electromagnetic emissions than third rail systems. It would comply with applicable legislative requirements⁶⁴¹ and again would not result in any significant risks in practice⁶⁴².

Matter 16-The extent to which the proposed works affecting the Listed Buildings and Conservation Areas ("the works") would accord with the provisions of the Planning (Listed Buildings and Conservation Areas) Act 1990 and particular sections 16, 66 and 72

4.225 The Scheme's impacts are as set out in the ES. The application of sections 16, 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 has been set out⁶⁴³.

Matter 17-The extent to which the works are in accordance with the development plan for the area including any 'saved policies'. The weight that should be attached to the development plan and any emerging plans.

4.226 When determining an application for CAC or for LBC, the statute does not impose a requirement to have regard to the development plan, and therefore the provisions of section 38(6) of the Planning and Compulsory Purchase Act 2004 do not apply to such determinations. Notwithstanding this, the

⁶³⁸ Document A-08c-5 paragraph 4.2 and Document APP-14-2: Mr Webb PoE paragraph 4.4

⁶³⁹ Document E-2-5: *Radio Equipment and Telecommunications Terminal Equipment Directive* 1999/5/EC for radios; and Document E-2-9: the *Machinery Directive* 2006/42/EC for plant and machinery

⁶⁴⁰ Document A-08c-5 paragraph 5.3

⁶⁴¹ Document E-2-8: *EMC Directive* 2004/108/E and Document E-1-21: SI 2006/3418

⁶⁴² Document A-08c-5 paragraph 5.6

⁶⁴³ This is dealt with in Appendix D to this report

development plan policies are material considerations to be taken into account when determining the applications for LBC and for CAC⁶⁴⁴.

- 4.227 The policies in the emerging CS, which is at a late stage in its preparation, and most of the policies in the UDP are generally consistent with the NPPF and therefore, in accordance with paragraph 216 of the NPPF, should be given great weight⁶⁴⁵. The policies of the UDP relating to listed building and CAs are consistent with the broad thrust of the NPPF in recognising the importance of heritage assets and seeking their preservation and enhancement⁶⁴⁶. However, UDP policy does not reflect the approach in the NPPF with regard to the significance of an asset and the assessment of harm. The policies of the UDP relating to heritage assets cannot therefore be regarded as completely up-to-date and should accordingly be given less weight⁶⁴⁷. The draft CS advises that the historic environment of buildings and spaces is one of the key contributors to Leeds' identity and that all change, especially harmful change, should be justified, and this is reflected in policy P11, which is consistent with the NPPF⁶⁴⁸.

Matter 18-The extent to which the works would accord with the National Planning Policy Framework and in particular the desirability of sustaining or enhancing the character or appearance of the heritage assets and Conservation Areas

- 4.228 The 12 core planning principles are identified in paragraph 17 of the NPPF. They include the principles that planning should be genuinely plan led, and that planning should proactively drive and support sustainable economic development to deliver the infrastructure the country needs. The need to improve public transport infrastructure on the A660 corridor accords with the economic, social and environmental objectives of the NPPF⁶⁴⁹. The Scheme's

⁶⁴⁴ This is dealt with in Appendix D to this report

⁶⁴⁵ Document APP-8-2: Mr Speak PoE paragraphs 4.12 and 4.13

⁶⁴⁶ Document E-4-21 paragraphs 126 and 131, page 30 to 31

⁶⁴⁷ Document APP-8-2: Mr Speak PoE paragraph 4.26

⁶⁴⁸ Document APP-8-2: Mr Speak PoE paragraph 4.43

⁶⁴⁹ Document E-4-21: NPPF paragraph 7; and Mr Cheek cross examination

impacts, including the impact on CAs and listed buildings, have been fully assessed in accordance with the policy approach set out in the NPPF. The Promoters' case is that the Scheme's limited impacts are clearly outweighed by the public benefits the Scheme would deliver.

Matter 19-If consent for the works is granted, the need for any conditions to ensure that they are carried out in a satisfactory manner

4.229 With regard to the suggestion that any CAC and LBC should be personal to the Promoters⁶⁵⁰, such a condition is unnecessary and contrary to the guidance that personal conditions are generally inappropriate when a planning permission is granted for permanent works. By virtue of the fact that the applications have been referred to the SofS⁶⁵¹, the applications in this case relate to applications where the consent is required in consequence of proposals included in an application for an order under sections 1 or 3 of the TWA 1992. Any concern that the consents could be relied upon to carry out works other than in connection with NGT could be overcome by a condition which provides that the consent granted by the LBC/CAC may only be carried out in connection with the relevant numbered work in the TWA Order. Such a condition/s would ensure that the benefits relied upon would be realised.

Conclusions

4.230 There is a major issue on which there is wide agreement, namely that existing public transport on the NGT corridors is deficient and that action needs to be taken to bring about improvements. There can be no doubt that there is a need for improved public transport. Given the need, action is required.

4.231 Any action, in the form of a public transport intervention, should be consistent with the relevant policies, funded and deliverable. NGT is consistent with the development plan, emerging, and national planning policy, local transport policies, and local economic policies. NGT is funded and deliverable. There is

⁶⁵⁰ OBJ 923 FWY suggested this at the Inquiry discussion on conditions

⁶⁵¹ Document E-1-8: Pursuant to section 12(3A) of the Planning (Listed Buildings and Conservation Areas) Act 1990

also widespread agreement that NGT would bring about improvements in public transport, in particular in its reliability and punctuality.

- 4.232 Although references have been made to electric buses, emerging technologies, platooning⁶⁵² and other suggestions, no coherent case has been presented by objectors to establish how the acknowledged need could be met by any alternative scheme which is consistent with policy, funded and deliverable.
- 4.233 To reject this Order in the hope that something better might come along would be wholly inconsistent with the policy framework and would deprive Leeds of a much awaited rapid transit system. To give Leeds a modern rapid public transport system, the Secretaries of State should make the Order, grant deemed planning permission, and grant the LBC and CAC applications.

5. THE CASES FOR THE SUPPORTERS

Written Submissions

Written support for the NGT was either not specific⁶⁵³ or was based on the following material points:

Journey Times, Reliability and Comfort⁶⁵⁴

- 5.1 The NGT would provide a much needed improvement to public transport on the route that would improve the speed, comfort and safety of the journey.
- 5.2 Journey times from south Leeds to the north west are too long due to the inadequate services provided by bus and the traffic congestion caused by bottlenecks in the Headingley area. At peak times the bus service offers no incentive to use public transport. The bus journey from Far Headingley to the City Centre takes about 40 minutes which causes inconvenience, waste of time

⁶⁵² OBJ 1810 Mr Bell suggested that driverless cars can be moved in 'platoons'

⁶⁵³ SUPP/21: Ian Kirk

⁶⁵⁴ SUPP/1: Dr Gleisner; SUPP/2: Elizabeth Brown; SUPP/3: Christine MacNiven; SUPP/4: George Dawson; SUPP/7: Bernard Foster; SUPP/9: Andrew Vickers; SUPP/10: Jules Staveley; SUPP/11: Barry Howgate; SUPP/12: Robert Stubbs; SUPP/14: Carol Gleisner; SUPP/17: Mr & Mrs Thornton; SUPP/20: Nick Haslewood; SUPP/23: Lynne Strutt; SUPP/24: B Ewart; SUPP/31: Leeds Hotels & Venues Association

and pollution from slow moving traffic⁶⁵⁵. Something has to be done about traffic on the A660 as soon as possible otherwise it will get worse. The NGT is the best proposal within the budget limitations and other more radical schemes would cause greater disruption.

5.3 Improvements to the existing route would be made at:

- Headingley Lane between Alma Road and the former Leeds Girls' High School site, which would provide a bypass to a current bottleneck to the advantage of cyclists and public transport⁶⁵⁶.
- Between the Inner Ring Road/Woodhouse Lane and Leeds University Parkinson Building, with improved street scene and pedestrian and cycle facilities⁶⁵⁷.
- Lawnswood/Outer Ring Road junction, with improved provision for cyclists and pedestrians and public transport benefits⁶⁵⁸.
- The closure of Weetwood Lane, which is a dangerous junction, and improvements to the Shaw Lane/St Anne's Road junction. The use of the resulting pedestrian area at the Three Horseshoes pub should not be as an unofficial beer garden due to residential amenity issues⁶⁵⁹.

5.4 Although the precise design of the vehicles is not yet known, they would be large multi-door level access buses which would offer easy access for passengers with mobility problems or in wheelchairs, as well as to pushchairs. Those with any form of mobility difficulty avoid the current buses due to overcrowding at the single front doorway. The NGT vehicles would be much quieter and less polluting than the current buses in use on the route.

5.5 Ticketing would be able to be under the control of Metro with contactless smart-card technology, which has been slow to have been introduced into cities outside London.

⁶⁵⁵ SUPP/10: Jules Staveley

⁶⁵⁶ SUPP/9: Andrew Vickers

⁶⁵⁷ SUPP/9: Andrew Vickers

⁶⁵⁸ SUPP/9: Andrew Vickers

⁶⁵⁹ SUPP/10: Jules Staveley

- 5.6 The proposed bus stops should be equally accessible to all users and have the most up-to-date technology found on only selected current bus stops.
- 5.7 The proposal would improve cycling along the route by segregating bicycles from cars and ordinary buses. It would also provide additional crossing facilities for pedestrians and shared space, improving conditions for pedestrians even though the width of pavement would be narrowed along Otley Road between Weetwood Lane and Shaw Lane.

Pollution⁶⁶⁰

- 5.8 The NGT would use clean electric power, reducing pollution, and the use of overhead cables would mean that vehicles would be lighter through not having to carry batteries and would not need to be periodically charged up.

Funding

- 5.9 The NGT has the support of central government funding⁶⁶¹.

Control of Existing Private Sector Bus Provision

- 5.10 The Transport Act 1985 means that there is a lack of control by bodies such as Metro over the existing private sector bus provision⁶⁶².

Mitigation and the Balancing Exercise⁶⁶³

- 5.11 The environmental losses would be adequately mitigated by measures that include the replacement of trees on a 3 to 1 ratio and a gain of public open space at Headingley Hill with the currently private open space becoming publicly owned and accessible land.
- 5.12 Relatively few buildings would be affected by the proposal and many of those that would be affected have been blighted for decades and would be no

⁶⁶⁰ SUPP/7: Bernard Foster; SUPP/9: Andrew Vickers; SUPP/10: Jules Staveley; SUPP/40: Tony Bundock

⁶⁶¹ SUPP/26: Downtown in Business

⁶⁶² SUPP/9: Andrew Vickers

⁶⁶³ SUPP/9: Andrew Vickers; SUPP/10: Jules Staveley; SUPP/12: Robert Stubbs; SUPP/20: Nick Haslewood; SUPP/24: B Ewart

material loss to the community, with a significant number of businesses renting their premises from Metro.

- 5.13 The use of lighting columns and existing buildings for fixing overhead wires would ensure that the impact of the overhead wires would be kept to a minimum.
- 5.14 The NGT could exacerbate existing parking problems, particularly in Cottage Road, due to a reduction in local parking on Otley Road and the use of the surrounding streets as 'Park and Ride' parking. This could be alleviated by a local permit scheme and tighter parking enforcement.
- 5.15 Taking account of the above, and the disruption during construction, any disadvantages would be compensated for by the benefits.

Permanence and Catalyst for Regeneration and Economic Growth⁶⁶⁴

- 5.16 The NGT would provide greater connectivity to the proposed regeneration of New Dock, which has no direct bus connection⁶⁶⁵. This redevelopment is the catalyst for the much wider regeneration of the Leeds South Bank from the new south station entrance through Holbeck village, the Tetley Brewery site and the old Chemical works. The development plans are heavily reliant on visitors and workers being able to access the site easily, quickly and cheaply and the lack of infrastructure will have a huge impact on the success of converting and letting workspace on site.
- 5.17 The NGT would make navigating the City a lot easier, with visitors and commuters easily directed from the Railway Station to the nearest stop. It would extend the City Centre perimeters south of the River Aire. Its permanence would reassure potential investors and attract businesses, which

⁶⁶⁴ SUPP/5: Allied London; SUPP/6: Muse Developments; SUPP/8: University of Leeds; SUPP/15: David Salinger; SUPP/16: Bruntwood Limited; SUPP/18: Bond Dickinson; SUPP/19: Jones Lang Lasalle; SUPP/26: Downtown in Business; SUPP/27: Royal Armouries (International) Ltd; SUPP/28: The Tetley; SUPP/29: Clive Brook; SUPP/30: Land Securities; SUPP/32: Town Centre Securities plc; SUPP/34: Lambert Smith Hampton; SUPP/35: ARC Inspirations LLP; SUPP/35A: First Direct Arena (SMG Europe); SUPP/37: CBRE; SUPP/38: DWF; SUPP/43: Opera North

⁶⁶⁵ SUPP/5: Allied London

would not be provided by a bus route that can be easily diverted or caught up in City Centre traffic. However, due to the operation date of the NGT being 5 to 7 years in the future, the success of the regeneration projects would be greatly aided by the provision of interim solutions, which would be provided by bus operators introducing a branded commercial service serving the proposed NGT route⁶⁶⁶.

- 5.18 Leeds City currently receives an average of 23 million visits per year⁶⁶⁷. The NGT is an integral part of the wider plans to deliver integrated transport improvements across the city region. The initial and subsequent routes would be transformational by encouraging movement into, around and out of the City. It is critical for the success of the Royal Armouries⁶⁶⁸ as a conference and events venue and the Tetley Centre⁶⁶⁹ as a venue for contemporary art and learning to have a modern public transport system that is highly integrated.
- 5.19 The Aire Valley Leeds Enterprise Zone, which covers 142 hectares and could deliver up to 7,000 new jobs, requires future transport links to encourage businesses to locate their operations on site⁶⁷⁰. Although the Scheme would only serve one corridor, it would provide a strong impetus for a 2nd and 3rd line to develop a future network, including an extension into Aire Valley to the east. There is also a need to provide a future link between Leeds and Bradford⁶⁷¹.
- 5.20 The University of Leeds single site campus currently plays host to some 33,000 students⁶⁷². These, combined with the other of the city's students, academics and support staff, are trying to access the City's higher education institutions via congested roads and inadequate, overcrowded public transport systems. To continue to attract new local, national and international talent

⁶⁶⁶ SUPP/5: Allied London

⁶⁶⁷ SUPP/31: Leeds Hotels & Venues Association

⁶⁶⁸ SUPP/27: Royal Armouries (International) Ltd

⁶⁶⁹ SUPP/28: The Tetley

⁶⁷⁰ SUPP/6: Muse Developments

⁶⁷¹ SUPP/29: Clive Brook

and skills, it is vital that the City and University remain a desirable place to live, study and work.

- 5.21 The NGT would make City Centre travel much easier, rapidly and efficiently connecting people to key education and employment sites, including the currently developed Phase 1 of Leeds College of Building new second campus at the junction of Black Bull Street and Hunslet Lane⁶⁷³ and Leeds City College Printworks Campus on Hunslet Road⁶⁷⁴. It would deliver frequent and reliable services from the north to the south via the City Centre. This would act as a catalyst and drive economic growth and regeneration within the City and region.
- 5.22 The Leeds Teaching Hospitals⁶⁷⁵ is one of the biggest NHS trusts in the country, with its two main sites based in Leeds City Centre, and employing over 14,000 staff across six sites, treating around a million patients a year. They are used by those living within Yorkshire and the Humber and over the rest of the north of the Country who require specialist hospital treatment, including at its world-class cancer centre.
- 5.23 The NGT Scheme would offer a sensible solution to the problems faced by people using the hospitals' services, from both a staff and patient perspective, in accessing the sites once they are within the City Centre, by providing a modern, accessible, high-quality and reliable form of transport. Also, the two park and ride sites would help to create an easy solution for many employees having to reach the City Centre. However, the Scheme does not extend out to St James Hospital and into the Seacroft area of the City. Therefore, the planned extension to the east should be brought forward if possible to benefit this and regeneration in that area.
- 5.24 The NGT would make Headingley Carnegie International Sports Venue more accessible and ease the visit to the stadium, which is proposed to have its

⁶⁷² SUPP/8: University of Leeds

⁶⁷³ SUPP/36: Leeds College of Building

⁶⁷⁴ SUPP/41: Leeds City College

⁶⁷⁵ SUPP/42: The Leeds Teaching Hospitals NHS

capacity increased for use as a cricket, rugby, music and concert venue. It is crucial in supporting the future plans in being able to provide a reliable transport service that is easily recognised. It would also benefit local residents at the time of events by reducing the need for on-street parking⁶⁷⁶.

- 5.25 Opera North⁶⁷⁷ is England's national opera company in the North and, as such, attracts audiences from across the Country. Visitors would hugely benefit from a modern, fast and reliable transport system like NGT. The LTVS would deliver an easily recognisable system for all of the audiences attending the Grand Theatre to give access to and from the Railway Station. Also, as there would be late hours of service and park and ride, it would offer additional flexibility for those travelling home late after evening performances, which is not catered for by the current transport provisions. The proposed extension is particularly supported, as it would include a loop across the City, bringing NGT closer to the theatre.
- 5.26 The Trinity Leeds Retail and Leisure Scheme is anticipated to have an annual footfall substantially in excess of 20 million visits⁶⁷⁸. This, and venues such as the Arena, which has a 13,500 capacity and is expected to attract over one million visitors a year⁶⁷⁹, and the multi-million pound New Front leisure scheme at the Merrion Centre⁶⁸⁰, need a robust transport infrastructure. The NGT would improve connectivity, alongside reduced congestion and economic and environmental benefits.
- 5.27 Evidence from the Metrolink extension in Greater Manchester suggests that it has had a positive impact on nearby residential property prices⁶⁸¹.

⁶⁷⁶ SUPP/22: Yorkshire County Cricket Club; SUPP/25: Leeds Rugby

⁶⁷⁷ SUPP/43: Opera North

⁶⁷⁸ SUPP/30: Land Securities

⁶⁷⁹ SUPP/35A: First Direct Arena (SMG Europe)

⁶⁸⁰ SUPP/32: Town Centre Securities plc

⁶⁸¹ SUPP/34: Lambert Smith Hampton

Supertram Approval⁶⁸²

5.28 The NGT route is similar to the main part of the route for the cancelled Supertram, which was approved following extensive public consultation and public Inquiry. Many of the objections to the NGT are essentially identical to those made against the Supertram that were discounted following Inquiry. It has therefore already been established that the benefits of a dedicated public transport system following the proposed route and powered by overhead lines is, on balance, to be supported.

Systems in other Countries⁶⁸³

5.29 Trolley bus systems run in European towns and cities without damaging the built environment, although they are not as widely spread as tram systems. Examples of successful tram systems are in Montpellier and recently in Bilbao, which runs through parts of a historic city centre without compromising the historic nature of the city scape.

Alternatives⁶⁸⁴

5.30 The tram would be the preferable option⁶⁸⁵. However, the NGT would have similar capabilities to the tram with greater flexibility, low carbon emissions, built more quickly and at a lower cost⁶⁸⁶. No viable alternative appears to have been put forward. Doing nothing is not a viable option due to the impact on traffic from the growth of the City. Should the proposals be rejected, there would be a need for road widening and any major highway improvements could be undermined by the withdrawal of co-operation by the privately run bus companies, such as on the Pudsey to Seacroft bus route⁶⁸⁷.

⁶⁸² SUPP/9: Andrew Vickers; SUPP/23: Lynne Strutt

⁶⁸³ SUPP/9: Andrew Vickers

⁶⁸⁴ SUPP/9: Andrew Vickers SUPP/13: Clive Barrett; SUPP/29: Clive Brook

⁶⁸⁵ SUPP/13: Clive Barrett

⁶⁸⁶ SUPP/29: Clive Brook

⁶⁸⁷ SUPP/9: Andrew Vickers

- 5.31 Future developments in rechargeable battery bus operation may allow for overhead wires to be a thing of the past but the current proposal establishes a distinct and segregated public transport corridor along a large part of its route.

Equality⁶⁸⁸

- 5.32 The Equality User Access Group for the LTVS is a small group of people with a variety of impairments, who were brought together to inform and advise Metro staff, LCC, and a number of their consultants at an early stage. It has been recruited through disability and equality groups to include people with a wide variety of experience in working with organisations to improve local facilities, particularly for disabled people.
- 5.33 The Group has been able to give insight and suggestions related to subjects that include shared spaces; the siting of street furniture and lighting columns; visual, audible and tactile information and siting of disabled parking spaces. The Promoters have been concerned to take on board many of the suggestions. Future plans are for a group discussion on topics including vehicle scope, the stops and facilities, ticketing, disruption during construction and operational safety awareness training.
- 5.34 Some of the Group have visited the Nottingham tram system and seen how it comfortably blends into the city, and how readily the local population, including disabled people, are using it. The Group is assured that, if the NGT Scheme goes ahead, all of the cultural, entertainment, retail opportunities and residential needs will be more accessible for disabled people.

⁶⁸⁸ SUPP/39: The Equality User Access Group for the Leeds Trolley Vehicle Scheme

6 THE CASES FOR THE OBJECTORS

Statutory Objectors appearing at the Inquiry

Weetwood House Court OBJ 1591, Mrs Riddell OBJ 797, Mr Riddell OBJ 1168 and other residents of Weetwood House Court who objected but did not appear: Mrs A S Evans OBJ 178, Mr B J Evans OBJ 219, Donald Dalton OBJ 568, Attorneys for Margaret Keighley OBJ 693, Anne Wilkes OBJ 871, Julie Grindrod OBJ 1533

The material points⁶⁸⁹ were:

- 6.1 The Order, if made, would give powers for the acquisition or use of part of the private accessway to (Parcel No 07009), and part of the grassland and boundary wall at the front of (Parcel No 07011), Weetwood House Court. It would also permit the temporary use of grassland, shrubbery, trees and footway between Weetwood House Court and Otley Road (Parcel No 07010)⁶⁹⁰.
- 6.2 Mrs Riddell is the Chair of the Weetwood House Court Management Committee and the owner of Flat 1 Weetwood House Court, which is a ground floor flat that has all its windows and a patio door directly facing onto Otley Road. As such, it would be the flat most affected by the NGT. Mr and Mrs Riddell do not currently occupy the flat but Mrs Riddell stayed there in 2004 when her mother occupied it. There are 40 flats in Weetwood House Court.
- 6.3 The proposals would alter the alignment of the vehicle accessway to the parking at the rear of the flats. Cars are currently parked along it and its temporary use during construction would reduce the amount of available parking and restrict access during that period. The Scheme would permanently shorten the access, which would remove space for one car to

⁶⁸⁹ Documents OBJ/797 SOC: Mrs Riddell Statement of Case, OBJ/1168 SOC: Mr Riddell Statement of Case, and OBJ/1591 SOC: Weetwood House Court (Leeds) Ltd Statement of Case; and the Inspector saw the outside and the grounds of the property of Weetwood House Court at about 1800 hours on Tuesday 23 September 2014

⁶⁹⁰ Document APP/211: Updated Book of Reference

park. It would also prevent right turns into and out of the access, which would require vehicles to travel further to turn at Lawnswood roundabout or West Park roundabout. This would inconvenience residents.

- 6.4 The proposed compulsory acquisition of land in Plot 07011, which currently forms part of the garden and boundary wall, and the temporary use of land between the flats and the road, as Plot 07010, would adversely affect the privacy of the occupants and their enjoyment of the land during construction. Some of the mature trees on that land are shown to be removed or at risk and a large tree by the lodge and access way that is not shown to be at risk would be too close to the proposed re-alignment of the wall to not be affected by the construction. These trees make an important contribution to the green and leafy appearance of the frontage. The existing boundary wall would be reconstructed about 1.8m closer to the flats and would need to be higher due to a fall in ground level of about 1m. This, and the loss of trees and green frontage, would harm the outlook from, and the light reaching, the facing windows of 3 ground floor flats and 2 first floor flats, particularly if a hedge would be planted as mitigation. There would also be a resulting loss in the value of the properties and they would be more difficult to sell or rent.
- 6.5 The road would be closer to the flats, resulting in a greater level of noise from pedestrians and dirt, dust and noise from traffic on the road. There is currently no problem with road congestion in that area. The proposal would result in the need to walk to separate stops for the bus and the NGT, with the NGT stops being further apart and the existing bus service likely to be halved. This would make the public transport less convenient and attractive to use. As such, there would be no benefit from the NGT to residents in the area.

Mr Stuart Natkus, Barton Wilmore LLP on behalf of Leeds & Yorkshire Housing Association (OBJ 1182), Morley House Trust (OBJ 1608), Headingley Land Developments (HLD) (OBJ 1611) and Headingley Office Park⁶⁹¹ (OBJ 1613)

The material points⁶⁹², other than those associated with the LBC and CAC applications⁶⁹³, were:

- 6.6 Leeds & Yorkshire Housing Association would be affected by the NGT Scheme as owners and occupiers of land along the western perimeter of Broderick Court, Alma Road (Parcel No 09045) and part of the garden of 2 Shire Oak Road (Parcel No 10035) required for temporary use; and public highway and footways at the junction of Broderick Court and Alma Road (Parcel No 09055) and grassland and part of the garden of 2 Shire Oak Road (Parcel No 10034) to be permanently acquired or used⁶⁹⁴.
- 6.7 Morley House Trust is a registered charity who acts on behalf of the registered landowners of the former assets of the Leeds Girls' High School, which includes the Elinor Lupton Centre, Ford House Nursery and the former Leeds Girls' High School site. Rights are required to attach OLE to buildings at the Elinor Lupton Centre (Parcel No 11019)⁶⁹⁵.
- 6.8 At Ford House Nursery, part of a playground and amenity area would be acquired or used (Parcel No 11031) and a further area would be acquired or used as additional land (Parcel No 11032), together with part of an accessway

⁶⁹¹ Objection submitted under Topland Ridgeway Ltd

⁶⁹² Documents OBJ/1182 PoE: Stuart Natkus PoE; OBJ/1608 SOC1, SOC2 and SOC3: Statements of Case and OBJ/1608 PoE1, PoE2 and PoE3: Stuart Natkus PoEs for Leeds High School, Rose Court/Ford House and Elinor Lupton Centre; OBJ/1611 SOC: Statement of Case and OBJ/1611 PoE: Stuart Natkus PoE for Headingley Land Developments; and OBJ/1613 SOC: Statement of Case and OBJ/1613 PoE: Stuart Natkus PoE for Topland Ridgeway Limited

⁶⁹³ See Appendix D to this report: Report on the Listed Building and Conservation Area Consents

⁶⁹⁴ Document APP/211: Updated Book of Reference

⁶⁹⁵ Document APP/211: Updated Book of Reference

(Parcel No 11035); and the temporary use of other land (Parcel Nos 11033 and 11034) would also be required⁶⁹⁶.

- 6.9 At the former Leeds Girls' High School, land and premises would be acquired or used (Parcel No 11048) and another area would be acquired or used as additional land (Parcel No 11039); and the temporary use of land (Parcel Nos 11040, 11041 and 11050) would be required⁶⁹⁷.
- 6.10 HLD consist of Headingley Land Developments Ltd, together with Headingley and Developments 2002 Ltd, Hinsley Properties No2 Ltd and the Diocese of Leeds Trustees. They jointly own land to the east of Headingley Lane that would be affected by the proposed route, either to be acquired or used (Parcel Nos 10037, 10038, 10044, 10049, 11002 and 11003) or as additional land to be acquired or used (Parcel Nos 10036, 10041, 10042, 10047, 10050, 10052, 10053, 11004, 11005 and 11015) or as land to be temporarily used (Parcel Nos 10039, 10040, 10046, 10048 and 11001)⁶⁹⁸.
- 6.11 Headingley Office Park has changed ownership from Topland Ridgeway Ltd to Addington Capital. It would be affected due to land to be acquired or used (Parcel No 11036), additional land to be acquired or used (Parcel No 11037) and land to be used temporarily (Parcel Nos 11038 and 11041)⁶⁹⁹.
- 6.12 The land that would be taken from the Elinor Lupton Centre forms part of the forecourt to the front of the property and the proposals include the potential to include fixings to the property. The main impact, however, relates to the closure of Richmond Road and the impacts upon the resulting access arrangements to the car park.
- 6.13 Ford House Nursery comprises three classrooms with playspace located to the east adjacent to the boundary wall abutting Headingley Lane. Overflow play space is located to the west of the nursery, within the communal courtyard, which provides access to the reception area and main entrance. The main

⁶⁹⁶ Document APP/211: Updated Book of Reference

⁶⁹⁷ Document APP/211: Updated Book of Reference

⁶⁹⁸ Document APP/211: Updated Book of Reference

objection is regarding the loss of existing play space both quantitatively and qualitatively, due to the proposed relocation of the boundary wall. This space is mainly used as play space for the children and is equipped with fixed play equipment and areas for other apparatus. The existing play space is one of the key promotional points of the school. Whilst replacement facilities could be provided elsewhere the quality of space is fundamental to the continued success of the school with both parents and national recognition.

- 6.14 Ford House Nursery has examined relocating to another site should the NGT proceed, but planning permission has been refused on the grounds of the effect of additional traffic on the junction of Buckingham Road and the A660. Access to the site is currently from two access points off Buckingham Road, one for staff to the west and one for visitors and disabled people to access the communal courtyard. The restrictions on Buckingham Road and the regrading of that road would have an adverse effect on the access to the Nursery, particularly with regard to deliveries, which would have to use the lower entrance following the closure of the upper entrance.
- 6.15 The proposal would result in the loss of a strip of land along the northern boundary of the Headingley Office Park in order to accommodate the proposed bus stop, lay-by, cycleway and new boundary wall. This in turn would reduce the width of internal access roads and the amount of space that is currently available within the site, which would impact upon vehicular manoeuvring and parking.
- 6.16 The compulsory acquisition of land to the west of Headingley Lane is mainly due to the need to accommodate a northbound cycle lane, introduced at DF7. The cycle lane in isolation would not provide sufficient justification to take the land and, as such, should be removed.
- 6.17 The land to the east of Headingley Lane is mainly a greenfield site that is located within the built-up area of Headingley and near to St Columba's Church to the west and Oakfield Court, a residential development to the north

east. It is included within the Strategic Housing Land Availability Assessment (SHLAA) and the Site Allocations Development Plan Documents prepared by LCC. An application for the renewal of planning permission for 57 dwellings on the site has not been determined by LCC.

- 6.18 The Scheme would prejudice the delivery of both the development which previously benefitted from planning permission and any future allocation of the site. The change from DF2 to DF7 would result in additional land being compulsorily acquired from the site and it has not been sufficiently justified with regard to relocating parking spaces for St Columba's Church.
- 6.19 No compelling case has been put forward to justify the part of the site that would be compulsorily acquired for ecological mitigation/open space. There is no open space affected in Headingley Ward and therefore there is no need for it as mitigation for loss of open space. The use of it as wildflower meadow for foraging bats would not be compatible with its proposed use as public open space. Also, it would be disproportionately large to replace the impact on biodiversity of the proposed loss of 5 trees in the area. The report by Brooks Ecological⁷⁰⁰ concludes that the proposed mitigation is probably suitable, but that there are other approaches to mitigation, including the planting of a line of trees, which would be acceptable and potentially more successful and would not involve the use of the area of land.
- 6.20 With regard to Leeds & Yorkshire Housing Association, following discussions with the Applicants, the remaining objection is regarding the security of the land during the construction of the Scheme and afterwards, due to the close proximity of the proposed new footpath, cycleway and NGT route to the property. This could potentially be overcome by an agreement to secure appropriate boundary treatment under a planning condition.
- 6.21 Generally, the NGT has led to stifling development, with restrictions being placed on new development on Buckingham Road due to the capacity of its

⁷⁰⁰ Document OBJ/1611 PoE Appendix 4 to PoE of Stuart Natkus for Headingley Land Developments

junction with the A660 and delays to the completion of planning permission for development of the former Leeds Girls' High School site until completion of the NGT.

Headingley Castle Management Limited (HCML) OBJ 461, Chris Barroclough OBJ 360 and Ian Barroclough OBJ 396, and Residents of Headingley Castle: Heather Marshall OBJ 806

The material points⁷⁰¹, other than those associated with the LBC and CAC applications⁷⁰², were:

- 6.22 HCML are the tenants of land used for the access to Headingley Castle, part of which would be acquired or used (Parcel Nos 10038 and 10044) and part of which would be temporarily used (Parcel Nos 10045 and 10046), and are the freehold owners of grassland, shrubbery and trees which would be additional land to be acquired or used (Parcel No 10043)⁷⁰³ under the Order. The ownership of HCML and the freehold interest in Headingley Castle are held by the 250 year leaseholders of the apartments and coach houses in 7 equal shares. The building is home to 20 residents.
- 6.23 The main grounds for objection are that the NGT route DF7 has been realigned nearer to Headingley Castle than DF2⁷⁰⁴ and would be raised from the cutting in DF2 onto the parkland curtilage, resulting in a significant impact upon that heritage asset due to the trolley vehicles, posts and cables. It would also require the removal of 2 lime trees forming an avenue along the private driveway. Highway consultants acting on behalf of HCML have demonstrated that the existing car park for St Columba's Church could be relocated under the original DF2 proposal⁷⁰⁵, avoiding the need to change to the DF7 route to

⁷⁰¹ Documents OBJ/461 SOC: Statement of Case and OBJ/461 PoE: PoE for Headingley Castle Management Limited; and OBJ/461-100 to OBJ/461-107; and oral evidence given by Mr Barroclough to the Inquiry

⁷⁰² See Appendix D to this report: Report on the Listed Building and Conservation Area Consents

⁷⁰³ Document APP/211: Updated Book of Reference

⁷⁰⁴ Documents OBJ/461-101 plan 17 and cross sections 13 and 15; and OBJ/461-106

⁷⁰⁵ Document OBJ/461-101 Plan 11

retain the car park. A return of the route to DF2 would allow a crossing at a lower point saving important trees.

- 6.24 The significance of the woodland either side of the access drive, which contains about 80 trees and forms an important wildlife habitat has not been adequately addressed in the ES. No consultation has taken place regarding the replacement of this woodland screening and natural habitat or with the owners and residents of Headingley Castle during the period of December 2012 to June 2013.
- 6.25 HCML would remove its objection subject to the route being located as indicated in DF2; the introduction of appropriate security fencing and gates with landscaping between the eastern perimeter of the route and the access, gardens and parkland; the introduction of tree screening to protect privacy through the planting of semi-mature trees between the route and the property; and an agreement to the access arrangements during the period of construction.

High Field Surgery OBJ 1811

The material points⁷⁰⁶ were:

- 6.26 High Field Surgery premises consist of a purpose built General Practitioner surgery and an associated private car park at Holtdale Approach, which would be near the northern terminus of the NGT. The Order would give powers for the temporary use of land (Parcel Nos 01021 and 01022) at the Surgery and the acquisition or use of land around the perimeter of the Surgery (Parcel No 01020)⁷⁰⁷.
- 6.27 The construction of the NGT would affect access to, and parking at, the premises and the resulting noise and dust would affect the use of the consulting and treatment rooms, which require a high standard of cleanliness.

⁷⁰⁶ Documents OBJ 1811 Objection, 24 January 2014; and OBJ/1811 SOC: Statement of Case, 28 February 2014; and oral evidence given by Mike Holmes to the Inquiry

⁷⁰⁷ Document APP/211: Updated Book of Reference

- 6.28 The proposal would result in the Surgery being surrounded by the NGT infrastructure, which would harm the aesthetics, due to the poles and wires. The layout of the Surgery car park would be changed, resulting in the effective loss of 2 spaces due to the need to provide a second entrance for delivery and refuse vehicles⁷⁰⁸, and the on-street parking on Holtdale Approach would be reduced and restricted to 30 minutes. This would impact upon the ease of access, parking and the needs of emergency vehicles. More patients would have to use the main car park, making it a longer, less safe and more difficult walk to the Surgery entrance, due to the need to cross the NGT route and the difference in levels. This could have an impact upon the viability of the business. Parking restrictions of 1 hour on Holtdale Approach would be preferable, together with the provision of a disabled parking space.

Mrs Baskind OBJ 1388

The material points⁷⁰⁹ were:

- 6.29 The Order, if made, would permit the attachment of OLE to the buildings at 52-54 Otley Road (Parcel No 09026)⁷¹⁰.
- 6.30 Mrs Baskind is the part owner of 52/54 Otley Road and was represented by Mr Nabarro of Nabarro McAllister & Co Chartered Surveyors. No 54 is let to The Bowery, which is an art shop/café and No 52 is let to a hairdressers. The premises include a forecourt and a rear car park, which is accessed from Shaw Lane.
- 6.31 Although there is no formalised parking on the forecourt, it is used for parking for the businesses that let the premises. The proposed reduction in the depth of the forecourt and planting of trees would prevent this informal parking. Cars would therefore need to park elsewhere putting more pressure on the rear car park. The access to this car park is blocked during peak times, due to queuing traffic on Shaw Lane, and the turning of vehicles in the car park is

⁷⁰⁸ Document APP/176 Property Objection Update File 3 Tab 149 Plans

⁷⁰⁹ Documents OBJ/1388 SOC: Statement of Case, January 2014; and OBJ/1388-100 Evidence to the Inquiry presented by Mr Nabarro

restricted by a mature tree. The resulting increase in the use of the car park would cause a greater risk to pedestrian and highway safety due to vehicles reversing onto Shaw Lane. The proposal should include road markings to prevent queuing vehicles blocking the access to the rear car park and the rear car park should be included in the Order land to enable the removal of the tree.

Jennifer Phelps OBJ 381

The material points⁷¹¹ were:

- 6.32 Jennifer Phelps is the Director of Shrine Hair Limited, who runs the business 'Shrine Salon & Spa' at 2 Norville Terrace. The business has about 15 years of its lease on the building remaining. The Order would give powers for the acquisition or use of part of the footway at the south side of Headingley Lane, fronting the business premises (Parcel No 11016)⁷¹².
- 6.33 There are concerns that noise disruption would seriously affect the hair services and the beauty spa, which is directly above the proposed works. Passing trade, which accounts for approximately 25% of the business revenue, would be harmed due to problems gaining access during the works. The aesthetics of the exterior, which are important to attract custom, would be susceptible to damage during the construction. These matters would all lead to a reduction in the business revenue and affect its viability.
- 6.34 Richmond Road would be closed and blocked off, which would take away the ability for clients and staff to park close to the salon, with about 90% of the clients travelling by car. The loss of part of the paved area would affect the walk-in trade and reduce the ability of prospective clients to look inside the premises. The short term impact on the business would be huge, which in turn would mean no longevity as the customer base would move away.

⁷¹⁰ Document APP/211: Updated Book of Reference

⁷¹¹ Documents OBJ 381 Objection letter 14 October 2013; and OBJ/381 SOC: Statement to the Inquiry and oral evidence to the Inquiry

⁷¹² Document APP/211: Updated Book of Reference

Louise Howard Long OBJ 330

The material points⁷¹³ were:

- 6.35 The Order, if made, would permit the attachment of OLE to the buildings at 52-54 Otley Road (Parcel No 09026)⁷¹⁴.
- 6.36 Louise Howard Long is the owner of Architect Hairdressing, which has a leasehold interest over the building at 52 Otley Road.
- 6.37 The grounds for objection regarding parking and access are similar to those of Mrs Baskind (OBJ 1388). Also, deliveries to the front of the shops would be prevented and there would be no provision for extra parking in the area.
- 6.38 During construction, there would be disruption and difficulty or perceived difficulty in gaining pedestrian access to the premises. No information has been given regarding the process of attaching OLE.
- 6.39 The consultation has been poor, with only one letter and a pack received and one meeting held with the Promoters since the official notification in September 2013.
- 6.40 The proposal would not be good value for money with a single route, not integrated and likely to be out-dated in a short time. It could result in an increase in rates due to the need to finance it, particularly if it were to go over budget.
- 6.41 The existing park and ride site at King Lane is not used, and the majority of users of the A660 are from within the Ring Road and so the proposed Bodington Park and Ride would not be used. Existing bus services could be cut and there would also be poor provision for cyclists with no cycle lane on Otley Road outside the premises.

⁷¹³ Documents OBJ/330 Objection letter and OBJ/330-100; and oral evidence to the Inquiry

⁷¹⁴ Document APP/211: Updated Book of Reference

- 6.42 The current good community spirit within Headingley would be harmed due to the loss of 2 lime trees outside the premises, which attract wildlife, the loss of green space and gardens and the introduction of OLE.
- 6.43 As a result of the above, the hairdressing business and other businesses within the shopping centre at the junction of Shaw Lane with Otley Road would be harmed by the NGT Scheme.

Deborah Fahey OBJ 1558 and on behalf of Chris Smith OBJ 229

The material points⁷¹⁵ were:

- 6.44 Deborah Fahey is the part owner of 6 Whitfield Avenue, of which part of the land forming the front garden would be acquired for temporary use (Parcel No 18065) should the Order be made⁷¹⁶. She has acted as the spokesperson for 'Whitfield Residents against the Trolleybus', which represents the views of most of the residents of the Whitfield Estate. At the Inquiry, she submitted a petition with over 800 signatures opposing the LTVS⁷¹⁷, that she indicated had been gathered at Morrisons supermarket in Hunslet over a 3 day period at the end of May and at a fun day outside the local Garden Gate public house.
- 6.45 Whitfield housing estate was built almost 35 years ago when vehicle access was stopped and the area was made into a pedestrian precinct. There are 16 houses that face the proposed route of the NGT. The occupants of which include the elderly, people with disabilities, and children.
- 6.46 The proposed route was chosen out of four routes that were put forward by the Promoters. A double track would be run in front of the houses on Whitfield Square/Whitfield Way which would result in trolley vehicles passing from 0600 hours until midnight, with a maximum of one every 3 minutes. The consultation on the proposal with the local residents has been very poor. The temporary use of the gardens of the 16 residential properties would be to

⁷¹⁵ Documents OBJ/1558 SOC: Statement of Case, and OBJ/1558-100

⁷¹⁶ Document APP/211: Updated Book of Reference

⁷¹⁷ Documents OBJ/1558-101

enable the construction of walls to replace the fences which the residents wish to retain to show individuality.

- 6.47 With 11m at the narrowest point between the Garden Gate pub and 10 Whitfield Avenue, a shared space concept would not work. There would be insufficient space for pedestrians to safely pass pushchairs, mobility scooters or wheelchairs, allowing for the lighting/OLE poles. Also, cyclists using the precinct as a cut through between Hunslet Road and Church Street would need to avoid the trolley vehicles, and could use the 2m allowed each side for the pedestrians.
- 6.48 The weight of trolley vehicles in front of the houses would cause damage to the properties. There have been subsidence problems at the car park next to the houses on Whitfield Avenue and the Garden Gate pub also has structural issues.
- 6.49 The proposed shared space would present safety issues, as it is used by children attending the nearby nursery and St Joseph's Catholic school, as well as those attending the job centre and accessing Morrisons and other food outlets. The Garden Gate pub holds social events most evenings, fun days and music events with the resulting use of the precinct. Also, children currently play on the precinct. The proposed trolley vehicles, being silent, would be a safety risk to all of these people.
- 6.50 There would be a loss of privacy with 7 houses having kitchens with windows looking onto the precinct that would be visible from the proposed trolley vehicles⁷¹⁸. The erection of higher walls would result in a loss of view and daylight.

⁷¹⁸ Document G-4-2 GLVIA2 paragraph 7.30 states: '*Although residents may be particularly sensitive to changes in their visual amenity, most land use planning regimes consider the public views are of greater value than views from private property. However the cumulative effects on a number of residents may be considered to give rise to the effect on the community*' and '*When considering views from windows, views from rooms normally occupied during waking/daylight hours are generally deemed more important than those used for sleeping from which occasional views may be obtained*'

- 6.51 The OLE would harm the views of the sky from the local houses. There is no information on what type of fittings would be used to attach the wires to the Garden Gate pub or what visual impact there would be or the impact to the structure. The pub is a Grade II* Listed Building, built in 1902, and the CAMRA publication 'Yorkshire Real Heritage Pubs' describes the inside as *'probably the jewel in the crown of pub architecture in Yorkshire'*. The use of the pub and the space outside it would be restricted by the NGT Scheme, which would harm the weekly revenue.
- 6.52 Vehicles would share the NGT route to gain access to the estate from Whitfield Way to Whitfield Gardens, which is the only way for residents to gain vehicular access to their properties. Chargeable parking permits would not be acceptable. The 10 parking spaces on Whitfield Square are shown to remain when the distance from the residents' fence to the edge of the car spaces is 9.15m, which is the narrowest area to fit a double track NGT route to share with the traffic. Daytime access would be required and reversing from the disabled parking spaces for two flats on the bend of the road would be made worse by the two way trolley vehicle system.
- 6.53 The NGT Scheme could result in restricting access to the school, which would encourage more cars to use Whitfield Way, causing congestion and school children having to cross the NGT route to get to school. The school staff and the parents do not want the trolley vehicle outside the school.
- 6.54 Traffic due to deliveries to Morrisons' supermarket, the shops in the Penny Hill Centre, the nursery and the residents' car park, combined with traffic to the Health Centre, shops and library causes queues on Whitfield Avenue. Also, pedestrians would be likely to cross in front of the traffic on the road, including the trolley vehicles, at a point where there would be better visibility and they should be able to cross at any point of the route and have priority over the trolley vehicles where there is shared space. Without such priority, it would not be safe for pedestrians. The queuing traffic and pedestrians could block the trolley vehicles, reducing their reliability.

- 6.55 The local MP, Hilary Benn, has e-mailed Mr Smith, one of the precinct's residents, suggesting that Mr Smith's e-mail demonstrates clearly that there are difficulties with the route that has been chosen and that he is taking the matter up with NGT again in the light of the representations made. This indicates that Mr Benn has not been given all the facts.
- 6.56 The trolley vehicles would cause congestion as they would have to stop the traffic over 4 lanes on Hunslet Road in order to have priority when crossing, causing delays on South Accommodation Road. The better option would be to take the NGT down the main Hunslet Road/Low Road, on which the traffic is free flowing.
- 6.57 The residents of Whitfield estate feel that the NGT is not the way forward for Leeds, as it basically serves the 2 park and ride sites and not the people of Leeds. The actual cost, at present day figures and by the time the Scheme would be implemented, is not known and the majority of people in Leeds would not use it because of its limited route. An alternative would be electric buses, which York have introduced and are built locally, whereas the trolley vehicles would have to be built in Europe.

Betty Cloughton OBJ 726

The material points⁷¹⁹ were:

- 6.58 Betty Cloughton is the owner and occupier of 236 Otley Road. The Order, if made, would permit the acquisition of land for temporary use (Parcel No 07014) and about a 1.8m deep strip of hardstanding driveway and part of the front garden for permanent use (Parcel No 07015)⁷²⁰.
- 6.59 The land is required to enable Otley Road to be widened to a five lane highway to accommodate the trolley vehicles. The resulting loss of the trees, hedge, gates and wall would irretrievably destroy the character of the property and

⁷¹⁹ Documents OBJ 726 Objection, OBJ/726 SOC: Statement of Case; OBJ/726 PoE: B Cloughton PoE and OBJ/726-100: Evidence submitted by Christine Perry; and the Inspector saw the property from 238 Otley Road at about 1800 hours on Tuesday 23 September 2014

⁷²⁰ Document APP/211: Updated Book of Reference

devalue it. The carriageway would be closer to the front of the house. Any replacement landscaping would not provide sufficient screening between the house and road and, when established, would prevent light reaching the living rooms. It would fail to act as a buffer against noise and air pollution and would not provide the current level of security.

- 6.60 The lane closures would not allow for parking outside the property, which could be necessary for emergency vehicles that have been called in the last year. The green environment of Otley Road would be destroyed by the proposal, due to the NGT route crossing the centre of Lawnswood roundabout and the loss of mature trees, which would take at least 30 years to be replaced.

Margaret Bell OBJ 1817

The material points⁷²¹ were:

- 6.61 Margaret Bell is the owner and occupier of 238 Otley Road. The Order, if made, would permit the acquisition of land for temporary use (Parcel No 07012) and about a 1.8m deep strip of hardstanding driveway and part of the front garden for permanent use (Parcel No 07013)⁷²².
- 6.62 The proposal would result in road traffic being closer to the residence, leading to increased noise and traffic pollution. It would remove the garden border, shrubbery and trees, together with a low brick wall, at the front of the property. Any screening of the traffic would affect the openness and light to the property. Replacement trees and shrubs would take several years to give an adequate barrier and their roots could damage the building and its drainage.

⁷²¹ Documents OBJ 1817 Objection; OBJ/1817 PoE; OBJ/1817-100 and OBJ/1817-101: Presentation by Mr Kemp; and the Inspector visited the property at about 1800 hours on Tuesday 23 September 2014

⁷²² Document APP/211: Updated Book of Reference

- 6.63 The reduction of the frontage by 1.8m would restrict the space available for turning vehicles and so prejudice the ability of the householder to enter/leave the property in forward gear.
- 6.64 The 24 hour bus priority inside lane would prevent the occupier from making a left turn onto Otley Road, which is currently possible across the 2 lanes of traffic from 0930 hours onwards since the bus priority lane operation ceases at that time. The proposals would mean that the occupier would have to cross the inner bus lane, blocking it whilst waiting to merge into the outside traffic lane, which would constitute a road safety danger. Vehicles travelling from the City Centre would not be able to turn right into the property, as it would require them to do so from the inside traffic lane and to cross the outbound bus priority lane and the inbound traffic and bus lane. Access would therefore be restricted to making a U turn at the Lawnswood roundabout to head back towards the City Centre and make a left turn across the bus priority lane.
- 6.65 Overall the NGT Scheme could well drastically affect the property value and the owner's ability to sell the property.

Lorraine Nelis OBJ 781 and Sarah Nelis OBJ 504

The material points⁷²³ were:

- 6.66 Lorraine Nelis lives in Headingley and is the tenant of an area of grassland, trees and hedges to the northern side of Headingley Lane and to the west of Hinsley Hall Lodge that would be acquired for the Scheme (Parcel 11013 additional land to be acquired or used and Parcel 11014 land to be acquired or used⁷²⁴). Sarah Nelis is her daughter. The land is in the ownership of WYCA and the lease is due to expire in July 2017.
- 6.67 The objectors have indicated that the 3 fields at the rear of a retaining wall along Headingley Lane have been used for keeping animals since the 13th Century. They have been cleaned up and protected to be used to keep

⁷²³ Documents OBJ 781 Objection 18 October 2013; OBJ-781 SOC: Statement of Case 27 January 2014; and OBJ/781-100 and oral evidence at the Inquiry

⁷²⁴ Document APP/211: Updated Book of Reference

previously ill-treated horses. The horses have been enjoyed by local residents. There are no other convenient fields on which to graze horses in the area.

- 6.68 The fields are within a CA and the trees are subject to Tree Preservation Orders. The area has a high biodiversity value. The NGT Scheme would result in the removal of part of an historic retaining wall, mature trees, natural meadow and habitats, contrary to LCC objectives. The fields constitute the only green space in Headingley. The introduction of the substation, gantries, wires and the NGT lanes and vehicles would harm the character of the CA. The loss of the trees has been estimated as being of the value of £14 million using the CAVAT method⁷²⁵.

Non Statutory Objectors appearing at the Inquiry

First West Yorkshire Limited (FWY) OBJ 923

The material points⁷²⁶, other than those associated with the LBC and CAC applications⁷²⁷, were:

Introduction

- 6.69 FWY is a licensed bus operator, operating registered local bus services under the 1985 Transport Act throughout the City of Leeds and across the whole of West Yorkshire. In particular, it operates several services along, or parallel with, the proposed route of the LTVS⁷²⁸.
- 6.70 FWY fully supports the principle of improving the public transport system in Leeds and throughout West Yorkshire. It considers that the proposed LTVS would not deliver the benefits claimed in the planning statement and is very likely to result in material adverse planning harm. Also, it has not been demonstrated that the LTVS would offer value for money for the tax payer and

⁷²⁵ Document H-2: Arboricultural Evaluation- CAVAT

⁷²⁶ Document OBJ 923 FWY/159: Closing Submissions

⁷²⁷ See Appendix D to this report: Report on the Listed Building and Conservation Area Consents

⁷²⁸ Document OBJ/923 SOC: FWY Statement of Case paragraph 1.2

end user. The LTVS Scheme has not been 'future proofed' and there has been no comprehensive evaluation of options alternative to the LTVS and the models that have been provided have not been analysed correctly⁷²⁹.

- 6.71 FWY's operations in the City of Leeds carry approximately 51 million passenger journeys per annum, of which some 12.4 million would be directly affected by the Order. 94% of FWY's services are operated on a commercial basis without direct financial subsidy from Metro. The services enjoy high levels of customer satisfaction, with 84% either satisfied or very satisfied according to independent research undertaken between September and December 2012 by Passenger Focus (the appointed statutory representative of the interests of bus passengers under the Local Transport Act 2008)⁷³⁰.
- 6.72 FWY currently operates around 800 vehicles from six principal depots in West Yorkshire, two of which are located in Leeds. It employs 2,400 staff and carries some 97 million passenger journeys per annum (ppa) in West Yorkshire and 51 million ppa in Leeds. Total FWY journeys account for around 65% of all bus journeys in West Yorkshire, and 66% of journeys in Leeds. During the last two years FWY has grown bus passenger journeys in West Yorkshire by almost 7%, reversing the trend of decline in prior years. In Leeds its fares strategy has resulted in 25-30% reductions for a large proportion of users during 2012-2014⁷³¹.
- 6.73 FWY has worked in partnership with local authorities within West Yorkshire, and specifically so in Leeds to deliver the following⁷³²:
- Guided busway on the A64 York Road corridor, opened in November 2001, with the private sector contribution from bus operators to the capital cost of providing the infrastructure for the Scheme of circa £5 million at 2001 prices, of which FWY contributed £3.7 million⁷³³;

⁷²⁹ Document OBJ/923 SOC: FWY Statement of Case paragraph 1.3

⁷³⁰ Document OBJ/923 SOC: FWY Statement of Case paragraph 2.3

⁷³¹ Document OBJ/923/06: Mr Alexander PoE paragraph 3.1

⁷³² Document OBJ/923/06: Mr Alexander PoE paragraphs 3.2, 3.3, 3.4 and 3.7

⁷³³ Document OBJ/923/06: Mr Alexander PoE paragraph 3.2 and Appendix B: West Yorkshire PTE, Leeds City Council and bus operators, Project Agreement, East Leeds Quality Bus

- A mixture of guided busway and bus priority measures primarily on the A61 Scott Hall Road corridor between Leeds City Centre and the northern suburbs, with highway infrastructure provided by LCC, bus stops, shelters and publicity provided by Metro and the vehicles and services by FWY, achieved by 1998 through a voluntary partnership and an all-party working group;
- A65 Kirkstall Road bus priority scheme, by FWY aligning £3.5 million of investment in new vehicles, improvements to the service pattern, reliability and punctuality and a joint initiative between itself and other bus operators to integrate ticketing arrangements for customers, with further improvements implemented from 27 April 2014, including the introduction of an additional limited stop express service; and
- The purchase of ftr StreetCar vehicles for the Leeds network, at a capital cost of £6.5 million entirely funded by FWY, deployed in partnership with Metro and LCC on an initial service in the City and redeployed on FWYs interurban Hyperlink service operating between Leeds and Bradford.

Matter 1- The aims and objectives of, and the need for, the Scheme

- 6.74 Notwithstanding whether its priority is justified over other more pressing demands for transport infrastructure investment for Leeds and West Yorkshire, FWY agree that it would be desirable to do something on the A660 to reduce congestion and to improve public transport journey times and punctuality.
- 6.75 LTVS as proposed would not deliver value for money and is unnecessary in its current form. There are better and more cost effective ways of improving transport provisions throughout Leeds by investing in bus and rail infrastructure. In particular⁷³⁴:
- a) It is doubtful whether the Order is capable of delivering the claimed reduction in public transport journey times, particularly at peak times;

Initiative 19 January 2000

⁷³⁴ Document OBJ/923 SOC: FWY Statement of Case paragraph 3.5

- b) The deliverability of the claimed improvements in journey time punctuality is highly questionable;
- c) the provision of the proposed high quality stops with shelters and real time information offering level boarding to the vehicle does not depend on the implementation of LTVS and can be delivered for existing services;
- d) the LTVS services would not be necessary to make the proposed park and ride sites and passenger services work;
- e) The claimed benefit of '*modern passenger vehicles offering improved quality of travel*' is already being delivered by FWY across its network in Leeds, using existing technology and does not require the LTVS in order to be implemented;
- f) The claimed benefit of '*linkages to the north and south of Leeds would be made easier for people to travel to work and improved access to key destinations would be made across the route*' for the LTVS system has not been demonstrated, and in some cases existing linkages would be jeopardised;
- g) Claimed reductions in congestion and improvements to air quality are overstated and would not be delivered by the granting of the Order;
- h) The economic and employment benefits of the proposed Order have been overstated in the Planning Statement and would not be achieved; and
- i) The claimed 3% increase in output equivalent to an annual £176 million boost to the local economy is not robust.

6.76 With regard to the objectives⁷³⁵, the proposed NGT Scheme would fail to achieve the benefits in Objective 1. The negative impacts, both from an existing bus operation perspective and from an environmental angle, have not been sufficiently taken into account and mitigated. There are better ways of achieving the claimed benefits of NGT through improved use of the public funds, which would result in more effective public transport provision across all of Leeds rather than just two corridors, which would have wider, more sustainable economic benefits and less environmental harm.

⁷³⁵ Document A-01-2: Statement of Aims paragraph 3.2

- 6.77 In terms of Objective 2, the Scheme would serve some of the most prosperous areas of the City, would not serve the principal land use development sites proposed for the next decade, and would make little contribution to improving connectivity with areas of high unemployment. Furthermore, in being restricted to two corridors in the City, any claimed benefits would be similarly restricted.
- 6.78 Objective 3 to improve the efficiency of the City's public transport and road networks would not be achieved. FWY currently operate 20 buses an hour along Headingley Lane, providing an average combined frequency of one bus every three minutes, generally using 2012 built buses with a capacity of 94. The NGT Scheme proposes the use of trolley vehicles with a capacity of 'up to' 160 passengers, with no details specified, at a frequency of only 10 vehicles per hour (vph). As such, FWY are already currently providing more capacity than the NGT Scheme itself would provide. Also, expected journey time savings from the NGT are unrealistic, while the negative impact on bus journey times across the wider Leeds network have been disregarded by the Promoters.
- 6.79 The punctuality benefits stated by the Promoters are unachievable, and significant improvements to punctuality could be achieved, on a wider scale, through a bus alternative. The proposed improvement to stops for NGT would be something which would be possible with existing bus services, and the quality improvements claimed by the Applicants would not be achieved, as there would be longer waiting times for a less frequent service and it would be restricted to high capacity articulated vehicles requiring a high proportion of passengers to stand, which would not be in the interests of passengers.
- 6.80 Objective 4 to support and facilitate targeted regeneration initiatives and economic growth in the more deprived areas of Leeds would not be achieved, as the Scheme would run almost entirely through the least deprived, most wealthy areas of the City and the NGT route essentially avoids all of the

proposed major Regeneration Priority Areas and Area Action Plans in the Leeds area⁷³⁶.

- 6.81 The proposed NGT would fail to reduce transport's emissions of CO₂ and other greenhouse gases, as required in Objective 5. FWY has reduced its own emissions significantly during the past years from improvements to bus engine technology, including a reduction of 15,500 tonnes of CO₂ emissions in the last 7 years⁷³⁷. The NGT Scheme would adversely impact upon the running times of buses which would have some adverse air quality implications. Further improvements could be made from a bus-based alternative to NGT⁷³⁸. Whilst the proposed NGT Scheme would have lower direct emissions from vehicles, it would result in increased emissions at localised hotspots along the route due to increased vehicle waiting times where NGT gets junction priority, and increased emissions from the abstraction from all public transport to park and ride journeys⁷³⁹.
- 6.82 With regard to Objective 6, most, if not all, the features and gains predicted for the Scheme could be delivered more quickly and more cost-effectively by upgrading existing conventional bus services. In particular, high quality bus stops with shelters and real time information are easily implemented, and are not dependent on the introduction of a trolleybus service. The wiring required for the LTVS would have numerous negative environmental impacts, and is one of the major objections to the Scheme from the wider public⁷⁴⁰. Even if completed, the Scheme would only deliver the claimed benefits to 6% of the Leeds population⁷⁴¹, and that claim needs to be subject to critical appraisal⁷⁴². Far wider benefits to quality of life and environment could be achieved through

⁷³⁶ Document C-1: Business Case paragraphs 3.89-3.91

⁷³⁷ Document OBJ/923/03: Mr Turner PoE paragraphs 2.6 and 2.7

⁷³⁸ Document OBJ/923/03: Mr Turner PoE paragraphs 6.12 onwards

⁷³⁹ Document OBJ/923/06: Mr Alexander PoE

⁷⁴⁰ Document OBJ/923/01: Mr Cheek PoE paragraph 9.15

⁷⁴¹ Document OBJ/923/01: Mr Cheek PoE paragraph 9.6

⁷⁴² Document OBJ/923/02: Mr Cheek PoE Appendix 3- TAS' Economic Report

a bus-based alternative, which could be implemented city-wide and would not be restricted to two corridors⁷⁴³.

- 6.83 In terms of Objective 7 to contribute to enhanced quality of life by improving access for all to jobs and services, the NGT route would not serve any of the main employment locations outside of the City Centre, thus failing to '*connect people to key employment sites*'⁷⁴⁴. Furthermore, the impacts on other traffic, including existing FWY bus services running across the City, would be damaged by the Scheme, potentially creating reduced access to jobs and services in many areas of the City, away from the NGT route.
- 6.84 It is of additional concern that in the Business Case 67% of the expected NGT demand would transfer directly from existing bus services and a further 7% from existing rail services. The assumed abstraction rates from public transport⁷⁴⁵ demonstrate that the proposed Scheme would provide very little benefit in the way of modal shift from private transport, and thus the associated environmental and mode shift benefits would be limited.
- 6.85 Proper consultation with the main bus operator would seem to be an absolute prerequisite to ensure a properly integrated public transport system and this has not happened. This suggests that the Scheme supports other aims and objectives and is a part legacy of the previously proposed Leeds Supertram scheme, rather than a scheme as a result of a meaningful strategic review of public transportation requirements throughout Leeds, West Yorkshire and the wider Leeds City Region⁷⁴⁶. The existing bus network in Leeds is very successful⁷⁴⁷. NGT would result in a worsening of the public transport network in the City and is unnecessary.

⁷⁴³ Document OBJ/923/06: Mr Alexander PoE

⁷⁴⁴ Document OBJ/923/03: Mr Turner PoE paragraph 7.1a: the NGT Business Case

⁷⁴⁵ Document OBJ/923/02: Mr Cheek PoE Appendix 2- the TAS report on the Business Case

⁷⁴⁶ Document OBJ/923/06: Mr Alexander PoE paragraph 4.12

⁷⁴⁷ Document C-1: Business Case paragraph 3.56: bus has a 59% mode share of commuting trips made within the City Ring Road

*Matter 2: The justification for the particular proposals in the draft TWA Order, including the anticipated transportation, regeneration, environmental and socio-economic benefits of the Scheme*⁷⁴⁸

- 6.86 The SP survey work of 2008 is now dated and did not ask about hybrids. It included basic sampling errors in relation to some attributes such as CCTV, lighting and shelter at stops and the parameter values chosen were out of line with studies elsewhere. The preferences revealed in relation to buses and trolley vehicles were exactly opposite to the vehicle quality penalties then generated, which accordingly had no empirical basis.
- 6.87 The SP survey showed a strong preference for double-decker conventional buses over trolley buses, but the Promoters used the difference in perceived quality between old 1970s buses and very new buses in 2008 as the value for a penalty that would be applied to buses as against trolley vehicles when modelling the demand for the new system⁷⁴⁹. The result for 'trolleybus' showing no preference was suppressed and withheld from the DfT, and it was claimed that the penalty applied to buses compared to trolleybus was 'based on' the SP work. Having erroneously come up with parameters implying that public transport users would perceive trolleybuses as greatly superior to buses the effect was then compounded by the invalid assumption that the difference in perceived quality would remain constant throughout the 60 year appraisal period, failing to take account of buses moving towards fully electric drivetrains. Assumptions were also made about the running times of buses and trolley vehicles which unduly favoured trolley vehicles over buses.
- 6.88 The SP survey results were fed into the LTM which was used to model public transport passenger flows and traffic flows. The LTM was, contrary to Government Transport Analysis Guidance (TAG), not designed with sufficient precision to generate reliable traffic flow predictions at the level of detail required to assess the NGT Scheme. In particular, it was not designed to be

⁷⁴⁸ Document OBJ/923/06: Mr Alexander PoE paragraphs 5.1 to 5.5

⁷⁴⁹ Mr Chadwick cross examination was unaware of that approach being adopted for any other Project

used to predict flows at individual junctions, side-roads or roads parallel to the main corridor. Nor was the capacity of trolley vehicles and its effects on passengers modelled since the vehicles had not been specified. It did not contain a detailed representation of active modes (walking and cycling), and did not contain a constant for growth in traffic congestion. No modelling was done specifically of effects on bus services parallel to or crossing the corridor. The modellers made no effort to establish the confidence levels of the outputs of the model⁷⁵⁰. It is not known how reliable the model is, and for park and ride car parks it is expected that the outputs would be reliable within plus or minus 50%.

- 6.89 The LTM was not designed to be suitable to predict traffic flows outside any particular address in Leeds, but its outputs were then used as the basis for the EIA which purported to give precise predictions of deteriorations or improvements to noise and air quality at particular premises.
- 6.90 Accordingly, the whole of the Promoters' case for the NGT has been built on unsound foundations, as the patronage forecast is grossly overstated and the Business Case is seriously flawed.
- 6.91 The flaws in the Business Case for the Scheme include the following:
- a) The transportation benefits could be achieved more quickly and more cost-effectively using a conventional bus-based system, particularly with regards to improvements in journey time and punctuality, high quality stops, park and ride services and modern vehicles. A particular concern is the quality of vehicle proposed and the low ratio of seats to standing places, which would require a notable proportion of passengers to stand for long distances on the basis of the heavy peak loadings in the Business Case.

⁷⁵⁰ Mr Hanson cross examination: the overall predictions for such models, such as total patronage for the new transport mode, are generally only expected to be within plus or minus 30% of the actual figure given the inevitable crudity of the model

- b) In terms of regeneration, the NGT route would have just two stops in areas with unemployment levels above the national average of 7%⁷⁵¹, with the majority of the planned route along the A660 corridor having unemployment levels virtually half the national average, and touches only two wards in the highest category of deprivation. It is poorly designed to improve accessibility to employment from areas of the City with high unemployment or deprivation, and the route would do little to provide access to the key land use development sites that will actually drive the economic development of the City over the next decade.
- c) The environmental benefits claimed to follow from modal shift are overstated and the proposed Scheme would result in major visual harm from the OLE and significant tree loss. This would negate much of the claimed benefit of the Scheme. The use of hybrid vehicles, and into the future, all-electric battery powered buses, would provide the same environmental benefits claimed for NGT, but without the adverse impacts of the proposed Scheme.
- d) With regard to the socio-economic impact, the underlying market data suggests that the patronage and revenue forecast of the Scheme is seriously overstated and the modelling work undertaken is seriously flawed. The generalised cost modelling, annualisation factors, mode penalties and SP research are unsound, resulting in an inaccurate assessment of the 'Wider Economic Impacts' of the Scheme by the Promoters. Analysis suggests that up to 48% of existing public transport users would experience an increase in 'Generalised Journey Time' as a result of the introduction of NGT. As a consequence, NGT would be very unlikely to deliver the socio-economic benefits claimed for it.

6.92 When the Promoters make realistic allowance for traffic, boarding and road conditions, their average overall predicted 'commercial speed' of the trolley vehicles traversing the route between Bodington and Stourton (including dwell

⁷⁵¹ Document OBJ/923/01: Mr Cheek PoE paragraph 9.13

times) would only be of the order of 11.6 to 14.5 mph⁷⁵². On some stretches, such as the space shared with pedestrians in Whitfield Way and near the University, the maximum speed would be just 10 mph. The NGT Project Board on 12 August 2013 unanimously resolved to remove the word 'fast' from the Project Vision⁷⁵³. The NGT trolley vehicles would achieve no higher speeds than would be possible with buses⁷⁵⁴.

- 6.93 The trolley vehicles would be inflexible compared with buses, as they could not be redeployed on other routes due to their dependence on OLE for power; they would not be designed with the additional sets of cables needed to routinely overtake slower-moving trolley vehicles in front; and it would take time to de-wire so it would not be practical to overtake other vehicles as a matter of course⁷⁵⁵. This would mean that no express services could be offered, like the X84 bus service, and no express service is proposed, which would limit the appeal of the park and ride sites to motorists. Also, a delayed trolley vehicle could not always be overtaken by faster-moving vehicles behind them in order to counteract 'bunching' without knock-on delays arising from slowing down the trailing vehicle.
- 6.94 It would be an expensive and time-consuming task to extend or substantially alter the route to serve additional or new sources of demand, because a

⁷⁵² Document C-1-13 Annex A, Tables for Options 04_02, 05_02, and 06_03: reported as 'commercial speed': 14.5mph southbound between the City Centre and Stourton in the PM peak, 11.6mph southbound from Bodington to the City Centre in the Inter-Peak, and 12.2mph southbound from Bodington in the AM peak. The speed for the Holt Park to Bodington stretch would be of the order of 18mph on a relatively uncongested stretch with a 30mph speed limit

⁷⁵³ Document H-7 Minutes for 12 August 2013 Item 4e: Mr Preston, the head of Metro, stated that '*the word 'fast' was not appropriate*'

⁷⁵⁴ Document OBJ/923/03: Mr Turner PoE paragraph 1.18 and in oral evidence: average bus speeds are currently between 9.0 and 10.6mph depending upon the service

⁷⁵⁵ Mr Henkel cross examination; Mr Smith cross examination: '*in terms of overtaking another trolley that is not part of the operational scenario...the route is segregated...it shouldn't need to do it for the reason of overtaking other cars only if there is an immovable obstacle. It's not needed for ordinary operation but de-wiring can be done automatically by the driver but could take 20 to 30 seconds.*'; Document APP/181 pages 6 to 7: a limited express service could be accommodated by de-wiring in transit and rewiring at the next stop although not in all traffic conditions, contradicted by the oral evidence of Msrs Henkel and Smith: '*proposal was not to have any express services and, if true, would not be a true express service as the vehicles could only run off the wires for a short distance. As the vehicles have not been specified it is impossible to know what their off-wire range would be.*'

further TWA Order would be required, as would the installation of fixed electrical infrastructure. Similar difficulties could apply when there were roadworks requiring traffic diversions. It would be costly and slow to order additional vehicles, because a bespoke order would have to be made and there are few suppliers of right-hand drive trolley vehicles⁷⁵⁶. There are no manufacturers in the UK, and there would be no market for the short-term hire of trolley vehicles to meet peaks in demand (eg special events), or to substitute for vehicles that were out of service⁷⁵⁷.

- 6.95 NGT has been deliberately designed to be not integrated and not to share stops. The consensus across Europe is that facilitating interchange is important when designing public transport systems⁷⁵⁸. The recommendation in the literature is that there should be a maximum of 31m walk for transfers between bus and tram services, walkways between modes should be covered in rainy climates, and passengers should not be required to cross over streets to interchange between services⁷⁵⁹. The guidelines of the 2011 EU working group for 'implementers of Passenger Friendly Interchanges' were: *'an interchange should provide a short transfer path for passengers, safety and easy access and be an attractive public space. Potential benefits of passenger-friendly design include minimising congestion and overcrowding, optimizing the location of key facilities, efficient use of space, increasing passenger satisfaction and increasing public transport modal share'*⁷⁶⁰.
- 6.96 The NGT route would not serve the bus station, was not designed to integrate with a new HS2 station, and its stops at City Square would be some considerable distance away from the exits to the train station⁷⁶¹. Outside the

⁷⁵⁶ Mssrs Turner and Cheek evidence to the Inquiry

⁷⁵⁷ Mr Cheek Evidence in Chief

⁷⁵⁸ Mr Cheek Evidence in Chief; Document FWY/120: Olszewski, 'Quantitative Assessment of Public Transport Interchanges' page 1

⁷⁵⁹ Document OBJ 923 FWY/120 page 2 and Annex: extract from the paper cited in second page

⁷⁶⁰ Document OBJ 923 FWY/120 page 2 summarising the guidelines

⁷⁶¹ The current southbound No 1 bus stop (whose location is under the Promoters' control and could be moved closer) is a few tens of metres further away than the proposed NGT stop. The current northbound No 1 bus stop on Bishopsgate is closer to the station than the proposed NGT stop

University, where currently there are 4 bus stops permitting of interchange, there would be just 2 NGT stops⁷⁶².

- 6.97 NGT would not share stops with the buses and would require bus passengers to walk to NGT stops to effect interchange along, and sometimes across, the street in all weathers. With the exception of Woodhouse Lane and Trinity stops, the closest NGT stops (such as Holt Park and Hospital Lane) would be nearly 30m from a bus stop. The Bodington Park and Ride stop would be nearly 40m from the southbound bus stops and further from northbound stops. Lawnswood NGT stop would be 80m from bus stops. Headingley Hill stop would be almost 100m from bus stops. Leeds Metropolitan University stop would be nearly 120m from a northbound bus stop. At Penny Hill passengers would be 100m from a westbound stop and at Belle Isle Circus the distances in each direction would be 70m and 80m⁷⁶³.
- 6.98 With regard to the reasons given by the Promoters⁷⁶⁴ why bus stops would not be shared with trolley vehicles:
- a) The lack of 'kerbside capacity' to handle more vehicles, with guidelines stating that they should receive no more than 20 vph due to long dwell times resulting from long boarding and alighting times, lacks any evidential basis⁷⁶⁵. As technology advances and multi-door buses are rolled out, dwell times would be reduced and more buses would be able to set down and pick up passengers at the same stop in each hour. Also, the Promoters' case indicates that many stops would have a combined frequency of less than 20 vph.
 - b) The need to reconfigure bus stops to accommodate articulated trolley vehicles within a lay-by is a significant inherent drawback of articulated vehicles. As a result, most of the NGT stops would not have lay-bys⁷⁶⁶.

⁷⁶² Mr Smith cross examination

⁷⁶³ Document APP-3-2: Mr Smith PoE paragraph 10.3.2

⁷⁶⁴ Mr Smith evidence

⁷⁶⁵ Mr Turner Evidence in Chief: *'Wellington Bridge Street slip road stop is served by 30 buses per hour, one of which is the articulated vehicle plying route 72, Stafford Street, Hunslet stop with a lay-by and single shelter has at least 34 buses per hour'*

⁷⁶⁶ Mr Smith cross-examination: *'it is not possible to have a trolley [bus] in a conventional lay-*

This would not only impede integration with buses, but would also hold up oncoming traffic in the dedicated lanes behind stopping trolley vehicles and would tend to make it more difficult for trolley vehicles to join oncoming traffic without disrupting the flow of the traffic.

- c) 'Branding and identity' to ensure that NGT would appear as a distinct system from conventional buses is not a good reason, as the vehicles could still be separately branded (for instance in terms of livery). Furthermore, the Order would allow the running of conventional buses along the busway⁷⁶⁷.

6.99 Lack of integration has other effects that would make public transport services less attractive. Passengers would have to make a pre-trip decision as to whether to walk to the bus stop or NGT stop. There would be reduced perceived frequency. There would be 2 different fare structures with a higher minimum fare proposed for NGT⁷⁶⁸, and travellers might have to buy 2 different tickets per journey.

6.100 There is no evidence to support the Promoters' claim that the trolley vehicles would be more reliable than buses. The maintenance cost per kilometre of trolley vehicles that are currently in service are in the range of 88% to 129% of diesel buses⁷⁶⁹. Assuming that the costs of repair would be similar⁷⁷⁰, they could be up to 29% less reliable, as repairs following a serious accident would take weeks⁷⁷¹.

6.101 The Promoters cannot purchase their vehicles because this would add over

by [be]cause it will need to be huge- articulated buses [sic] will require a longer length to pull up. So you either have huge lay-bys or no lay-bys. Certainly it's better to have straight geometries for trolleybuses'

⁷⁶⁷ Document APP/205 Filled up draft Order Article 51 and at Inquiry Filled in Order session

⁷⁶⁸ Document C-1 paragraph 15.136

⁷⁶⁹ Document C-1-16 page 66

⁷⁷⁰ Document C-1 paragraph 5.15: trolley buses need less maintenance than buses; Document C-1-16: '*Electric propulsion systems have fewer moving parts compared with internal combustion engines and arguably should require less maintenance,...*' '*but it had proved difficult to find quantitative evidence to support this*'

⁷⁷¹ Mr Cheek Evidence in Chief

£12 million to the capital cost of the project⁷⁷², causing them to exceed the capital expenditure budget set by the DfT when it granted Programme Entry approval. Outsourcing repairs would be risky⁷⁷³. In the absence of other trolley vehicle systems in the UK, and with trolley vehicles unable to travel any significant distances (such as between cities) under their own power, there would be no market in trolley vehicles for short term hire that could make up for any vehicles that were out of commission⁷⁷⁴. The OLE would need to be de-electrified for maintenance about once a month⁷⁷⁵. There would be insufficient spare trolley vehicles to afford adequate backup for break down etc or for catering for special events.

- 6.102 In addition to this problem, the OLE introduces the risk of failure of the equipment, which is a common occurrence in other European cities⁷⁷⁶. The two basic types of outage are faults in the equipment and outages caused by extrinsic agents such as power cuts or surges, weather conditions, or other road vehicles colliding with poles. The more miles of electrical cabling needed to power a transport system and the more electrical components there are, the more likely it is that somewhere along the system would suffer an outage.
- 6.103 The Promoters' own assessment indicates that the NGT system would be vulnerable to adverse weather conditions. There would be '*significant risks*' of harm arising from extreme high temperatures and heatwaves⁷⁷⁷, including expansion and buckling of structures, and a reduction in the rated capacity of the power lines. Even though it is defined as a 'low' risk in the Climate Change Management Assessment, it would affect the reliability of the system.

⁷⁷² Assuming a unit cost of £600,000 and purchase of 21 vehicles

⁷⁷³ Mr Cheek Evidence in Chief: the industry tried leasing and maintenance agreements shortly after deregulation which were generally withdrawn as being unsuccessful

⁷⁷⁴ Mr Cheek Evidence in Chief

⁷⁷⁵ Mr Smith cross-examination: '*maintenance could take as long as 24 hours and would probably be done on a Sunday*'

⁷⁷⁶ Document OBJ/171-100: Professor Todd presentation page 22 examples of failures from the last year, including trolleys in Antwerp, Geneva, Neuchâtel and La Chaux de Fonds, and the new Edinburgh tram which suffered 2 power failures in July 2014

⁷⁷⁷ Document A-08g-1 paragraph 6.10: Heatwaves currently occur every 3 years and are 'very likely' to become more frequent and paragraphs 6.4 to 6.5: current levels of heatwaves, as well as the expected increase in these temperatures over the 60-year life of the Project, 'is

- 6.104 The current risk from precipitation events is considered to be high⁷⁷⁸ and may result in structural damage. There is also potential for the dedicated NGT lanes to cause channelling of surface water. The NGT Scheme would introduce more areas of impermeable hardstanding which would increase run-off and could exacerbate flooding issues⁷⁷⁹.
- 6.105 The FRA indicates that much of the southern stretch of the NGT route, including the substation at the Old Red Lion public house, is 'within an area at high probability of flood risk (Zone 3a(ii))'⁷⁸⁰. This means that there is currently a 1 in 20 year probability of flooding⁷⁸¹. The Scheme would not be operable when the River Aire is flooding, but following the retreat of the flood water would quickly be able to return to normal operation⁷⁸². This means that it would be out of action at least 3 times in the next 60 years owing to the siting of the substations, even if the flood risk does not worsen owing to climate change. The Climate Change assessment additionally identifies the substation on Water Lane as being at risk of flooding⁷⁸³. The assessment assumes the robustness of the design to cope with flooding, but the designs are either insufficiently advanced to do this, or there has been a reckless disregard of flood risks⁷⁸⁴.
- 6.106 The FRA tells us that on the northern stretch, there is '*a risk of surface water flooding during heavy rainfall at discrete locations*'. The key locations that may affect scheme operation are given as Hyde Park Corner, behind the Arndale Centre in Headingley, at the junction of Otley Road with the Leeds Outer Ring Road and along Boar Lane in the City Centre. Although it suggests that this overland flow flooding would be likely to be short lived and therefore

expected to result in damage requiring higher levels of maintenance of assets'

⁷⁷⁸ Document A-08g-1 paragraph 3.24

⁷⁷⁹ Document A-08g-1 paragraph 6.16

⁷⁸⁰ Document A-08g-4 paragraph 3.14: The Climate Change assessment assesses heavy precipitation events as having a probability of up to once a year with a 'high' current risk and a likely future increase in risk that is 66% to 90% likelihood of a deterioration

⁷⁸¹ Document A-08g-4 paragraph 3.9

⁷⁸² Document A-08g-4 paragraph 3.16

⁷⁸³ Document A-08g-1 paragraph 6.14

⁷⁸⁴ Document A-08g-1: '*assuming robust design, the risk of impacts associated with flooding*

service disruption would be minimal, climate change could increase this risk in the future⁷⁸⁵ and no meaning is given to '*short-lived*'. The off-highway stretches, such as those behind the Arndale Centre, would make the trolley vehicles more vulnerable to flooding than buses and they would not be able to deviate significantly from the route in the event of flooding.

6.107 The Climate Change Assessment asserts that '*ice loading on overhead lines is not considered a significant issue as the trolleybus is likely to disturb the lines during operation so that ice cannot build up*⁷⁸⁶. However, the Business Case does not allow for any night-time running, and Leeds has several months of the year where there are night-time frosts. The Climate Change Assessment gives a score of 2.5 to the likelihood of 'cold-waves', snow and ice increasing⁷⁸⁷. A trolley vehicle would not be able to be diverted from, for example, the steep Winrose Grove between Stourton Park and Ride and Belle Isle Circus given the location of the NGT depot. The Climate Change Assessment notes that '*There is uncertainty as to who will be responsible for the maintenance of the gritting and snow clearance of the off highway sections of the route.*' Even with such measures, snow and ice would result in slower and delayed services⁷⁸⁸.

6.108 Leeds is vulnerable to winds and there is a 'high' risk of gales, which occur every year and are predicted to increase (a score of 3.5) and the historic trend has been an increase in the number of gales particularly in the winter⁷⁸⁹. The OLE would be particularly vulnerable to high winds, including from resulting tree fall⁷⁹⁰.

and high precipitation events over the operational life of the Scheme is expected to be low'

⁷⁸⁵ Document A-08g-4 paragraph 3.8

⁷⁸⁶ Document A-08g-1 paragraph 6.20 page 23

⁷⁸⁷ Document A-08g-1: text of Tables 6.1 and 6.2 says that the likelihood of 'cold-waves', snow and ice increasing is 'very unlikely' but the scoring matrix at Table 3.8, indicates that 3 means 'even odds', 5 means 'very likely' and 1 means 'very unlikely' and a score of 3.5 in table 6.4 was described as 'about as likely as not', indicating when the probability is above 50% the language used is consistently 'editorialising' and playing down the significance of the numerical score that has been assigned

⁷⁸⁸ Document A-08g-1 paragraph 6.20

⁷⁸⁹ Document A-08g-1 Table 6.4 page 24; paragraph 9.6 page 43; paragraph page 59

⁷⁹⁰ Document A-08g-1 paragraph 6.24: '*There is a risk that gales could cause trees, tree*

- 6.109 As NGT would share the majority of its route with other traffic, particularly on the A660 northern corridor, it would not be insulated from general traffic congestion. Even though trolley vehicles would get priority at traffic signals, they would still be affected by traffic congestion between sets of signals. Accordingly, journey time variability would not be eliminated either between times of day or between seasons eg term time versus holidays. Passengers normally allow for changes in journey time depending upon time of day and time of year, so the economic benefits claimed for journey time consistency, based on reduced uncertainty, are exaggerated⁷⁹¹.
- 6.110 Should a trolley vehicle encounter an obstacle on part of the shared route, such as a broken down trolley vehicle, the following factors would limit its ability to double back and divert around the obstacle without serious disruption to the service:
- a) the need to de-wire;
 - b) the low manoeuvrability of the long NGT vehicles;
 - c) the limited width of some sections of the route;
 - d) the lack of connection to the road network; and
 - e) the one-way traffic and the limited capability to travel off the OLE.
- 6.111 With regard to the punctuality of the NGT compared to buses⁷⁹², buses are deliberately timetabled to take account of the traffic conditions at different times, allowing longer between stops in order to remain punctual⁷⁹³. The evidence relied upon by the Promoters to show improved punctuality was based on observations from 2006 to 2007, when the performance of FWY has

branches and other debris to fall onto overhead lines or onto the trolleybus lane, causing structural damage to the Scheme and lane blockages. Additionally there is the risk of debris blowing onto the NGT Scheme route and disrupting and damaging trolleybuses'

⁷⁹¹ Document OBJ/1719 PoE2: NWLTF Professor Bonsall PoE paragraph A22(i) page 19: The fundamental cause of bunching is not congestion *per se* because, if there is a queue of traffic, all vehicles are caught up in congestion and delayed to the same extent

⁷⁹² Document C-1-11 Figure 2.1: shows high variability of bus journey times

⁷⁹³ No evidence was before the Inquiry on the extent to which buses are currently keeping to their timetable at individual stops along the route other than that for non-frequent services (fewer than 6 per hour) FWY's network across West Yorkshire are just below the Traffic Commissioners' target of 95% of departures being within 5 minutes of the scheduled time at the start of the route

since improved⁷⁹⁴. Cars emerging from premises, pedestrians crossing, vehicles setting down or picking up goods or people, and illegal parking would all be likely to take place along the shared route even if a parking ban were strictly enforced. At times, traffic would stack and jams would occur, or buses would move off or stop in front of trolley vehicles. As a result, it is inevitable that trolley vehicles would be significantly less than 100% punctual.

6.112 By giving trolley vehicles absolute priority rather than 'late bus' priority, the bunching caused by buses could be increased⁷⁹⁵; due to them being held back. Consequently it would be wrong to assume that NGT punctuality would be substantially better than the 1.5 minute variance allowed for buses.

Furthermore, any percentage improvements to punctuality in vehicle arrival times would not translate directly into a percentage improvement in door-to-door journey time predictability. The time spent walking to and from stops is relatively invariant as it does not depend upon traffic conditions.

6.113 With regard to the quality of the NGT, the Promoters' assumptions as to the in-vehicle journey times of LTVS are over-optimistic for the following reasons:

- a) No allowance has been made for the low speeds that would be achieved in shared and narrow space⁷⁹⁶, or for delays due to the proximity of stops to junctions or trolley vehicles being stuck behind buses.
- b) No allowance has been made for traffic congestion increasing over the next 60 years, contrary to the guidance in TAG Unit 3.11.2⁷⁹⁷, or slower

⁷⁹⁴ Document OBJ/923/03: Mr Turner PoE paragraph 2.7(a) page 18, cross examination and Rebuttal paragraph 4.6: on routes registered to operate on a frequent basis (at least every ten minutes) FWY is required to ensure that for 95% or more of journeys run customers wait on average no more than 1.25 minutes longer than half the frequency, and these targets are being monitored by the Traffic Commissioners

⁷⁹⁵ Document OBJ/1719 PoE2: NWLTF Professor Bonsall PoE paragraph A25(iii) page 20: The fundamental cause is not congestion *per se*, because if there is a queue of traffic, all vehicles are caught up in congestion and delayed to the same extent; and Mr Turner's evidence: If a bus is late, more passengers will have accumulated at each stop and a longer boarding time is required to pick them up. For the following bus, fewer passengers will have massed at the stops and they will take less time to pick up, causing bunching

⁷⁹⁶ Document OBJ 1719 NWLTF/122 paragraph B4 and Document C-1-13 Annex page 7 run 03-01A

⁷⁹⁷ Document E-3-16 paragraph 6.4.5: *'For submodes that run on-street and share road space with other vehicles...it is important that journey times in the PT assignment model are*

runs times when the trolley vehicle frequency is increased beyond 10 per hour, particularly as the intention is to run 12 per hour in 2031.

- c) The assumed dwell times at stops are over-optimistic, as they were said to be based on a TfL study, showing fixed-element boarding times of 9.4 seconds, which is not comparable⁷⁹⁸. Longer vehicles are less manoeuvrable and have to wait for larger gaps in the traffic than shorter vehicles to be able to join the traffic stream. Also, a high ratio of standing passengers makes it more difficult for passengers to alight and board⁷⁹⁹, and impedes the movements of inspectors, affecting revenue protection and potentially leading to significant delays⁸⁰⁰. The 0.7 seconds allowed for each passenger to board or alight is accordingly likely to be overly optimistic and flawed.
- d) No allowance has been made for blocking-back at individual junctions, which is predicted by the LTM, and the reductions in green-phase times at traffic lights that would be required to mitigate against these events.
- e) No allowance seems to have been made for speeds being reduced owing to adverse weather conditions⁸⁰¹.

6.114 The total door-to-door journey time includes the amount of time spent walking to the stop, waiting at the stop and then walking to the destination. In this regard, the frequency of services at 10 per hour⁸⁰² would result in an average increase in waiting time from 1.5 minutes for the buses which run at about 20 per hour⁸⁰³, to 3 minutes⁸⁰⁴.

consistent with the level of traffic congestion'

⁷⁹⁸ Document OBJ 1719 NWLTF/122 paragraph B1 page 3: the study surveyed 2 articulated bus routes, one of which had a higher average fixed boarding time of 10 seconds, and average dwell times per passenger, with other things being equal, found to be higher on articulated buses than on single-door double-deck buses

⁷⁹⁹ Document OBJ/923/13: Rebuttal PoE of Mr Turner paragraph 3.6(d)

⁸⁰⁰ Mr Cheek oral evidence at the Inquiry: based on experience in Nottingham and elsewhere tickets need to be checked on at least 8% of journeys in order to prevent a culture of non-payment emerging

⁸⁰¹ Document A-08g-1 paragraphs 6.11 to 6.13 and 6.20 and Document A-08g-4 paragraphs 2.9, 3.2, 3.8 and 3.12 : 'delayed/slower services' even with gritting, owing to ice and snow in winter, and standing water or overland flows on stretches of the route when it rains

⁸⁰² Documents C-1 paragraph 2.7 and OBJ/923/03: Mr Turner PoE paragraph 2.7(f)

⁸⁰³ Document OBJ/923/03: Mr Turner PoE Table 7 pages 12 to 13: the extent of overlap at

- 6.115 Applying the waiting time weightings used for modelling⁸⁰⁵, it is estimated that 48% of existing bus users on the NGT corridor would experience a higher 'generalised journey time' using NGT than they would if they used the existing bus service⁸⁰⁶. This is without modelling the effect of limited trolley capacity on passengers' ability to board the first vehicle that arrives, which could result in waiting times increasing by a further 6 minutes (unweighted) where it would not be possible in the peak of the peak periods.
- 6.116 An allowance for walking time to and from the stops⁸⁰⁷ would be an average of an additional 60m at each end of the journey, which would work out at about 1.5 minutes of additional journey time, assuming a walking speed of about 3 mph. Applying a weighting for walking time, for which the Promoters have used a weighting of 1.8 in some of their modelling, would add to the perceived journey time.
- 6.117 In terms of how pleasant the environment would be, the DfT's guidance⁸⁰⁸ specifies that a weighting of 1.5x could be applied if crowding would constrain the demand for the mode of transport, be likely to have a significant effect on traveller behaviour, or an effect on crowding is one of the objectives of the Scheme. It has been accepted that there would be an effect on passenger behaviour⁸⁰⁹, which if such a weighting was added to time spent on NGT to reflect crowding, it would further tip the balance against the NGT.

different stretches of the NGT route and the frequencies of the services

⁸⁰⁴ NGT plan to run 10 per hour Monday to Friday, 8 per hour Saturday and 4 per hour evenings and Sundays

⁸⁰⁵ Documents E-3-8 TAG Unit 3.5.6 at paragraph 1.2.13; Document OBJ/923 SOC: FWY Statement of Case Appendix 2 TAS Report Table 19 page 31- The Promoters for some modelling applied a weighting of 1.67:1 relative to in-vehicle time for business travellers, 3.30:1 relative to in-vehicle time for commuters 'on their own time' and 2.26:1 for waits by others; and Document C-1-3 page 30: when modelling the park and ride sites, they applied a simple weighting of 2

⁸⁰⁶ Documents OBJ/923/01 Mr Cheek PoE paragraph 9.14 and OBJ/923/02 Appendix 2 paragraphs 3.6.5, and 3.7.2

⁸⁰⁷ OBJ 1166 Mr Sleeman Evidence in Chief: The NGT stops would be about 560m apart, on average

⁸⁰⁸ Document E-3-16 WebTAG Unit 3.11.2 paragraphs 5.6.4, 6.4.1 and 6.4.4.

⁸⁰⁹ Document OBJ 1719 NWLTF/122 paragraph D2 pages 53 to 55: Mr Chadwick in his oral evidence implicitly accepted that there would be an effect on passenger behaviour because he stated that it was likely that there would be 'peak spreading' to avoid the busiest times of day

- 6.118 In the absence of NGT, the money earmarked in the WYTF for the extension of 'NGT' and the local Government funding that would have been spent on LTVS could be freed up for further infrastructure improvements on and off the corridor⁸¹⁰. Overall, therefore, there would be no average door-to-door journey savings from NGT, as compared with the future 'no-scheme world', even assuming that the Promoters' assumptions as to in-vehicle journey time is not over-optimistic.
- 6.119 NGT has been designed on the basis that trolley vehicles would get the highest priority, which requires no more than about 10 vph without doing serious detriment to other traffic flows at junctions⁸¹¹. To accommodate the number of passengers that NGT aims to attract, a vehicle with a passenger capacity greater than that of a double-decker bus would be required, which means an 18m long articulated trolleybus⁸¹² with a high ratio of standing room to seats⁸¹³.
- 6.120 Ability to get a seat is the third-most commonly required attribute by passengers according to Passenger Focus' research⁸¹⁴, and was the reason that Bristol's BRT has rejected articulated buses⁸¹⁵. The fewer seats available

⁸¹⁰ Document OBJ 1719 NWLTF/122 paragraphs B58 and B59: Mr Robertson confirmed in his oral evidence that it would be possible to extend bus priority at signals on the A660 so as to give time savings to buses and save more than 20 seconds for southbound buses at Blackman Lane if the exit to Lodge Street were restricted to left-turn only and Mr Henkel confirmed that time savings would be delivered by simplified ticketing and new payment technologies, which would be encouraged irrespective of the outcome of the Inquiry

⁸¹¹ Mr Robertson Evidence in Chief: *'there's a limit to how much we manipulate junctions. In order not to cause disruption you would end up delaying the vehicles somewhat....When I say there's a practical limit, it's not that one falls off the edge of a cliff if there are more than 10 vehicles [per hour] just that there will be a rapid loss of priority'*

⁸¹² Document H-7 Project Board minutes: the Promoters considered and rejected even larger double-articulated vehicles on grounds inter alia that additional road and bridge strengthening would be required to take their weight

⁸¹³ Document OBJ 923 FWY/131 page 2: a Mercedes Citaro G has 47 seats and a notional standing capacity of 111 passengers; Document OBJ/923/03: Mr Turner PoE paragraphs 1.7 and 2.3- FWY's fleet of double-deckers currently have between 72 and 78 seats, and Table 11 page 31- the New Routemaster would seat 62; Mr Cheek Evidence in Chief- Typically, expect a double decker bus to have about 70 seats to 30 standing; and Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 3.7- FWY's existing bus fleet has a seating ratio of 77%

⁸¹⁴ Document OBJ 923 FWY/117 page 11: 'priorities for improvement'; and Document OBJ/923/01: Mr Cheek PoE paragraph 10.5

⁸¹⁵ Document OBJ 923 FWY/156 Committee Report paragraph 11 and Minutes item 6

per trolley vehicle, the less attractive it would be to those who do not like standing, or are unable to stand for long periods, including the disabled, the elderly, the infirm, very young children and their parents, pregnant women, and those who are heavily laden with shopping or luggage⁸¹⁶. The SP survey shows a strong preference for a very new double-decker bus, a smaller preference for an advanced bus like ftr and no preference for articulated trolleybus⁸¹⁷. The evidence is therefore clear that passengers prefer very new double-decker buses where they have a high chance of getting a seat.

- 6.121 The maximum number of passengers that an articulated vehicle can accommodate is a notional figure based on axle loadings⁸¹⁸. This would be uncomfortably close and impracticable, particularly when all the standing passengers would need to hang onto a handrail and many could be carrying shopping or luggage. The only ways to accommodate more standing passengers in comfort would be to take out seats, reducing the chance of getting a seat and thus the comfort of the average journey for those who do not like standing or are unable to stand, or reduce the number of doors, which would increase dwell times and result in slower journey times⁸¹⁹. In practice, therefore, the articulated vehicles would have a lower capacity than their notional capacity⁸²⁰.
- 6.122 Standing passengers are at greater risk of injury in the event of collision⁸²¹. On the Promoters' figures, assuming a 40 or 50 seat vehicle with notional capacity of 140 or 160, on large stretches of the route between 50% and 75% of passengers would have to stand travelling northbound and up to 50%

⁸¹⁶ Mr Cheek's evidence: In Nottingham operators are removing articulated vehicles from the University routes because they are unpopular with students who want to get a seat

⁸¹⁷ Document APP/155 Table 1.

⁸¹⁸ Documents OBJ 923 FWY/131 and FWY/125 page 3: the Mercedes Citaro G, which has a notional capacity of 158 and 47 seats, allows 15.8 sqm for standing at 7 passengers per sqm (4 passengers per sqm is considered to be crowded on the London Underground)

⁸¹⁹ Documents OBJ 923 FWY/131 and OBJ/923/03: Mr Turner PoE paragraph 2.4

⁸²⁰ Document OBJ/923/02: Mr Cheek PoE Appendix 2 paragraph 2.6.2, page 17: '*Articulated buses in London were licensed to carry 149 passengers, but we believe that an effective maximum is around 125-130*'

⁸²¹ Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 3.6

travelling southbound at peak times⁸²². However, the graphs that have been used by the Promoters cannot be taken at face value for the following reasons:

- a) Figures 5 and 7 assume 14 services per hour, but the data for the flows was taken from the LTM Forecasting Central Case Report⁸²³, and Figure 1 assumes 11 services per hour throughout the peak period when an extra service would run only once during the 'peak of the peak' and not every hour.
- b) The spreading out of total peak passengers evenly over the whole 3 hour peak period to give 'average flows' is inappropriate and does not give a true indication of the crowding problem at the worst times because there is not an even distribution⁸²⁴. As such, the trolley vehicles would be unable to cope because the predicted hourly flows would exceed the capacity of the vehicles⁸²⁵.
- c) Should a trolley vehicle be full, passengers waiting at each stop would have to wait for the next trolley vehicle, thereby contributing to overcrowding on that vehicle.
- d) Trolley vehicle dwell times would increase due to the numbers of passengers boarding, which would make them liable to 'bunch' and run behind time, making passengers wait longer and the queues at stops to build up.
- e) Passengers would be likely to resist being crammed together and the effective capacity would be less than the notional capacity.

6.123 With regard to ride quality, both buses and trolleybuses have essentially the same wheels and suspension systems. The faster or smoother acceleration of electric vehicles over diesel vehicles would not be perceptible, as the vehicles

⁸²² Document APP/108 Figures 5 and 7

⁸²³ Document C-1-8: The modelling assumption was that there would be 10 services per hour, which would show that the proportion of passengers having to stand would be, according to the modelling, much higher across the whole peak period

⁸²⁴ Document OBJ 1719 NWLTF/122 paragraph C7 pages 41 and 42: During the peak hour approximately one-third higher numbers of passengers would be expected to arrive at stops than the average that would be expected if flows were evenly distributed and it would vary by stop eg Woodhouse where the multiplier is 1.38 (38% more)

⁸²⁵ Document OBJ 1719 NWLTF/122 page 42: In the peak 15 minutes within the peak hour about 1/3 more passengers would be expected than the average over the whole peak hour

would be travelling at low speeds and in traffic, would not be routinely overtaking other vehicles, and would have to stop and start for passengers. Series hybrid vehicles, such as New Routemasters, use an electric motor to drive the wheels with the combustion engine used to generate electricity. As the trolley vehicles have not been specified, it is not clear how noisy their motors would be or whether any reduction in engine noise would be perceived within the seating area, or that any such reduction would materially benefit passengers or offset the difficulty in getting a seat.

6.124 The Promoters' case is that the OLE infrastructure would cause the NGT to be perceived as 'permanent', and that this would encourage investment that otherwise would not take place. However, the trolley vehicle would not have the capacity benefits of a tram or rail service. The system would be inflexible eg it would not easily respond to increased demand or create new routes and one vehicle breakdown would cause backlogs because the vehicles would not be able to overtake. NGT would lock Leeds into a long term commitment to a costly bespoke system using an outdated form of technology. The Promoters were unable to cite a single study showing that trolley vehicle systems had attracted investment by virtue of 'permanence'⁸²⁶.

6.125 NGT would not benefit from 'permanence' because of the following:

- a) A heavy capital investment into fixed infrastructure does not make it more likely that trolley vehicles would be run if they would be uneconomic eg because of a lack of demand, higher-than-predicted operating costs, or competition with bus services⁸²⁷. The NGT system would not be comparable with Docklands Light Railway, which was a service that was initially loss-making but was subsidised for many years by the public sector⁸²⁸. The NGT

⁸²⁶ Mr Chadwick cross examination

⁸²⁷ REP/05 Mr Boodoo cross examination: Caen's system included a guidance rail, was opened in 2002 and the decision was made in 2011 to shut it down by 2018

⁸²⁸ Mr Caten cross examination: Docklands Light Railway was a railway offering additional capacity over and above the road network and did not run on street, it was subsidised when it made a loss as a matter of policy, it was initially operated by London Transport who also ran the bus network, such that competition from buses was not a threat in the early years and major new financial centre developed around Canary Wharf leading to dramatic passenger growth

project would serve an already busy road corridor whose land is not controlled by the Promoters, and is already served by bus, which could directly compete, and NGT has been promoted on the assumption that it would generate an operating surplus, without contingency funding or any commitment to subsidise losses.

- b) The fixed infrastructure would increase the financial vulnerability of the service when compared to bus, as there are very few trolleybus systems operating in the world, particularly with right-hand drive, OLE maintenance would add to the operating costs, and borrowing would be required to fund the capital cost that would have to be repaid with interest.
- c) Investors look for whether there is a comprehensive and efficient public transport system, which would not be improved by NGT, and whether they consider that demand is likely to be sustained in the future, which NGT would be less able to respond to and less likely to be sustainable than a bus.
- d) The A660 corridor has been served by the same bus route services for more than 50 years⁸²⁹, while all previous 'permanent' trolleybus systems in the UK have been abandoned and 65 other schemes around the world have similarly closed since 2000. The A660 itself is a fixed 'permanent' structure⁸³⁰. The provision of stops and bus lanes would be sufficient to give the impression of 'permanence' of a busway⁸³¹. The Eddington Report does not exclude buses as opposed to trolleybuses and the proposed bus routes permeating the South Bank to serve Allied London developments show that buses could respond rapidly and flexibly without TWA orders or fixed infrastructure schemes⁸³².

6.126 The Merseyside Rapid Transit Order proposal was rejected both by the Inspector and the SofS⁸³³. Some of their conclusions and how they relate to

⁸²⁹ Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 3.5: Bus Route 1 commenced between Lawnswood and Beeston in 1956 on closure of the tram route; Mr Turner cross examination: Bus service 28 has been in operation since 1961 and 12 and 15 to Middleton began as replacements for the trams in 1959

⁸³⁰ Mr Farrington accepted in cross examination

⁸³¹ REP/05 Mr Boodoo cross examination

⁸³² Mr Farrington accepted in cross examination

⁸³³ Document OBJ 923 FWY/100: Merseyside Rapid Transit Order Secretary of State's Decision

the LTVS proposals are listed below:

- a) No comparative analysis study had been carried out between the selected mode of transport and high-quality buses with priority measures. The conclusion was that improving existing bus services was a potential alternative that would meet the current objectives of improving public transport services, 'modal transfer' from private to public means of transport, and the City's image⁸³⁴.
- b) Trolleybuses required overhead wires which, however tastefully designed, could not be represented as an attractive feature of the townscape and which constrain flexibility of operation⁸³⁵.
- c) Of relevance to the transport planning case are comments on corridor choice, economic effects and modal shift⁸³⁶; park and ride and the need for fast direct links to the City Centre⁸³⁷; potential for better use of an existing parallel railway line (given the potential for use of the Harrogate-Leeds railway line with a park and ride facility in the Horsforth area)⁸³⁸.
- d) Conclusions on traffic control/reduction⁸³⁹.
- e) With reference to the amount of private car parking provision available in Leeds and the City Centre, comments on the inability of the authorities to control the supply and price of City Centre parking and the consequences for modal shift⁸⁴⁰. The shift away from the car would always be prevented unless the parking in central Leeds was addressed, and there is not only the over provision of cheap public car parking in Leeds City Centre but also the very high amount of private car parking permitted for office and residential developments, which is something LCC has no means of reducing.

Letter and Document FWY/101: Merseyside Rapid Transit Order Inspectors Report

⁸³⁴ Documents OBJ 923 FWY/100 paragraph 6 and FWY/101 paragraphs 417 and 418

⁸³⁵ Documents OBJ/923 FWY/100 paragraph 5 and FWY/101 paragraphs 419 to 425

⁸³⁶ Documents OBJ/923 FWY/100 paragraph 6 and FWY/101 paragraphs 431 to 435

⁸³⁷ Document OBJ/923 FWY/101 paragraphs 444 and 445

⁸³⁸ Document OBJ/923 FWY/101 paragraph 446

⁸³⁹ Documents OBJ/923 FWY/100 paragraph 17 and FWY/101 paragraphs 474 to 476

⁸⁴⁰ Documents OBJ/923 FWY/100 paragraph 19 and FWY/101 paragraphs 477 and 478

- f) The adverse effects of the proposed Scheme on existing bus operators are of particular relevance⁸⁴¹. This reinforces the point about the damage done to local bus operators⁸⁴².
- g) The conclusion on the impacts of diversions on park and ride in seeking a quicker and easier alternative to using the car to the City Centre⁸⁴³.
- h) The adverse impact identified in terms of pedestrianisation⁸⁴⁴ in addition to which the safety concerns raised by both the SofS and the Inspector such that the scheme required '*the most compelling justification, and demonstration that there is no reasonable alternative*'.

6.127 A comparison of the level of linked development in Merseyside with that proposed along the NGT route shows that Holt Park, Bodington, Leeds Girls' High School and South Bank are going ahead anyway and the link to HS2 would be particularly bad, with a walk of at least 150m in the open⁸⁴⁵.

*Matter 3: The main alternative options considered by the Promoters (including alternative modes to bus, and alternative means of propulsion) and the reasons for choosing the proposals comprised in the Scheme*⁸⁴⁶

6.128 No consideration has been given to the fact that the proposed transportation and propulsion methods are over 100 years old and throughout the world are being removed from towns and cities⁸⁴⁷. In the last decade, 65 trolleybus schemes across the world have been closed down.

6.129 The mode of transport used in the NGT proposals was chosen following the failure of the Leeds Supertram scheme, and not as a result of a meaningful assessment of any qualitative alternative modes which would stimulate increased demand for public transport and therefore reduce congestion.

⁸⁴¹ Documents OBJ 923 FWY/100 paragraphs 9 to 11 and FWY-101 paragraphs 436 to 442 and 444 to 448

⁸⁴² Document OBJ/923/02: Mr Cheek PoE Appendix 4- DfT slides

⁸⁴³ Documents OBJ 923 FWY/100 paragraph 12 and FWY/101 paragraphs 449 to 457

⁸⁴⁴ Documents OBJ 923 FWY/100 paragraphs 13 and 14 and FWY/101 paragraphs 458 to 464

⁸⁴⁵ Mr Farringdon cross examination by Mr Jones

⁸⁴⁶ Document OBJ/923/06: Mr Alexander PoE paragraphs 6.1 to 6.19

⁸⁴⁷ Document OBJ/923/01: Mr Cheek PoE paragraph 8.15 onwards

- 6.130 All reasonable options should have been evaluated, to provide a full comparison between the possible options, rather than dismissing many of the options as undeliverable and thus hiding the potential benefits they would have over the proposed trolley vehicle⁸⁴⁸. Where a proposal causes harm, it becomes relevant to consider alternatives. The more harm that the proposal would cause, the more weight the decision-maker should give to the possibility that an alternative scheme would work instead⁸⁴⁹.
- 6.131 There would be substantial harm caused by the NGT proposal, including visual blight, harm to the character and appearance of CAs, harm to the fabric and/or settings of listed buildings, noise pollution, air pollution, disruption to traffic, expropriation of private property, and consequent economic costs. In addition, the SofS is given the following statutory duties:
- a) The Equality Act 2010 imposes these 3 separate requirements that are engaged:
 - i. The duty for providers of services including transport services not to directly or indirectly discriminate on grounds of age or disability. The NGT and the Promoters who provided it would discriminate unlawfully as NGT would inconvenience the disabled and elderly disproportionately to the general population insofar as they could not so easily walk to the stops and/or interchange with other transport services and/or ride in comfort (owing to not being able to stand for long periods) when there are less detrimental steps that could reasonably be taken to achieve the aims.
 - ii. The duty to make reasonable adjustments to accommodate people with disabilities⁸⁵⁰. The Scheme proposes that there would be

⁸⁴⁸ Document OBJ/923/03: Mr Turner PoE paragraph 5.4(e)

⁸⁴⁹ Document OBJ 923 FWY/163 Tab 36: Case *Langley Park School for Girls v Bromley LBC* [2009] EWCA Civ 734; [2010] 1 P&CR 10 at [45] and [51]-[53] Court of Appeal: '*Where there are clear planning objections to a proposed development,...the more likely it is that it will be relevant, and may in some cases be necessary, to consider whether that objection could be overcome by an alternative proposal.*'

⁸⁵⁰ The Equality Act 2010 section 20: '*The first requirement is a requirement, where a provision, criterion or practice of A's puts a disabled person at a substantial disadvantage in relation to a relevant matter in comparison with persons who are not disabled, to take such steps as it is reasonable to have to take to avoid the disadvantage.*' And '*The second*

provision and/or practices and/or physical features which would put disabled people who were unable to walk or stand for prolonged periods at a substantial disadvantage to able-bodied people. These include separate stops for NGT, moved and less closely-spaced bus shelters, NGT only calling at NGT stops, not sharing NGT stops with buses and the provision of vehicles with a lower seating to standing ratio and standing capacity than existing buses. Accordingly, operating trolley vehicles rather than buses along the route for any given bus service, and failing to integrate services, would amount to a failure to make reasonable adjustments and hence be unlawful⁸⁵¹.

- iii. The Public Sector Equality Duty⁸⁵² whereby the decision-maker must be clear precisely what the equality implications are when he puts them in the balance and he must recognise the desirability of achieving them, but ultimately it is for him to decide what weight they should be given in the light of all relevant factors⁸⁵³.
- b) *'The presumption in favour of preservation (of heritage assets under sections 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act) 'itself implies the need for suitably rigorous assessment of potential alternatives'*⁸⁵⁴.
- c) Articles 12 and 16 of the Habitats Directive require the SofS to consider whether there is no satisfactory alternative to the Scheme.
- d) Section 40 of the NERCA requires that the Secretaries of State take all reasonable steps to conserve biodiversity that are consistent with their functions. If there is an alternative that would do less to harm

requirement is a requirement, where a physical feature puts a disabled person at a substantial disadvantage in relation to a relevant matter in comparison with persons who are not disabled, to take such steps as it is reasonable to have to take to avoid the disadvantage'

⁸⁵¹ The Equality Act 2010 Schedule 2 paragraph 2(3) The second requirement includes a duty: '(a) to avoid the disadvantage, or (b) to adopt a reasonable alternative method of providing the service or exercising the function.'

⁸⁵² The Equality Act 2010 section 149: Public sector equality duty

⁸⁵³ Case *Blake v Waltham Forest DC* [2014] EWHC 1027 (Admin) at [54]

⁸⁵⁴ Document OBJ 923 FWY/163 Tab 35: Case *R(Forge Field Society) v Sevenoaks District Council* [2014] EWHC 1895 [61]

biodiversity, then all other things being equal the Order should not be made.

- e) The duties under the Climate Change Act to reduce greenhouse gas emissions (including oxides of nitrogen and CO₂).

6.132 Attention has been focused on one solution consisting of a trolley vehicle, which was thought to be eligible for central Government funding and have a prospect of a financial return for the Promoters, with the A660 corridor likely to generate the most revenue. The trolley vehicle technology seems to have been chosen because it allows use of a TWA Order procedure, which would give the Promoters control over the implemented system.

6.133 There has been a failure to specify and appraise genuine alternatives to the NGT Scheme in terms of non-trolley vehicle options and alternative routes, and to then assess these against the key objectives such as minimising long-term cost to the taxpayer; improving overall transport efficiency; reducing generalised door-to-door journey times; encouraging modal shift; reducing emissions including greenhouse gases, PM and NO₂; reducing traffic accidents; and minimising other impacts such as noise, visual harm etc.

6.134 Modelling or assessment of the following should have been done both individually and in combination in a rigorous testing exercise, holding other variables constant and changing variables to assess which policy choices worked best as a package and which represented the best value for money having regard to the general principles in HM Treasury's *'Managing Public Money'*:

- a) Better uses of the £250 million in terms of Leeds transport generally, including a new rail link to the Airport⁸⁵⁵ and a series of bus network congestion points⁸⁵⁶.
- b) Specific interventions along the A660 corridor at particular junctions or congestion-spots.

⁸⁵⁵ Document OBJ 923 FWY/157: Costed at £98 million

⁸⁵⁶ Document OBJ/923/03: Mr Turner PoE Table 6 pages 9 to 10

- c) Off-highway infrastructure open to one or more bus operators as well as, or instead of, trolley vehicles.
- d) Interim solutions for different periods to work out whether for instance 10 years of hybrids followed by 50 years of wire-free electric battery powered buses might prove better overall than 60 years of trolley buses⁸⁵⁷.
- e) Different kinds of traffic priority phasing at each junction to allow for different frequencies of service and traffic circulation patterns (such as 80% or 60% priorities for buses rather than absolute priorities, or different degrees of priority at different times of day).
- f) Different degrees of segregation of some vehicles from other vehicles at different stretches of the route, both in terms of roadway sharing, lengths of bus lanes and at stops.
- g) Sharing of stops/integration of buses with trolley vehicles.
- h) Different patterns of services in terms of frequency along the corridor.
- i) Different types of vehicle.
- j) Mixes of vehicles rather than simply specifying all trolley vehicles.
- k) Entry into a bus partnership agreement for the operation of more express buses calling at existing bus stops.
- l) Improvement of facilities at existing bus stops.
- m) Demand-management measures such as congestion charging, residents-only parking permits or increasing parking charges.
- n) Changes to road priority, speed limits etc (eg reduced speed limits to improve traffic flow, 'tidal flow', 'hurry call' bus priority, intermediate bus priority falling short of absolute priority, NGT priority falling short of absolute priority, shared equal prioritisation of bus and NGT over other traffic).
- o) In respect of park and ride: Prioritising this at other sites that are more favourably sited to attract traffic especially from the west of Leeds⁸⁵⁸;

⁸⁵⁷ Document C-1-16: The Sub-Mode Options Report page 81 states in relation to hybrids, *'diesel hybrid bus still uses a fossil fuel with its price linked to world oil prices, albeit in lower quantities. This exposes NGT to the risk of a long term increase in the cost of fuel relative to other sub modes. The long term security of diesel fuel supplies may also be a concern'*

⁸⁵⁸ Mr Cheek evidence from Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 4.11

modelling park and ride at the Stourton and Bodington locations but with a dedicated express shuttle bus service; a trial park and ride scheme at one or more locations but on a smaller scale to ascertain the extent of the demand and then learn from any mistakes if larger facilities were to be built.

6.135 As late as March 2009, the Promoters recognised that 'NGT' need not necessarily use the technology or follow the route that is now being promoted⁸⁵⁹. Many of the elements that the Promoters' own consultation told them were valued by Leeds residents, and would encourage those with a choice to use public transport rather than cars, would be attainable by use of buses rather than trolley vehicles. These include punctuality and reliability, modern comfortable vehicles with space for luggage, facilities that allow passengers to wait in a safe and secure environment, clean vehicles that are seen as safe and secure, and information before and during the journey⁸⁶⁰. Some attributes would be contrary to what is achieved by NGT, such as offering competitive door-to-door journey times when compared with alternatives, affordability and offering adequate capacity.

6.136 NGT would not achieve any of the needs identified in the following: '*a framework for public transport which...protects and enhances the bus patronage in the area within the Outer Ring Road through promoting faster journey times, reliability, quality and making best use of capacity*', '*[p]rovides better integration between modes and services*', '*contributes to promoting regeneration and social inclusion*' and '*contributes to the national objective of reducing carbon dioxide emissions*'⁸⁶¹.

6.137 Lower-cost bus network enhancement was not identified even as a 'potential solution' for the A660 corridor in March 2009⁸⁶². 'New Generation Transport'

⁸⁵⁹ Document C-4-2: Paper Investing Public Transport A Framework for Leeds

⁸⁶⁰ Document C-4-2 page 13

⁸⁶¹ Document C-4-2 page 13

⁸⁶² Document C-4-2 pages 21 and 23

was not necessarily seen as being a trolley vehicle system, but was envisaged as potentially bus-based and appropriate for 4 radial routes⁸⁶³.

- 6.138 The Promoters chose to specify 2 'alternatives' for comparison with their Preferred Option for the Business Cases. These were evidently specified so as to make the Preferred Option look attractive for the purpose of presenting the Business Case to the DfT, after the trolley vehicle system concept had been chosen and specified⁸⁶⁴.
- 6.139 The Promoters only tested alternatives in the Business Case through which it was able to capture the revenue surplus, not alternatives that might offer a better BCR overall⁸⁶⁵. The Promoters do not appear to have explored the possibility that bus operators could be charged a licence fee for access to off-highway infrastructure, nor that DfT would be more willing to pay for infrastructure that had a lower overall cost to the public sector (as would a system that did not need a depot, substations, vehicles or OLE to be provided at public expense) and a greater benefit. Nor did they apparently consider that alternatives where private sector partners provided buses that integrated with the existing public transport services might increase economic growth and so benefit the public finances indirectly.

⁸⁶³ Document C-4-2 page 22: NGT was simply referred to as a 'higher capacity system' that 'could' be electrically powered, with 'quality waiting environments – shelters, lighting, information provision' and 'high quality vehicles attractive to users- level boarding, good ride quality, luggage space', and the photograph shows an articulated bus rather than a trolley vehicle

⁸⁶⁴ Mr Chadwick evidence: '*NBA and LCA options were developed simply to justify the application for funding and that they should not be regarded as representing the best that could be achieved at lower cost*'; Document APP-7-2 Mr Chadwick PoE paragraph 3.146: '*the LCA is specified in order to confirm that the scale of investment in the Preferred Alternative is justified*'; Mr Chadwick evidence: If the TWA Order was not granted, he would want to consider alternatives by starting again with a blank sheet of paper, and that the NBA and LCA '*were not designed to be strategic alternatives*', that they were '*appraisal mechanisms rather than strategic alternatives*'; and Mr Chadwick in cross examination: agreed with Professor Bonsall's suggestion that NBA and LCA had never been a genuine attempt to explore what could be achieved at lower cost, saying '*The purpose was not to make a strategic choice between options on the table but to confirm that the Preferred Option was superior in monetised cost-benefit*'

⁸⁶⁵ Document OBJ/923/03: Mr Turner PoE pages 40 to 41: The Scheme is distinguished in this respect from Leigh Guided Busway, South Yorkshire Bus Rapid Transit, Cambridgeshire Guided Busway, Luton & Dunstable Guided Busway and Eclipse East Leeds

- 6.140 The NBA differed from the Preferred Option only in respect of the power source, so it shared many of the Preferred Option's disadvantages such as separate stops, a limited number of priority vehicles per hour, lower frequency, delay to bus services, and high capital cost. It also was specified to have 'quality factors' at half of those for trolley vehicles, when the passenger experience would be similar⁸⁶⁶.
- 6.141 The LCA was not a serious attempt to show what could be achieved at lower cost⁸⁶⁷. It was specified on the assumption that the buses used would be perceived as having no improvement over 2008 vehicles for the next 60 years and to include very modest improvement to bus stop facilities even though these are cost-effective in terms of attracting greater use of public transport⁸⁶⁸. The bus priority specified was represented as being less effective than could reasonably be achieved⁸⁶⁹. The LCA was also specified to assume no improvement over the boarding times in 2012 despite the potential offered by multi-door entry, smart ticketing and simpler fare structures designed to cashless fares⁸⁷⁰. No provision was made for more express services or more frequent services.
- 6.142 The 'Strategic Fit Review' fails to justify why the A660 was chosen for the 'NGT' intervention and expenditure of £250 million as opposed to the other radial routes identified in March 2009. It provides no traffic modelling, environmental or economic analysis to justify the choice of this corridor⁸⁷¹.
- 6.143 The 'Sub-Modes Options Report' avoids costing in the higher infrastructure costs of trolley vehicles compared with commercially operated buses, ignores double-decker buses and assumes that all vehicles would be 18m articulated

⁸⁶⁶ Mr Chadwick accepted in cross-examination that, had the NBA been specified to have the same quality parameters as trolley vehicles, it would have showed a higher BCR than the Preferred Option as the costs were lower

⁸⁶⁷ Mr Chadwick in cross-examination states that the LCA is not about maximising a bus based package, and that the strategic decision was made in 2009 and everything since was to confirm that that investment is needed

⁸⁶⁸ Document OBJ 1719 NWLTF/122 paragraph B102

⁸⁶⁹ Document OBJ 1719 NWLTF/122 paragraphs B60 and C4

⁸⁷⁰ Document OBJ 1719 NWLTF/122 paragraphs B33 and B100.

⁸⁷¹ Document C-1-15: Strategic Fit Review paragraphs 6.1 and 6.2

vehicles even though that results in a failure to test higher seating capacity vehicles, and assumes the same route, service frequency, level of segregation and priority as the NGT⁸⁷². This results in it ignoring the issue of integration with the public transport network and the economies of scale/synergies that could be achieved by using the same type of vehicle across all services⁸⁷³. It claims that *'An articulated battery electric vehicle is not yet commercially available, therefore there is not currently the option to service routes which have the highest passenger demands and require vehicles with greater capacities'*, when there is evidence of electric buses being introduced⁸⁷⁴ and the Government's Ultra Low Emission Vehicle Strategy, *'Driving the Future Today'*⁸⁷⁵ shows 'mainstream EVs' by 2025. It also gives a significantly inflated cost of £420,000 for hybrid vehicles because it compared only 18m articulated buses, rather than considering double decker buses⁸⁷⁶.

- 6.144 The 'Review of Technology Alternatives' is of alternatives for the proposed route, alignment and set of stops, rather than an attempt to design an alternative system from the bottom up, and has the aim of justifying receipt of investment money from central Government rather than the merits of the solution⁸⁷⁷. It chose 2 alternatives that have a higher cost (Light Rail and Ultra-Light Rail) to compare with the NGT⁸⁷⁸. These were not genuine comparators as there was no funding to pay for them. It misleadingly states *'Market research with car users and bus passengers in Leeds found that a modern trolleybus system would be preferable to a conventional bus-based*

⁸⁷² Document C-1-16: Sub-Modes Options Report paragraph 1.2

⁸⁷³ Document C-1-16 paragraph 1.4: 'Key Assumptions'

⁸⁷⁴ Document OBJ 923 FWY/127: Fully-electric battery powered double-decker bus has started running in York with a DfT grant; Document FWY/155: Electric 18m hybrid bus in the USA market introduced this year by the Chinese firm BYD; Documents C-1-16 and FWY/155: Chinese single-decker buses and plug-in hybrid operational trials have been announced in London and Milton Keynes; Mr Cheek oral evidence at the Inquiry: London has announced a target to move to fully-electric single-deck buses by 2020; and by 2020, when NGT is programmed to be operating, there would probably be many commercially available electric buses, both articulated and double-decker

⁸⁷⁵ Document OBJ 923 FWY/140

⁸⁷⁶ Document C-1-16 pages 60 and 62

⁸⁷⁷ Document C-1-1 paragraph 1.10

⁸⁷⁸ Document C-1-1 paragraph 1.20 page 4

option and would attract more mode-shift from car', citing the SP study from August 2008⁸⁷⁹, when it did not find this. It also states that there was risk attached to securing a voluntary partnership agreement with bus operators⁸⁸⁰ when these are standard⁸⁸¹. It claims that buses were forecast to result in less modal shift from car but this depends upon flawed modelling assumptions.

6.145 Overall, therefore, the work done for the Business Case Review did not provide any rigorous justification for use of trolley vehicles. There was no consideration of an interim solution.

6.146 An interim solution was the course of action that Wellington City Council were advised to take by Price Waterhouse Coopers in April 2014, when it had the choice between investing in new OLE for its existing trolleybus service and discontinuing it in favour of an interim hybrid-then-electric approach. Its appraisal, which was not being prepared to justify a preconceived scheme, found that some hybrid vehicles were quieter than some trolley vehicles⁸⁸²; and *'International trolley use has reduced in recent decades and Wellington's trolley bus system is the only remaining public trolley bus system in Australasia'*⁸⁸³. It listed disadvantages of trolleybuses, including the need for significant investment in overhead network infrastructure, difficulty and high capital costs of extending routes, potential for power supply systems to become overloaded and cause trolleybuses to stall; visual pollution from OLE; and risks to pedestrians from wires⁸⁸⁴.

6.147 Bristol has recently had £34.5million of DfT funding for its new Rapid Bus project confirmed. The West of England Joint Transport Executive considered

⁸⁷⁹ Document C-1-1 paragraph 1.21

⁸⁸⁰ Document C-1-1 paragraph 1.22

⁸⁸¹ FWY have given numerous examples of such agreements being secured including by the Promoters

⁸⁸² Document OBJ 923 FWY/102 pages 22 to 23 and 26: hybrids were found to be 2-3dB quieter than diesels (diesels emitted 65dB-77dB and trolley vehicles 60-70dB)

⁸⁸³ Document OBJ 923 FWY/102 page 12: Reasons for declining usage include the high maintenance and renewal costs of overhead networks, reliability issues, the inflexibility of changing transport routes and inefficiencies associated with not being able to pass other trolleybuses on the same line (In the 20 months to July 2013, diesel buses were required to replace trolley buses for a quarter of all weekday services)

as disadvantages of articulated vehicles⁸⁸⁵ the limited market availability of articulated vehicle types following their removal from London, higher maintenance costs, more rapid depreciation, less opportunities for re-deployment (primarily due to the need for longer stop platforms on the background bus network or elsewhere in the UK) and reliance on standing space to deliver passenger capacity. These criticisms apply all the more to NGT because trolley vehicles are even rarer in the UK than buses and so would rapidly depreciate and have no alternative applications.

- 6.148 FWY propose its own alternative, a hybrid bus, as a low-cost interim solution to deliver tangible immediate gains pending a switch to fully-electric battery buses once they mature. It is proposed to align with the intended WYTF, which is a major investment project specifically aiming to increase employment and productivity growth, to create a world-class infrastructure for West Yorkshire and its neighbouring authorities. All of the work and planning for the WYTF has already been conducted by the Promoters.
- 6.149 In its alternative bus-based option for Leeds, FWY would itself invest £97 million in a fleet of 260 NBFL vehicles, based on the 'New Routemasters' in London. These buses, with multiple doors to allow faster boarding and alighting at stops, would be deployed on the core networks and services in Leeds within five years, aligned with WYTF. The allocated DfT funding required for the NGT Scheme and the £77 million local contribution required from the Promoters would therefore be unnecessary.
- 6.150 The deployment of the NBFL would not only deliver economic benefits as claimed by the Promoters but also benefit more people over a wider area of Leeds and West Yorkshire more quickly; involve no infrastructure disruption, other than what is planned for with the WYTF; have no negative impacts on the wider bus networks; and permit the use of technology that is scalable, flexible and can further evolve over time and would be replaced and sustained as part of the normal FWY fleet renewal plan. Because of this, the NBFL would

⁸⁸⁴ Document OBJ 923 FWY/102 page 24

provide a greater economic benefit than NGT in both the medium and longer term and across the area. As such, it would ensure that viable services could be maintained into the future on all corridors, thereby maintaining the current low fare levels.

6.151 NBFL would have the following advantages:

- a) Higher seating capacity: it would seat 62 assuming a London layout (and there would be scope to vary the layout on the new fleet), compared to 40 seats on trolley vehicles, according to the Promoters.
- b) Faster and more consistent duration of in-vehicle journeys due to reduced dwell times owing to boarding and alighting from 3 doors rather than 1 as at the moment, and smart card and mobile phone ticketing.
- c) Higher frequency with 26 to 30 buses per hour at bus stops on the central Headingley corridor, compared with 10 trolley vehicles per hour (tph) at NGT stops.
- d) Scope for expansion by adding more buses with more than 30 services per hour being able to be accommodated without problems, but NGT has been specified so that its electrical equipment could only accommodate at most 15 vph⁸⁸⁵, and run times begin to increase with more than 10 vph owing to the signalling constraints for articulated vehicles with absolute priority as proposed by the Promoters.
- e) Shorter walk and wait times with better interchange, as the current convenient stops would remain in place and the same tickets could be used across the network.
- f) Greenhouse gas, NO₂ and PM emission reductions with hybrids being more environmentally friendly than trolley vehicles on a wheel-to-well basis⁸⁸⁶, and replacing buses with NBFL would deliver an immediate 30% reduction

⁸⁸⁵ Document OBJ 923 FWY/156: Report to Committee

⁸⁸⁶ Document OBJ/923 SOC: FWY Statement of Case paragraph 6.9; Document OBJ/923/03: Mr Turner PoE paragraph 3.6 and Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 3.16

⁸⁸⁷ Document OBJ/1166-106: Mr Sleeman Document 13: the Ricardo report

in overall air pollution within the Ring Road even without any modal switch from car⁸⁸⁸.

- g) No risk to other services.
- h) Conforms to customers' stated preferences⁸⁸⁹.
- i) Lower fares and would be far less expensive to run than NGT as there would be no need to finance and then maintain an expensive overhead line infrastructure; there would be economies of scale and saving on leasing costs and on revenue protection costs⁸⁹⁰; and there would be greater scope for efficiency gains.
- j) Traffic congestion reductions/modal shift due to NBFL being more popular than NGT because it would use the more convenient existing stops and more highly-regarded vehicles with more seats, would operate at a much higher frequency on the corridor, would cater for demand across a wider area of Leeds and West Yorkshire, and would interchange better with other services (by using existing stops and with the No 6 stopping at the bus station).

6.152 The NBFL would be able to meet the Promoters' objectives for park and ride systems using the infrastructure improvements which are already planned through the WYTF. FWY's sister company First York Ltd (FYL) already operate a network of 30 vehicles in York under contract to City of York Council (CYC) which provides a significant income stream for CYC as a condition of the commercial contract between it and FYL.

6.153 The NBFL would be delivered within a timeframe of five years, which could run between 2014 and 2019, dependent upon LCC's ability to undertake bus priority and bus stop infrastructure works as detailed in the transport fund proposals. It would work alongside the West Yorkshire Bus Partnership. As

⁸⁸⁸ Document OBJ 923 FWY/154: WYITA report paragraph 2.7- NBFL emits just 22% of the NO₂ and 25% of the PM of standard diesel buses

⁸⁸⁹ Document APP/155 Annex 'Mode Specific Constant: from Bus to Trolleybus' had a negative coefficient of -0.0578 translating to a willingness to pay of -2.76 units. 'Bus type: from 'old' to 'very new'' had a coefficient of 0.2935 and a positive willingness to pay of 14.03 units; and Document C-4-24 Figure 7.3 page 43: a greater willingness to pay for travel by new bus over old bus than for trolleybus over old bus

such, other bus operators would still be able to continue their own investment in the area, within the agreed partnership framework, to bring further benefits to the overall transport network across West Yorkshire. FWY would continue to work alongside the Promoters as part of the Voluntary Partnership Agreement (VPA), which would enable FWY, the Promoters and other bus operators to work in partnership into the future.

- 6.154 The delivery of comparable bus-based schemes is not prevented by the legislative framework or there not being a QCS or VPA being in place⁸⁹¹. FWY have in the past delivered successful bus-based schemes with the Promoters using VPAs. First UK Bus has considerable experience of involvement in similar arrangements in other areas of the United Kingdom, with one specific agreement in Hampshire including a profit sharing mechanism between First and the local authority. A major VPA, as implemented in Sheffield, has also achieved substantial benefits. The proposals developed with the Promoters and other district councils and bus operators make provision for the legislative tools and frameworks, with the exception of a QCS, to be used to secure and sustain partnership initiatives and applications as with the West Yorkshire Bus Partnership.
- 6.155 NBFL would involve no adverse impact upon heritage assets, it would involve no compulsory acquisition of land and no additional construction works, yet would provide benefits to a greater extent than those claimed for NGT.
- 6.156 Atkins Transport Planning's report 'Study of High Quality Buses in Leeds' (the Atkins Report)⁸⁹², was commissioned by the DfT and published in November 2005 solely to '*identify and assess an optimised 'showcase' bus option for the three Leeds Supertram corridors*'⁸⁹³. Its starting-point⁸⁹⁴ was the 'bus rapid transit' option already mooted by Metro. This was to '*be sufficiently distinct from other bus services to be perceived as a separate mode, predominantly*

⁸⁹⁰ Document OBJ/923/01: Mr Cheek PoE paragraph 9.6 and oral evidence

⁸⁹¹ Document C-1: Business Case paragraph 5.11

⁸⁹² Document G-4-55

⁸⁹³ Document G-4-55 paragraph 1.4

⁸⁹⁴ Document G-4-55 paragraphs 2.8, 2.10, 2.27 and 2.34

*due to having a reasonably high level of segregation, high levels of reliability both of journey time and headways, ultra-high-quality vehicles, high quality waiting environments and distinctive branding*⁸⁹⁵.

- 6.157 The Atkins Report notes that with multiple vehicle access points, off-vehicle fare collection and more efficient use of priority measures at junctions, reliability of bus journey times could be improved so as to compare with light rail systems⁸⁹⁶. It identifies the following factors which research has shown to be important to successful quality bus schemes, none of which depend upon a trolley vehicle system with OLE: largely exclusive rights of way; high vehicle speeds; attractive stations with a quality waiting environment; real-time information; clearly and distinctively branded buses; off-vehicle fare collection; quiet and accessible multi-door vehicles; an all-day, frequent service; bus lane enforcement measures; passing-places; and fitting tracking devices to the vehicles⁸⁹⁷.
- 6.158 Atkins collated a significant number of case studies to show that investment in bus could deliver '*significant patronage growth and mode transfer from car*', including at Brighton & Hove, Perth, Leeds and Bradford, and Crawley⁸⁹⁸. West Yorkshire has borne this out since the Atkins Report was published, with approximately a 7% rise in bus patronage over the past 2 years to April 2014⁸⁹⁹.
- 6.159 The Atkins Report concludes that '*Experience of bus investment in the UK indicates that the largest increases in bus patronage appear to have occurred where there has been a systematic approach to improvements*⁹⁰⁰, and '*there is no clear evidence that a high quality bus based system providing most of the attributes of a tram system would not attract similar levels of patronage and deliver similar levels of benefit*'. While it recognises that there was an

⁸⁹⁵ Document G-4-55 paragraphs 2.2 to 2.6

⁸⁹⁶ Document G-4-55 paragraph 3.11

⁸⁹⁷ Document G-4-55 paragraph 3.13

⁸⁹⁸ Document G-4-55 paragraphs 3.41 to 3.52 and quote from paragraph 3.52

⁸⁹⁹ Document OBJ/923/06: Mr Alexander PoE paragraph 3.1

⁹⁰⁰ Document G-4-55 paragraph 3.88

argument to be had about '*a perception of greater permanence*', it concludes that '*there are few bus systems that have been delivered in a systematic manner comparable with a tram and thus it is not possible to establish the significance of this perception*'.

- 6.160 At the time of the Atkins Report in 2005, development of hybrid and electric buses was considerably less advanced than it is today. Nevertheless, it considers that the conventional diesel-driven StreetCar ftr would be the appropriate vehicle for a BRT '*showcase bus*' system, and concludes that with properly resurfaced roads, there is '*no evidence that the ride quality associated with BRT will be significantly lower than for the tram*'⁹⁰¹. In particular, '*high levels of sound-proofing*' in such a vehicle would render even the conventional diesel engine quiet for passengers⁹⁰². It concludes that a diesel ftr vehicle without level-boarding could be assumed to be three-quarters as attractive relative to the existing diesel buses as a tram⁹⁰³.
- 6.161 The DfT envisaged in the light of that report that the appropriate solution would be⁹⁰⁴ '*...a show case bus system that could lead the way for other cities*', which could be delivered by '*the bus companies in Leeds*'. It '*would be accompanied by fixed physical infrastructure in terms of dedicated stops, high quality shelters, real time information, off-board ticket machines etc*', but not OLE, and '*developed to operate as a complete system*'. The advantages of an integrated complete bus system were considered to be that it '*would be significantly better value for taxpayers (than tram)...could benefit more people and would be more flexible with scope for further extensions*'. Those benefits over tram of flexibility, lower cost to taxpayers and benefiting more people are precisely the benefits that an integrated bus-based solution as suggested by FWY would have over the NGT Scheme.

⁹⁰¹ Document G-4-55 paragraphs 3.81 to 3.82, 4.11 and 4.12

⁹⁰² Document G-4-55 paragraph 4.14

⁹⁰³ Document G-4-55 paragraphs 5.40 to 5.43

⁹⁰⁴ Document C-6-1

*Matter 4: The extent to which the Scheme would be consistent with the National Planning Policy Framework, national transport policy, and local transport, environmental and planning policies*⁹⁰⁵

6.162 It is the policy of LCC to promote the NGT Scheme, but that does not make it a good scheme and the purpose of the Inquiry is to examine the merits of the Scheme. Therefore, the fact that any such documents contain a policy to construct NGT should not affect the Secretaries of State's judgment on the merits of the Scheme, except to the extent that any wider planning objectives contained in such documents were both sound and could not be achieved in the absence of NGT ⁹⁰⁶.

6.163 Although adopted planning policy is relevant, the making of a TWA Order is not a determination under the Planning Acts⁹⁰⁷ or other enactment relating to Town and Country Planning, and so there is no starting presumption that planning policies should be followed⁹⁰⁸. Nor is the LTP anything other than a material consideration. TWA orders are matters for the SofS for Transport and there is no legitimate expectation or presumption that central Government will follow the policy of any local authority just because it is that local authority's

⁹⁰⁵ Document OBJ/923/06: Mr Alexander PoE paragraphs 7.1 to 7.9

⁹⁰⁶ No evidence was led that NGT was necessary to achieve the broad objectives of the CS, and Mr Speak accepted in cross-examination that no development anticipated in the CS depended upon NGT as opposed to buses

⁹⁰⁷ Document E-1-19: Planning and Compulsory Purchase Act 2004 sections 38(7) and 117(4)-Decisions on the Listed Building Consent applications are such determinations

⁹⁰⁸ Document E-1-15: The Transport and Works Act 1992 section 16 amends section 90 of the Town and Country Planning Act 1990 to enable the Secretary of State to deem any planning permission required under that latter Act to have been granted '*on making an order under...the Transport and Works Act 1992*'. However, the determination to make the Order is a condition precedent for the exercise of the power in section 90 of the TCPA 1990, and the scheme of the legislation is clear that the decision to make the Order is not made 'under' the TCPA 1990 but 'under' the TWA 1992. In Document FWY/163 Tab 38: Case R (*Samuel Smith Old Brewery (Tadcaster)*) v. *Secretary of State for Energy and Climate Change* [2012] EWHC 46 (Admin) at [75] it was held by Edwards-Suart J as follows: '*Mr Village submitted that the giving of a direction under section 90(2) of the 1990 Act is a determination under the planning acts. I do not agree. On the contrary, as a matter of construction I consider that it is a direction that such a determination is not required. It is worth noting that the SoS does not have to give such a direction: it would be possible to make no such direction and let the planning application process take its own separate course...*'

policy⁹⁰⁹. It would be contrary to the will of Parliament when it decided for the purpose of the 2004 Act not to specify the TWA 1992 as a 'Planning Act', and it would ignore the object of the TWA 1992 which was to replace the Parliamentary Bill procedure for transport-related infrastructure projects with a more streamlined procedure to free up legislative time. Just as Parliament was unfettered by local development plan policies when determining whether to pass an Act, so the SofS is not fettered by development plan policies under the TWA 1992.

- 6.164 The NPPF does not apply to decisions under the TWA 1992 either. It indicates clearly in paragraphs 1, 2 and 11 to 13 that it applies to planning decisions where the statutory presumption in favour of the development plan applies, and refers at paragraph 6 to *'the planning system'*. Again, it is no more than a consideration that may be material.
- 6.165 The UDP policies refer only to Supertram. That was a very different, more extensive scheme using a different higher-capacity mode of transportation that connected to east Leeds and the bus station.
- 6.166 The UDP Inspector emphasised that *'each proposal must be judged on its own merits'*⁹¹⁰. He also said that *'The impact (on townscape) has to be set against the prospects of reducing road traffic congestion which also impacts on conservation areas'*⁹¹¹. NGT was never designed to reduce road traffic congestion and nor would it do so, Supertram ran further away from Headingley Castle and trams have fewer overhead cables than trolley vehicles. He also said that *'...for a range of reasons East Leeds has probably the highest development potential in the District, and the East Leeds ST (Supertram) could play an important part in realising this as well as fostering a much improved PT (public transport) service for existing users in the East Leeds*

⁹⁰⁹ Document OBJ 923 FWY/163 Tab 37 Case R (*Bloggs 61*) v Secretary of State for the Home Department [2003] EWCA Civ 686 [2003] 1 W.L.R. 2724 at [31] [38]-[39]: 'What authority A says to B cannot bind authority C': and Case *Cornwall Waste Forum St Dennis Branch v Secretary of State for Communities and Local Government* [2012] EWCA Civ 379; [2012] Env LR 34 at [36]

⁹¹⁰ Document D-2-5 paragraph 160.20

*corridor*⁹¹². NGT would have none of these benefits. He was not endorsing trolleybuses as being the solution; he was faced with a choice between 1999-vintage buses and 1999-vintage trams.

- 6.167 There was no Strategic Environmental Assessment of the UDP because it predated the 2001 Strategic Environmental Assessment Directive⁹¹³, so there was no requirement to assess all reasonable alternatives and give reasons for selecting a particular policy. Nor was the Local Plan Inquiry considered to be the appropriate forum for examining the detailed merits of alternative modes of transport against tram. The Inspector stated *'Detailed proposals for ST (Supertram) will be subject to the requirements of the Transport and Works Act including a public inquiry. They will probably be subject to an Environmental Assessment. They will have to be judged against the duties laid down in the Planning (LBCA) Act 1990 to have regard to the importance of preserving or enhancing the appearance or character of conservation areas as well as other planning and highways criteria....It is...for the T&W Act inquiry to consider the detailed merits of the ST proposals for the Headingley and East Leeds corridors, including no doubt comparisons with other forms of PT'*⁹¹⁴.
- 6.168 The Inspector stated that detailed consideration of route alignments should also be a matter for the TWA Inquiry⁹¹⁵ and it is that context that he suggested that it was appropriate for *'....the UDP to safeguard preferred routes and even alternative routes from developments which might prejudice the implementation of ST'*. His substantive comments on buses were *'Whilst existing patronage of buses is comparatively very high in the A660 corridor, buses, even with bus lanes, find it very difficult to avoid the effects of general road traffic congestion. They may be cheaper but they do not generally offer a sufficiently improved level of service in terms of time, comfort, reliability and*

⁹¹¹ Document D-2-5 paragraph 160.19

⁹¹² Document D-2-5 paragraph 160.16

⁹¹³ Document E-2-6: Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

⁹¹⁴ Document D-2-5 paragraphs 159.10 and 160.16

⁹¹⁵ Document D-2-5 paragraph 160.22

image to attract many motorists from using their cars. There is little prospect that further enhancements to bus services could significantly improve this position’.

- 6.169 Only about 1.6 km of the 10 km northern line is fully segregated from traffic in a materially different way to the bus lanes contemplated by the UDP Inspector⁹¹⁶. Since 1999, when the Inspector wrote his report, there have been significant enhancements in bus technology and the SP work shows that new double-decker buses were already preferred over trolleybuses in 2008 when hybrids were not yet contemplated. Bus patronage is showing year-on-year growth in Leeds and guided busways, including those in Leeds, Cambridgeshire and Hampshire, have been successful. Accordingly, the decision to safeguard a route for Supertram in the UDP did not mean that impacts on heritage and the environment from NGT should be given less weight, or that there is no conflict with the policies on heritage, or that the need for the trolley vehicle Scheme has been established.
- 6.170 There is strategic support for protecting green spaces in UDP objective SP1 and policy N1, which would be breached by the off-highway sections across Woodhouse Moor and other green space. Policy N10 would be breached insofar as public rights of way along and close to the highway would be made less pleasant by the introduction of overhead line infrastructure, removal of historic paving in CAs, loss of original boundary features and loss of mature trees. UDP policy N51, which requires a buffer zone between development and land of conservation interest, would not be complied with. Policy N49, which states that development which depletes or impoverishes the wildlife or habitat resources will not normally be permitted, would also be breached in relation to bat and bird habitats and species along the corridor. The NGT would also fail to meet a number of heritage and conservation policies due to the OLE required⁹¹⁷.

⁹¹⁶ About 3 km in the south is shown as ‘NGT only’

⁹¹⁷ Document OBJ/923/05: Ms Lightbody PoE

- 6.171 In terms of transport policies, Strategic Aim policy SA2 would be undermined by the NGT Scheme as it would harm the environment by building over green spaces and areas of wildlife habitat, as well as despoiling the built environment. It would also increase the length of trips because kilometres travelled by car would increase even though trip numbers would decrease; undermine the promotion of public transport through inconveniencing bus customers and offering an unattractive trolley vehicle service; undermine 'other sustainable modes' because there would be a decline in active modes; increase the number of accidents; and fail to promote economic development.
- 6.172 UDP policy T1 would be breached because *inter alia* the NGT Scheme would not improve facilities for public transport overall; would not improve road safety; would not promote alternatives to car use but increase use of cars; would not improve facilities for those with impaired mobility because they would have to travel further to stops and could not get a seat; and would not encourage integration between transport modes through better interchange.
- 6.173 UDP policy T2(i) would be breached because the Scheme would lead to increased accidents; increase noxious emissions and noise; and reduce overall transport system efficiency through increased costs, congestion and longer door-to-door journey times. Policy T6 would be breached because there would be unsatisfactory access and provision for disabled people within the NGT Scheme. Policy T7 would be breached because cycle routes would not be improved overall insofar as dedicated cycle lanes would be replaced by lanes shared with buses that would be too narrow for comfort for cyclists. The NGT proposal would fail to conform with policy T9 because the system would become less efficient and less integrated.
- 6.174 UDP policy T12 states that '*introduction of new modern forms of transport such as Supertram and guided bus will be supported*', but it is questionable whether trolley vehicles are 'modern', unlike hybrid or electric buses. What the general support of the Policy does not do is condone breaches of the specific policy objectives for public transport (eg integration, efficiency and support for active modes) by any specific new transport proposal.

- 6.175 The preservation of the route for Supertram in UDP policy T13 means that any project other than Supertram that comes forward along those routes is in principle in breach of the specific Policy T13⁹¹⁸. Insofar as the supporting text refers to safeguarding the route for Supertram in policy T13, it is inconsistent with any other non-tram project on that corridor including the NGT Scheme. The text of the reasoned justification which was inserted after Supertram lost its funding carry less weight than the words of the policy which refer to Supertram.
- 6.176 UDP policy T15 is supportive of the NGT Scheme insofar as it relates to measures to give priority to bus movements such as extended bus lanes. However, the Scheme would overall result in less priority to buses because the trolley vehicles would get absolute priority over other modes at signals and through use of the off-highway sections. Accordingly, overall there would be conflict with the policy. Policy T17 supports the principle of park and ride related facilities at Stourton and Bodington, but it does not endorse them being developed along with a trolley vehicle system.
- 6.177 UDP policy T16 is supportive of park and ride sites but subject to the sites having to be derived from a thorough assessment of possible sites (there is no evidence that a thorough assessment was done); demonstrating a positive contribution to the objectives of the LTP (which overall they do not when considered in conjunction with the overall Project); being acceptable in terms of traffic reduction (which they would be unlikely to achieve); and being implemented in association with other measures such as public transport

⁹¹⁸ Document OBJ 923 FWY/163 Tab 31: Case *R (Cherkley Campaign) v Mole Valley DC* [2014] EWCA Civ 567 at [16] and [20]: ‘when determining the conformity of a proposed development with a local plan the correct focus is on the plan’s detailed policies for the development and use of land in the area. The supporting text consists of descriptive and explanatory matter in respect of the policies and/or a reasoned justification of the policies. That text is plainly relevant to the interpretation of a policy to which it relates but it is not itself a policy or part of a policy, it does not have the force of policy and it cannot trump the policy. I do not think that a development that accorded with the policies in the local plan could be said not to conform with the plan because it failed to satisfy an additional criterion referred to only in the supporting text. That applies even where, as here, the local plan states that the supporting text indicates how the policies will be implemented...The policy is what is contained in the box. The supporting text is an aid to the interpretation of the policy but is not itself policy.’

improvements and parking controls (which they would not be). They also have to maximise accessibility by non-car modes, which they would not do, as there would be no interchange stop between NGT and bus.

- 6.178 A LTP is not required to undergo any external scrutiny or examination. Accordingly it should be given less weight than the local development plan. The LTP refers to 'NGT'. From a transport policy perspective, the proposed Scheme would not be consistent with the aims and objectives of LTP3⁹¹⁹, as it would adversely impact upon existing bus services.
- 6.179 The draft CS⁹²⁰ was subject to examination by a planning Inspector but no hearing session was held on the merits of NGT. The policies relating to NGT have therefore not been subject to rigorous scrutiny in that forum.
- 6.180 Draft CS policy T2, dealing with accessibility requirements and new development, indicates minimum accessibility standards for new development. If the Promoters' assumptions on bus operator responses are correct, these standards⁹²¹ would not be met at the northern extremities of route Nos 1 and 6. The affected area includes new housing development being planned in Moseley Wood⁹²². NGT is therefore inconsistent with draft CS policy T2.
- 6.181 Draft CS policy SP11, dealing with Transport Infrastructure Investment Priorities, states that *'the delivery of an integrated transport strategy for Leeds will be supported...which includes a range of infrastructure interventions in accordance with the objectives of the West Yorkshire Local Transport Plan 3'*. NGT is inconsistent with the key objectives of the LTP. These are to improve the quality of life, make substantial progress towards a sustainable low carbon future, to maximise growth, support regeneration and promote a safe and healthy environment. The NGT Scheme would not conform to any of these objectives. Therefore, even though it is referred to in the LTP, it cannot be

⁹¹⁹ Document OBJ/923/03: Mr Turner PoE paragraph 7.2

⁹²⁰ Document D-1-1

⁹²¹ Document D-1-1 Appendix 2 Table 2

⁹²² Document D-1-1: Site Allocation Plan No 1199

considered to accord with the objectives of that Plan when the LTP is construed as a whole.

- 6.182 The explanatory text to policy SP11 states that '*Integrated, sustainable transport is fundamental*'. NGT would neither be integrated with the bus system nor sustainable economically, financially or in terms of environmental impacts; and it would increase travel by car and traffic congestion and would not improve the public transport networks. The text also referred to air quality management areas and areas of concern, stating '*reducing air pollution levels through the promotion of walking, cycling and public transport... the burden of disease from respiratory infections, heart disease, and lung cancer can be reduced*'. NGT would reduce use of active modes and worsen air quality. Accordingly, none of the objectives that motivated the inclusion of policy SP11 in the CS are met and most are undermined.
- 6.183 Paragraph 4.9.9 of the supporting text to the draft CS states: '*If the city is to grow as forecasts suggest is possible, ways need to be found of getting more people into the City Centre without adding to traffic congestion or the capacity problems of the rail network. This may include making better use of the city's bus network...*'
- 6.184 None of the priorities in policy SP11, including (i), which is '*public transport improvements for the bus and rail networks.....and investment in a rapid transit system to increase radial route capacity....together with investment in the provision of Park and Ride facilities*', are reflected by NGT. NGT would harm the bus network, distract from improvements such as connections to the Airport and, on the Promoters' own Business Case, increase road traffic accidents. Priority (xi) is to improve provision for mobility of the disabled and the Scheme would be a step backward owing to its reliance on standing capacity, lack of interchange and the longer spacing between stops.
- 6.185 Draft CS City Centre policy CC3 refers to the need for increased public transport radial route capacity and makes reference to the NGT (trolleybus) proposal. The proposed NGT routes are also included on Map 9 as part of 'the emerging transport strategy'. However, a distinction needs to be made

between the policy and the proposals⁹²³. Radial route capacity could be provided by enhanced shuttle bus services linked to park and ride facilities and this approach would be equally consistent with draft CS policies SP11 and CC3. These policies do not require implementation of the NGT.

6.186 There is conflict with draft CS policy P11, which states that *'the historic environment, consisting of archaeological remains, historic buildings, townscapes and landscapes, including locally undesignated assets and their settings will be conserved and enhanced'*⁹²⁴. There is also conflict with draft CS policy P12, dealing with landscape and townscape, which indicates that *'the character, quality and biodiversity of Leeds' townscapes and landscapes, including their historical and cultural significance, will be conserved and enhanced to protect their distinctiveness through stewardship and the planning process.'* NGT would fail to preserve or enhance the townscape, but would harm it with OLE, and the main cited benefits such as repaving of streets and removal of unsightly advertising hoardings could, and should, be done anyway by LCC in the exercise of its general duties. This conflict weighs against the Scheme.

6.187 Draft CS policy G2, dealing with the creation of new tree cover, indicates that *'Development which would result in harm to, or the loss of, Ancient Woodland and Veteran Trees will be resisted'* and that *'Development in the urban area of the city, including the city centre will make provision for the inclusion of street trees to increase the area of tree canopy cover.'* The impact of the NGT proposals on veteran trees and on the area of tree canopy along the A660 is not consistent with this policy. Any new planting could not be guaranteed to grow effectively and, even if it did, there would be significant long lasting detriment to the streetscape until the trees matured.

⁹²³ Document D-1-1 paragraph 6.22 notes that *'should key projects not receive funding, then the Council can respond at that time as necessary through other mechanisms, such as changing the type of infrastructure proposed'* and exemplifies the point by referring to the fact that NGT 'evolved' from Supertram

⁹²⁴ Accepted by Mr Speak in cross examination

- 6.188 The Scheme fails to support planning policies⁹²⁵. The proposed NGT Scheme is a manifestation of the Leeds Supertram proposal, and support for the principle of both proposals is contained within the adopted and emerging development plan policies. However, those policies are very simplistic and do not assess the NGT proposal on a City-wide basis. The proposed LTVS also fails to meet the economic, social and environmental objectives of the NPPF.
- 6.189 There are significant doubts as to the NGT's consistency with the UDP, which highlights the importance of bus services, stating they should be supported and given priority alongside wider transport improvements, or the draft CS, which details *'the delivery of an integrated transport strategy for Leeds'*, and *'planned transport infrastructure for the whole of Leeds'*. The proposed NGT Scheme would fail to meet these objectives. While buses would be able to use some NGT lanes, the majority of this is currently bus lane, so actual benefits to bus services would be limited, if not adversely impacted, and the main infrastructure changes would be exclusively for the use of NGT. This effectively ignores the bus mode, instead creating a segregated approach between trolley vehicle and bus, completely against the integration the above policies set out. Similarly, the NGT route would spend £250 million on just two corridors in Leeds, failing to meet the aim for improvements for the whole City as detailed in the draft CS.

*Matter 5: The likely impact on the public, businesses and the environment of constructing and operating the Scheme*⁹²⁶

Noise, dust, vibration and disturbance

- 6.190 The draft Order proposes at Article 66 to remove the right of local people to obtain an order from the Magistrates' Court requiring abatement of a statutory nuisance (which includes a noise that is prejudicial to health), if it is being made *'in connection with the exercise of powers conferred by this Order'*.

⁹²⁵ Document OBJ/923/04: Mr Brook PoE

⁹²⁶ Document OBJ/923/06: Mr Alexander PoE paragraphs 8.1 and 8.5 to 8.14

Accordingly, it is especially important that the noise impacts of the Scheme are properly scrutinised.

6.191 In terms of noise impacts from construction works, there is no construction programme. Also, there appears to be no assumptions made when assessing construction noise impacts as to the type, location, duration and frequency of works or what works would take place outside standard business hours⁹²⁷.

6.192 The '*level of effect*' is given as '*dependent on distance...to the receptor*', but no quantification of noise has been indicated. Increases of up to 19dB are predicted to be experienced at numerous non-residential premises from particular construction activities⁹²⁸. For instance, St Anne's Cathedral had a measured baseline noise level of 65dB and was predicted to experience 19dB additional noise from '*enabling works*', 16dB additional noise from carriageway construction and 12dB from OLE and other electrical work. Many of the increments in after-hours noise would also be substantial, such as at the Three Horseshoes Pub (baseline 70dB, increment 25dB) and residences above Headingley Lane near Hyde Park Corner (baseline 68dB, increment 17dB)⁹²⁹. Demolition works are also predicted to cause up to 42dB of increased noise (at Headingley Medical Centre)⁹³⁰. These would be very significant disturbances. The Promoters' evidence accepts that construction noise levels in educational establishments '*would be above those conducive to education*'⁹³¹.

6.193 Some provisions in the CoCP are not practically possible to enforce, such as that engines not be idled '*unnecessarily*' and no assessment has been made about the resources that would be required to police the CoCP. The noise assessment work does not represent a '*worst case*'⁹³² but in fact takes 'an

⁹²⁷ Mr Forni cross examination: 'I've not actually made any direct assumptions as to when, where or how often and can't see that at this stage I can possibly know.... we do not know what methods the contractors will adopt.'

⁹²⁸ Document APP-13-3: Mr Forni PoE Appendices Table 4.2

⁹²⁹ Document APP-13-3: Mr Forni PoE Appendices Table 4.5

⁹³⁰ Document APP-13-3: Mr Forni PoE Appendices Table 4.9 page 17

⁹³¹ Document APP-13-2: Mr Forni PoE paragraph 7.8

⁹³² Document APP-13-2: Mr Forni PoE paragraphs 4.10 and 5.20: suggest that '*worst case*'

average case'⁹³³. The noise modelling has used the traffic flow prediction supplied by the LTM and it has not been subjected to any sensitivity test to allow for variance. The LTM is unfit for this purpose. Also, the assessment has taken no account of the existing noise profile of different areas within Leeds⁹³⁴ and it fails to assess other important factors such as whether there would be a doubling of a loud background level of noise or a quiet background level, the pattern and pitch of noise, the road surface profile, vehicle speed, weight and suspension characteristics, as well as exhaust rattle⁹³⁵. This limits the weight that can be attached to the noise assessment conclusions about particular premises. However, the evidence demonstrates that there would be liable to be a problem, including 'large or very large' adverse effects predicted along Cookridge Street⁹³⁶ with increased noise of up to 6dB LA_{eq18h} predicted '*due to changes in road traffic*'⁹³⁷.

- 6.194 The Health Assessment notes that, over the long term, 559 dwellings are predicted to suffer 'significant adverse effects' from noise⁹³⁸, defined as increases of more than 3dB and does not mention non-residential premises that would suffer adverse effects. The premises are predicted to experience noise increases prejudicial to health, and would be likely to also suffer some diminution in property value. Traffic flows, and thus also traffic noise, would be liable to be significantly higher than predicted owing to the unattractiveness of the park and ride offering, the increase in car congestion that would result from bus services enjoying less priority and less revenue, and consequent increases in rat-running.

⁹³³ Mr Forni accepted in oral evidence given at the Inquiry

⁹³⁴ Mr Forni accepted in cross examination

⁹³⁵ Document APP-13-2 Mr Forni PoE paragraphs 5.40 to 5.42

⁹³⁶ Document APP-13-2 Mr Forni PoE paragraph 5.8 page 28

⁹³⁷ Document APP-13-2 Mr Forni PoE paragraph 5.11 page 29

⁹³⁸ Document B-8 paragraph 5.24: '*This is likely to result in some small health impacts, although the magnitude of the change and sensitivity of the receptor to that noise varies along the route and the timescale considered.*'

Impacts on air quality

- 6.195 As a direct result of the impact that the NGT would have on existing bus services, communities would become disconnected from the Leeds public transport system and would be forced to use alternative methods, including private cars and taxis. This trend would have a detrimental impact on air quality. The NGT Business Case does not evaluate the adverse impact on air quality of the withdrawal of bus services or the reduction in bus investment which would otherwise deliver significant air quality improvements through the introduction of modern technologies.
- 6.196 There would be a lower than claimed modal switch between car and park and ride and car and NGT, and thus the expected impact on air quality from the Scheme would be reduced⁹³⁹. Furthermore, there would be a risk that, due to the negative effects of NGT, more buses would be required to provide the same level of service on some routes, resulting in increased emissions from buses, while from a strategic point of view, the current level of investment in new buses reducing emissions with each batch of buses through improved technologies would be slowed⁹⁴⁰.
- 6.197 The assessment that was done for the ES looking at potential emissions of NO₂ and particulates was fundamentally flawed for the following reasons:
- a) It relied upon inputs from the LTM⁹⁴¹, which is a strategic highway model designed to look generally at traffic flows on the corridor and is not suitable for looking at individual junctions on or off the corridor⁹⁴².

⁹³⁹ Document OBJ/923/01: Mr Cheek PoE paragraph 12

⁹⁴⁰ Document OBJ/923/03: Mr Turner PoE paragraphs 2.5 to 2.8

⁹⁴¹ Document C-1 paragraph 14.66: *'The ES assessed the air quality impacts of the NGT Project through...quantitative assessment of air quality impacts across Leeds in the operational phase for an opening year 2020 with and without the NGT Project, using an atmospheric dispersion model that takes traffic flows from the Leeds Transport Model as inputs'* and Document B-2 paragraph 2.26

⁹⁴² Document C-1-3 Leeds NGT Leeds Transport Model Update (Jan 2014) paragraph 2.5: *'as with most strategic highway models, there are some differences between modelled flows and counts at individual junctions and there is therefore a need for care in using detailed local outputs. To ensure their suitability; the detailed model flow forecasts should be supplemented with more local data and models for the purpose of junction design.'*

- b) It failed to give a representative picture of the true baseline situation in Leeds, which is one of seriously harmful air quality⁹⁴³. There are currently exceedances of the EU limit values for NO₂⁹⁴⁴. In terms of particulates, the averages are below the EU limit value⁹⁴⁵, but above the World Health Organisation guideline level of 10 micrograms and any exposure would be harmful. LCC considers that the A660 corridor contains and lies close to 'areas of concern' and it is not a great distance from numerous air quality management areas⁹⁴⁶. West Yorkshire is the 4th most polluted reporting zone or agglomeration in the UK⁹⁴⁷. Metro have been advised that the UK's liability for continued breaches of the EU Directive⁹⁴⁸ could be £1 million per day⁹⁴⁹.
- c) It relied upon Defra predictions, who admitted that on its own latest projections the EU targets for 2010 would not be met in West Yorkshire until after 2030 at the earliest, based upon projections that were materially different and more pessimistic than the previous Defra projections which were used for the EIA⁹⁵⁰. There was also no account taken of the loss of investment in buses that would be caused by the introduction of NGT and thus the delay in reductions of emissions from buses.

⁹⁴³ Document B-2 Technical Appendix on Air Quality page 3.8: monitoring of roadside data showed annual mean NO₂ concentrations 'are high and, at five of the locations, above the air quality objective'; and Figure 1 page 27 shows that average measured background levels in Leeds have fluctuated from 2006 and 2012 between 35 and 40 micrograms per cubic metre

⁹⁴⁴ Document OBJ 923 FWY/154 Tab 4: Defra projection tables July 2014 entries for West Yorkshire: Change from 75 micrograms of NO₂ per cubic metre in 2012 to 75.1 micrograms of NO₂ per cubic metre in 2015

⁹⁴⁵ Defra Website averages quoted as 17 and 14 micrograms for years 2012 and 2014 at Headingley

⁹⁴⁶ Document OBJ 923 FWY/154: map in the slide presentation of Mr Cherry, and Document B-8 paragraph 5.10: '*There are several areas designated as Air Quality Management Areas (AQMA) that are along the route.*'

⁹⁴⁷ Document OBJ 923 FWY/154: Defra updated projections Table July 2014

⁹⁴⁸ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe establishes limit values for a range of noxious pollutants. Article 1(5) provides that it is aimed at 'maintaining air quality where it is good and improving it in other cases'

⁹⁴⁹ Document OBJ 923 FWY/154: Report to WYITA paragraph 2.4

⁹⁵⁰ Mr Leather acknowledged in cross-examination

d) Its dispersion model is limited and poorly validated⁹⁵¹. If background emissions and tailpipe emissions stay the same in 2020 as they were in 2012⁹⁵², at 24 of the 59 locations the modelled NO₂ would be above the 40 microgram standard, and the Scheme would have a 'substantial adverse effect' at 4 Marlborough Gardens in Woodhouse (row 21), a 'moderate adverse' effect at 7 properties and a 'slight adverse effect' at a further 4 properties. Also, where the effect of the Scheme would be to make an already unhealthy situation above the standard worse (eg row 25, 20 Queen Square), the EIA treats that effect as 'negligible', which is the wrong approach. The model was validated only against 2 measuring stations: Headingley Centre and Headingley Kerbside⁹⁵³, but was used to predict particulate matter levels at individual properties across a wide area of central Leeds. Accordingly, it was not mathematically possible to reliably predict PM_{2.5} and PM₁₀ concentrations at any given property in Leeds based on the model. It is therefore probable that the Scheme would cause significant adverse effects in terms of NO₂, PM_{2.5} and PM₁₀ pollutants compared with no-scheme.

6.198 The assessment of air quality was wholly unscientific and unfit for purpose, but even this showed that all other things being equal the Scheme would cause substantial adverse effects. The Health Assessment made no reference to the World Health Organisation guidelines, nor to the fact that Leeds and Headingley in particular are already exceeding them, nor to the fitness for purpose of LTM as a basis for inputs into the air dispersion model, nor to the fact that NGT would, all other things being equal, increase emissions compared to a DM scenario.

⁹⁵¹ Document B-2 paragraphs 2.21 to 2.42 and Annex A describe the process of setting up the air quality model; and paragraph A8 following Table A2 on page 61: 'During validation, it was found that modelled NO₂ concentrations were below the measured levels at all locations, which meant the model was under-predicting NO₂

⁹⁵² Document B-2 graph on page 27: shows that since 2000 the background recorded levels of emissions have not fallen, and were 5 micrograms higher in 2010 than in 2012

⁹⁵³ Document B-2 Annex A paragraph A.6 page 59 states that there were only 2 monitoring points for PM₁₀ (particles 10 microns across). Those are set out on page 60 in Table A.1 and are shown as A3 and A2 on the map in Volume III of the ES (Figures) on page 44, drawing no. 312694/AQ/006

- 6.199 If a proper assessment had been carried out, it would have shown substantial increases in emissions⁹⁵⁴ such that adverse health effects would be likely to result from the Scheme at many locations, with an increase in mortality across Leeds being the inevitable result. In addition, knowingly promoting or approving a transport system that would worsen air quality, jeopardise the attainment of the EU air quality standards or prolong the period of non-compliance would amount to a serious breach of EU law and would open up the UK and Leeds to legal challenge both from the EU Commission and from any victims of the air pollution.
- 6.200 It has been evident since at least the 2012 PEBC submission that the Scheme would result in increased CO₂ emissions over existing levels⁹⁵⁵. The true quantum of additional greenhouse gas emissions generated is unknown because emissions have not been properly assessed. The assessment in the ES makes the assumption that the opening year would be the 'worst case'⁹⁵⁶, but no quantitative estimate has been made of emissions resulting from the construction phase. Also no sensitivity testing has been done to take account of the dependent factors, including traffic growth and the extent of traffic congestion.
- 6.201 The estimates that have been made for the operational phase depend upon the LTM traffic flow outputs⁹⁵⁷, but the predictions depended upon the assumptions that were input as to the relative attractiveness of the NGT compared with car, bus and rail, and the impact on bus services. They do not take into account the switch to the private motor car that would happen if bus services were reduced or discontinued across the City. LTM was not designed to estimate flows on individual roads or at individual junctions and overall it was almost certainly wrong in its patronage predictions and the confidence

⁹⁵⁴ Documents OBJ/1637 SOC and OBJ/1637 PoE: Professor Andrews Statement of Case and Proof of Evidence

⁹⁵⁵ Document C-2 page 45 table 8.11 and paragraph 8.33 and Document A-08-c-2 table 4.1 page 19 puts additional operational phase emissions at 4,025 tonnes of CO₂-equivalent emissions per year

⁹⁵⁶ Document A-08-c-2 paragraph 2.6

⁹⁵⁷ Document A-08-c-2 paragraphs 2.28 to 2.29

intervals were not determined to indicate how likely it would be wrong. Furthermore, the passenger kilometre data from LTM that was used in the greenhouse gas emissions assessment came from the 2009 Major Scheme Business Case when at that time there was a different scheme with an eastern line⁹⁵⁸.

6.202 The assessment assumed that regenerative braking would save 31% of the power required by the trolley vehicles, but energy savings from regenerative braking could be less than half those assumed⁹⁵⁹. It also asserted that even though carbon emissions would increase, the trolley vehicles would be more energy efficient per passenger kilometre than buses. However, no reliance can be placed on assertions by the Promoters that NGT would be more efficient per passenger or less carbon-intensive than buses⁹⁶⁰.

6.203 Taken together, the NGT Scheme would have an adverse impact on greenhouse gas emissions that would be more than 4,025 tonnes annually.

Impacts on landscape, townscape and visual amenity, including proposals for the removal and replacement of trees, the effects on the character and appearance of the conservation areas and on listed buildings

6.204 The impact on the visual amenity as a result of the Scheme would be significant and unnecessary. This would be as a result of the provision of additional stops, traction poles, line fixings, overhead wires, substations, depots, additional signs, fences and barriers. The stop siting and design would be deliberately intended to stand out from, rather than harmonise with, the surrounding areas⁹⁶¹.

⁹⁵⁸ Document A-08-c-2 paragraph 2.29

⁹⁵⁹ Document A08-c-2 paragraph 4.12: '*the efficacy of such systems is dependent on the manufacturer of trolleybus vehicle, which has not yet been determined. Typical energy savings are in the range of 15-40% of the total demand of the trolleybus...but this may vary according to the vehicle loading, terrain, as well as the system itself.*'

⁹⁶⁰ Document OBJ 923 FWY/154: Mr Cherry's presentation- a figure of 76g is quoted for bus or coach and 120g for a 'small car'

⁹⁶¹ Mr Walker cross examination: '*Our brief was...first that we have to create a stop, we have to try and make sure that stop is as visible as possible and we have to try and re-create the character in the area and we have to encourage footfall...maximise it through this area...So if you look at our plan (for the Headingley Centre NGT Stop)...we have to create a stop that is*

- 6.205 The impacts on heritage assets include the townscape impacts on listed buildings and CAs⁹⁶². The serious but indeterminate harm to heritage assets is a powerful reason why alternatives need to be considered carefully⁹⁶³.
- 6.206 This impact would go beyond the impact upon listed buildings and CAs and their setting⁹⁶⁴, extending also to general impacts on the environment in terms of tree loss⁹⁶⁵. The Scheme would also require the loss of green open space for the construction of the off-highway route in Headingley, as well as loss of verges, central reservations and part of Belle Isle Circus. It would affect all those who live, work and shop on the nearby streets, as well as those who travel along or across them.
- 6.207 These effects have been under-assessed by the Promoters, and are one of the major concerns of the Scheme among the public.
- 6.208 The EIA process conducted by the Promoters failed to rigorously appraise the potential environmental impacts of the Scheme. No photomontages were originally shown in the ES for the construction phase, operational Year 1 or Year 5, but only for Year 15. The aim appears to have been to show the scene as it would be after planting had become established. Fifteen years is about a fifth of a lifespan and is a considerable period of time. In the meantime the visual effects would be worse. Some Year 1 photomontages have been produced⁹⁶⁶, but the Promoters' evidence focusses on the situation at Year 15, and it would take 30 years for tree planting to mature and broadly resemble the trees that were replaced⁹⁶⁷.

visible...we have to remove a significant number of trees here, sadly, to make sure we can create the stop but also to create good visibility'

⁹⁶² These are dealt with in Appendix D to this Report

⁹⁶³ Document OBJ 923 FWY/163 Tab 35: Case R (*Forge Field Society*) v *Sevenoaks District Council* [2014] EWHC 1895 [61] held that '*the possibility of...an alternative site on which that harm can be avoided...will add force to the statutory presumption in favour of preservation. Indeed, the presumption itself implies the need for suitably rigorous assessment of potential alternatives.*'

⁹⁶⁴ Document OBJ/923/12: Ms Lightbody PoE

⁹⁶⁵ Document OBJ/923/01: Mr Cheek PoE from paragraph 8.12

⁹⁶⁶ Document B-7

⁹⁶⁷ Document APP-10-2: Mr Walker PoE and in cross examination

6.209 The photomontages that were produced played down the extent of visual clutter, minimised the intrusiveness of the overhead wires and exaggerated the benefits of tree planting. They show a 'best case' scenario with the new infrastructure as unobtrusive as it could be depicted, trees disguising the ugly poles, street furniture reduced beyond what would be likely to be required, highway surfacing and pavements appearing as if they had just been laid when they would have been 15 years old, and everything in sunlight. In reality, there would be greater street furniture, the paving would become worn and broken, the sky would often be overcast, and for much of the year the trees would have no leaves.

6.210 Examples of this are on the following photomontages:

- a) Bodington Park and Ride fails to represent the pedestrian crossing or show overhead wires along or between the traction poles on the left-hand two thirds and shows a winter view for the existing but in 'Year 15' shows leaves, appearing as in the summer, and the street-lights obscured by trees when they would have to be kept free from foliage in order to illuminate the roadway⁹⁶⁸.
- b) Lawnswood roundabout changed the colour of the sky from greyish white in the existing to blue for the proposed, added leaves onto the trees, and removed pedestrian barriers and traffic signs from the roundabout⁹⁶⁹.
- c) Behind the Arndale Centre does not show any overhead wires continuing into the middle distance, or fixings to traction poles, and the wires appear too high and do not marry up with the trolley vehicles that are depicted⁹⁷⁰. It also states that it is 'Not to Scale'.
- d) Headingley Hill existing includes a rubbish bin in the foreground, a bright-red bus stop and bare trees. 'Year 15' shows the sky tinted blue, leaves on the trees, the bin replaced by a silhouette of a person, the lighting darkened (which makes the overhead wire-scape appear less noticeable), and does

⁹⁶⁸ Document A-08f pages 232 and 234 compared with Document B-7 page 6: also feature immaculate grass on the left hand side rather than the muddy ragged grass in the original photograph

⁹⁶⁹ Document A-08f pages 236 and 238

⁹⁷⁰ Document A-08f page 242

not show any wires connecting to many of the traction poles. It also depicts new NGT shelters in a neutral grey colour, when they are intended to be 'as visible as possible'⁹⁷¹.

- e) Monument Moor does not show all the wires that would be required, and shows more yellow light and a much bluer sky in 'Year 15', with yellow flowers in bloom added to the field⁹⁷².
- f) Raglan Road existing shows a sack of rubbish, a plastic bollard, traffic light and 'no entry' sign. These are omitted from 'Year 15', which does not show any lane markings or pedestrian barriers, and the road and pavement surfaces are shown as being clean and new and the NGT stop as faint grey⁹⁷³.
- g) Cookridge Street does not show all the necessary overhead wires⁹⁷⁴.
- h) Penny Hill replaces the existing grey sky, bare trees and worn highway surface with sunny blue sky, trees in leaf (except for one tree), and a spotless surface. Also, the colouring of the poles and stops appears to show the least noticeable colour⁹⁷⁵.
- i) Hyde Park Corner does not show the demolition of Victorian buildings but does show the removal of 3 advertising billboards, whose removal is not contingent upon the Scheme going ahead⁹⁷⁶.

6.211 No photomontages have been produced showing the City Museum or the Headrow, which the Promoters' evidence suggests would be where the most serious harm to the streetscape would be done⁹⁷⁷. Other views where there would be high levels of harm, such as at Belle Isle Circus, or across to the Parkinson Building have not been represented⁹⁷⁸. Photographic viewpoints often appear to have been taken so as not to show where mature trees would

⁹⁷¹ Document A-08f pages 244 and 246 and Mr Walker in cross examination

⁹⁷² Document A-08f pages 248 and 250

⁹⁷³ Document A-08f pages 252 to 254

⁹⁷⁴ Document B-7 photomontages page 29

⁹⁷⁵ Document A-08f pages 268 and 270

⁹⁷⁶ OBJ/1641 SHCA: Ms Carey Jones Evidence in Chief; Document B-7 photomontages pages 19 to 20

⁹⁷⁷ Mr Ward cross examination

⁹⁷⁸ Ms Randall cross examination

be removed and no photomontages show double cantilever traction poles or fixings to listed buildings⁹⁷⁹.

- 6.212 The only safe conclusion to draw is that there would be liable to be significant adverse environmental impacts from the Scheme. This is contrary to the GLVIA2⁹⁸⁰, which does not only apply to rural areas⁹⁸¹.
- 6.213 Views within CAs have not been consistently treated as being in the most sensitive category, even though the whole purpose of the designation is to treat those views as being worthy of conservation or enhancement⁹⁸². Even though GLVIA2 states that *'it is usually assumed that formally designated landscapes are more likely to be sensitive to change than other areas'*⁹⁸³, the public has not been consulted on what view they considered to be most sensitive, contrary to GLVIA2⁹⁸⁴.
- 6.214 The ES fails to put those walking on the Meanwood Valley Trail, using parks or pavements, into the most sensitive category of receptor, but applies a blanket methodology that puts them into a 'medium sensitivity' category. Also, commercial premises have been uniformly put into the category of low sensitivity, including restaurants with outdoor seating and picture windows⁹⁸⁵.

⁹⁷⁹ Mr Ward in cross examination

⁹⁸⁰ Document G-4-22 GVLIA2 paragraph 2.8: *'The reader of the assessment...must be able to recognise that a rigorous process has been applied'*; paragraph 2.21: *'A separate Environmental Assessment team independent of the design team may be appointed to explicitly demonstrate that the assessment is objective'*; paragraph 8.8: *'Photographs...need to be impartial and objective to avoid misleading impressions'*; paragraph 2.35 final bullet: *'General principles of good practice...include...consider the worst case situation, where appropriate, in relation to seasonal or unknown effects or aspects of the proposal that are not fully developed'*; paragraph 8.16: *'Viewpoints should...include conditions indicating the worst case situation'*; paragraph 4.14: *'Where key data on project characteristics is lacking, there may be a need to make explicit assumptions as to what will happen, based on the 'worst case situation'*

⁹⁸¹ Document G-4-22 GVLIA2 paragraph 2.1: *'Landscape encompasses the whole of our external environment, whether within villages, towns, cities or in the countryside'*; and for example case studies on pages 50 to 55 are for urban or urban fringe locations

⁹⁸² Mr Ward in cross examination

⁹⁸³ Document G-4-22 GVLIA2 paragraph 2.30

⁹⁸⁴ Document G-4-22 GVLIA2 paragraph 2.35 5th and 6th bullets

⁹⁸⁵ Document A-08e-1 Technical Appendix H Summary Table 4.5 page119; Mr Walker cross examination: Examples given included Suka Thai, Salvo's, New Inn, Giorio's, Olive Tree , Sebbi's Cafe and the Three Horseshoes PH

This is incorrect in terms of the hierarchy in GLVIA2⁹⁸⁶, as in heavily trafficked pedestrian areas, areas such as Hyde Park Corner/South Headingley where there is little private amenity space, or areas used for recreation such as Woodhouse Moor and Belle Isle Circus, the visual receptors (ie people) are highly conscious of the views and must be treated as high sensitivity receptors.

- 6.215 The arboricultural evidence does not represent each individual tree on the landscape plans, contrary to the British Standard, showing many as 'tree groups', with no count of the numbers of trees. More than a hectare of trees would be lost⁹⁸⁷. The assessment divides individual trees (but not trees in groups) into 4 categories: A, B, C and U, but Category A is defined as a high quality tree with more than 40 years' life expectancy and Category B is a medium quality tree with more than 20 years' life expectancy with no category for trees that are high-quality but having 40 or fewer years' life expectancy. Therefore, potentially many of the Category B trees are of high quality. Category C includes both trees of low quality with a life expectancy of less than 10 years and 'young trees, stem less than 150mm', with no distinction apparently made in landscape terms between the felling of the two kinds of Category C tree, when the former would in the no-scheme world have died by Year 10, but the latter would have matured into large, healthy trees.
- 6.216 With regard to the reliance placed on new tree planting in a 3 to 1 ratio to make up for trees that would be lost, there is no assurance that it would be possible to plant specimen trees in the locations intended as the location of utilities is uncertain; the liability for maintenance has not been established; and tree care may not have been budgeted. Also, no allowance has been made in the visual impact assessment for trees that would die or fail to grow

⁹⁸⁶ Document G-4-22 GLVIA2 paragraph 7.31 states that the importance of the view may be determined inter alia with respect to its popularity or the numbers of people affected, and in the facilities provided for its enjoyment; paragraph 7.32 states that the most sensitive receptors may include users of all outdoor recreational facilities including public rights of way, whose attention or interest may be focused on the landscape, communities where the development results in changes to the landscape setting or values views enjoyed by the community and occupiers of residential properties with views affected by the development

properly⁹⁸⁸, and it has been assumed that all trees would survive and grow up healthily, which is a best-case, rather than worst-case approach to assessment.

Impacts of attaching overhead line equipment to buildings

- 6.217 The requirement for OLE to provide power to the trolley vehicles would create a significant negative impact on the visual amenity of the areas the Scheme would run through. There would be visual impacts across the carriageway, particularly at traffic junctions, due to mountings on buildings and poles obscuring and spoiling views of buildings. It would create a sense of enclosure and harm to openness, particularly in narrow roads like Cookridge Street but also across wider roads and squares. It would be distracting and would jar with the streetscape, particularly in more open locations.
- 6.218 The Promoters have not specified or designed the OLE infrastructure, but examples from trolleybuses in Vancouver⁹⁸⁹, Lecce⁹⁹⁰, Geneva⁹⁹¹, and Castellón⁹⁹², and trams in Manchester⁹⁹³ and Edinburgh (which have half as many wires as trolleybuses)⁹⁹⁴ demonstrate that the OLE is unsightly.
- 6.219 There would be potential damage from the attachment of OLE to buildings, particularly as the Promoters have yet to finalise detailed plans⁹⁹⁵. This matter should have been concluded well before the submission of the revised Business Case.

⁹⁸⁷ Document APP-10-2: Mr Walker PoE page 44

⁹⁸⁸ Mr Walker evidence: expected 1 in 10 trees to fail to take; OBJ 1727 DCRA Mrs Pickering evidence: Failure rates of urban trees are much higher

⁹⁸⁹ Document OBJ 923 FWY/123

⁹⁹⁰ Document OBJ 923 FWY/111

⁹⁹¹ Document OBJ/171-102: Professor Todd photograph slide No.16

⁹⁹² Document OBJ 923 FWY/112

⁹⁹³ Document OBJ/923/05: Ms Lightbody PoE pages 26 to 27

⁹⁹⁴ Document OBJ 923 FWY/145: Ms Lightbody Briefing Note on the Edinburgh Tram System

⁹⁹⁵ Document C-1: the Business Case paragraph 14.203: '*The ES indicates that the details of the fixing for OLE is not yet available at this design stage however it is understood that it normally consists of an expanding bolt into the façade of the building from the outside*'

Impacts on land use, including effects on commercial property and the viability of businesses, and community facilities

- 6.220 No high head count employers, transport companies, leisure groups, multiple retailers or small businesses in Headingley have been cited as supporting the NGT project. If the TWA Order were to be granted, there would be a period of time in which the Promoters would seek to apply for funding and then, if they received funding, determine whether to finally implement the Scheme. In the meantime, the making of the Order would have an impact on the extent of investment in businesses and property sited along the route and they would be adversely affected should the Scheme go ahead. The more doubtful it is that the Scheme would go on to secure final stage funding and go ahead quickly, the more weight this 'blighting' effect should be given when weighed in the balance.
- 6.221 The impact of the NGT project during its construction phase on traffic flow and its consequences for the economy have not been modelled or quantified. Also, there would be disruption for businesses directly affected by the roadworks⁹⁹⁶. The Promoters' Socio-Economic Assessment is that disruption would be 'minor' or 'moderate' for up to 400 days and it envisages temporary closures⁹⁹⁷. The Promoters have not studied the cashflows and balance sheets of any of the individual businesses along the routes in order to arrive at the view that they have '*sufficient capacity and means to absorb changes*'⁹⁹⁸. They cannot identify how many traction poles would be needed at any given location, nor the extent of relocations of utilities, and there is not a detailed construction

⁹⁹⁶ Document A-08e-4 Socio-economic technical appendix K paragraphs 4.17 to 4.21 pages 19 to 20: 'Businesses located on the route, near to construction compounds, or along routes heavily used by construction traffic may experience negative effects including temporary closure, pedestrian severance, reduced amenity and issues with noise and dust from construction. Businesses which lie directly on the route would be most affected, especially those whose entrances face onto the route... This could result in loss of revenue through reduced patronage in the short-term, extending into the long-term if customers are deterred from returning, or find alternative outlets. In extreme cases, this could result in business relocation and even business failure.'

⁹⁹⁷ Document A-08e-4 paragraph 4.21: 'the extent and duration of any closures – has been assessed as being of predominantly minor magnitude'

⁹⁹⁸ Document A-08e-4 Table 2.2 page 9

programme for the purpose of the assessment. Accordingly, they cannot say what the changes would be and no quantified assessment of construction impacts has been made, contrary to TAG guidance⁹⁹⁹. Investment by affected businesses, such as FWY, would be suppressed in advance of, and during the period of, disruption. The Promoters Business Case Review shows higher operating costs and delays to journey times on the highway for business vehicles, with a net cost to business of £223.6 million¹⁰⁰⁰.

6.222 The figures for job creation are 'gross' figures ie the Promoters have calculated the jobs predicted to be created by NGT but not predicted how many jobs would be lost. The net effect could therefore be negative. The direct employment figures fail to make any allowance for the loss of jobs operating buses that would be sustained in proportion to the success of the NGT at out-competing buses¹⁰⁰¹. There is no assessment of what those job losses would be, the relative propensity of the two groups of drivers to spend and any net effect on the economy.

6.223 The indirect employment figures rely upon the assumptions entered into the LTM as to 'quality factors', which have been given a value and 'monetised'. A large percentage of the economic benefits are derived from the quality factors¹⁰⁰². Even if quality factors have an economic value to the passengers, they would not in themselves translate into greater employment, which would depend upon whether the quality factors resulted in increased economic production, incomes and spending.

6.224 NGT would not offer any material passenger journey quality advantage over buses and their potential advantage over hybrids is limited at most to a

⁹⁹⁹ Document OBJ/1719 PoE2: Professor Bonsall PoE paragraph A14

¹⁰⁰⁰ Document C1 Business Case Review Table 17.1 page 17-2

¹⁰⁰¹ Document A-08e-4 paragraph 4.24: *'It should be noted that this is a gross effect. There may be a negative impact in terms of the recasting of bus routes and/or services when NGT routes become operational.'*

¹⁰⁰² Document APP/103A Answer 5: The DfT estimated that in the 2012 business case the contribution of 'quality factors' was between 55% and 60%; Document OBJ 1719 NWLTF/122 page 35 paragraph C1 and Professor Bonsall oral evidence: at least £279 million of the claimed £701 million of economic benefits are derived from the 'quality factors' and the true contribution is likely to be significantly higher than that

somewhat quieter ride for some of the journey, insofar as electric motors are generally quieter than diesel engines and the cabins are not soundproofed (which would depend on the specification of the vehicles). Furthermore, a better-lit stop, CCTV, or a quieter journey would be difficult to translate into greater economic output from the passengers or generating thousands of jobs. Nor would any predicted small in-vehicle journey time savings by NGT over bus, which would be offset by walking and waiting time, result in an increase in economic production that would sustain any significant boost to employment.

- 6.225 The willingness of passengers to pay more for NGT over buses¹⁰⁰³ would result in reduced disposable incomes. The economic benefits of this would depend mainly on the extent to which spending of the additional revenue generated by the NGT project would be put to more economically productive or efficient uses by the operating company and the Promoters than it would have been by the passengers. That is unknowable and highly uncertain and the Promoters have produced no assessment of this. Accordingly, increased fares (especially for short journeys), poor interchange, high traffic congestion and a net cost to business would be likely to lead to a net loss of jobs.
- 6.226 The housing sites in northern Leeds, such as Otley, Adel, Woldale and Swallow Drive would come forward regardless of the NGT, and their growth would not be hindered by a lack of permanent visible infrastructure¹⁰⁰⁴. NGT would not unlock sites that would not have come forward in any event, and bus operators would be able to accommodate major development sites in their route networks¹⁰⁰⁵. The NGT project has interfered with existing planning consents for redevelopment of sites along the route¹⁰⁰⁶. Sites lying farther away from the NGT than a comfortable walking distance would not benefit directly, but would suffer from the increased overall congestion in Leeds.

¹⁰⁰³ Document OBJ/923/06: Mr Alexander PoE paragraph 3.1: Since 2012, there has been a reduction of between 25% and 30% in bus fares

¹⁰⁰⁴ Mr Farrington agreed in evidence

¹⁰⁰⁵ Mr Speak accepted in evidence

¹⁰⁰⁶ Mr Natkus evidence regarding the former Leeds Girls' High School development

- 6.227 Without any commitment to NGT, Hammersons have made a significant investment in developing Victoria Gate, a 42,000 sqm retail and leisure development on Eastgate, due to open in 2016¹⁰⁰⁷, and Leeds has gone up the rankings of the best cities to locate a business, in terms of internal transport¹⁰⁰⁸.
- 6.228 In order to have an effect on economic development and creation of employment, transport infrastructure schemes need, for example, to deliver a sustainable competitive advantage over existing transport services; serve in a useful and practical way parts of the city that are economically deprived and/or not served by transport already; provide access to otherwise inaccessible new land use development schemes which are going to create employment opportunities; and/or make a real and sustainable contribution to the reduction of congestion. NGT would not do any of these things¹⁰⁰⁹.
- 6.229 NGT would result in Leeds becoming a less attractive place to do business, given that the general amenity of a city is important to its international ranking as a good place to locate a business¹⁰¹⁰. Also, overall transport system efficiency (costs per unit of output or trips made) would reduce, resulting in increased costs per trip to be borne by the businesses of Leeds¹⁰¹¹. In addition, the lack of any interchange with the railway station or bus station, and the absence of any connection to the Airport, would limit the extent to which the NGT would support economic growth through inward investment.
- 6.230 Failure to interchange with the bus station is a major drawback of the NGT. The bus station has excellent waiting facilities, serves buses to Harrogate, Rippon, Wetherby, York, Scarborough and Wakefield among other destinations, as well as being a starting point for some low fare Megabuses. The coach station is adjacent to the bus station and it is accordingly much

¹⁰⁰⁷ Mr Farrington cross examination

¹⁰⁰⁸ Document APP-1-3: Mr Farrington PoE Appendix Page 21: 'Best Cities in terms of Internal Transport Leeds 2011=10, 2010=15

¹⁰⁰⁹ Document OBJ/923/09: Mr Cheek Rebuttal PoE paragraph 2.2

¹⁰¹⁰ Document OBJ/171-100: Professor Todd presentation to Inquiry pages 10 and 11

¹⁰¹¹ Document OBJ/1719 PoE2: Prof Bonsall PoE paragraph A33 page 22

easier for elderly people to use than the railway station. The bus station is close to Kirkgate market, the West Yorkshire Playhouse, the Jobcentre, the College of Music, the BBC, Leeds Minster and the Department for Health headquarters. It will adjoin the Victoria Gate shops, including the John Lewis shop that is under construction¹⁰¹².

- 6.231 The University of Leeds new sports facilities and improvements to the highway immediately outside the Parkinson Building need not be linked to a trolley vehicle scheme. Leeds Beckett University and the College of Art do not support it. Students already use public transport and are well served by frequent bus services, including dedicated bus services for Leeds Beckett University. Students value being able to get a seat but would have to stand more on articulated trolley vehicles¹⁰¹³. The NGT stop would be located further from the student accommodation at Liberty Dock than the current bus stop. It is proposed to undertake construction work under the library of the College of Art, which would cause significant disruption to students.
- 6.232 NGT would not penetrate into the big sites earmarked for redevelopment and particularly in the South Bank area, which is already served well by buses¹⁰¹⁴. The main areas of deprivation lie in the south and east, and to a lesser extent the west, of the City and not directly along the NGT route which mostly serves the affluent north¹⁰¹⁵. There is no commitment that the NGT Scheme would extend routes along the Aire Valley. It is being promoted on its own merits and not in reliance on the prospect of possible future lines. The nearest proposed stop would lie some considerable distance from the proposed HS2 station which would be inconvenient for modal interchange, particularly for passengers with heavy luggage and the disabled.
- 6.233 NGT would not significantly benefit Headingley cricket ground's ability to host test cricket, which is constrained by other factors including chiefly low

¹⁰¹² Mr Simpson Evidence in Chief

¹⁰¹³ Mr Cheek Evidence in Chief: Operators are withdrawing articulated bus services on University routes in Nottingham owing to unpopularity with students

¹⁰¹⁴ Document OBJ 923 FWY/104

¹⁰¹⁵ Mr Farrington accepted in cross examination

capacity, rainy weather and poor pitch conditions. NGT would have very limited capacity to cope with sudden increases in its use, as it would only have 2 spare trolley vehicles. It would also stop further away from the cricket ground than current bus stops.

Matter 6: The effects of the Scheme on statutory undertakers and other utility providers, and their ability to carry out undertakings effectively, safely and in compliance with any statutory or contractual obligations

6.234 The extent of the utilities and those requiring to be moved has not been identified. The Construction Implementation Strategy states only that '*The relevant service authorities will need to evaluate whether it is acceptable to have services lowered and/or protected or whether diversion is required. They will need to be consulted about the level of and type of protection required.*' That document goes on to say '*The time required for the relocation/protection of each service will vary greatly depending on the amount/length of apparatus to be affected, the degree of protection/diversion required and whether the work will result in a loss of service/outages which need to be planned a long time in advance*¹⁰¹⁶. The necessary investigations and consultation should have been done in advance of the application for the Order so that a proper assessment of the disruption and costs involved could be carried out.

Matter 7: The likely impact on motorists, cyclists and pedestrians of constructing and operating the Scheme

a) the effects of the proposed trolley vehicle system on other public transport services, highway capacity, traffic flow, vehicle parking, pedestrian and cyclist movement and road safety

6.235 There would inevitably be disruption to buses and traffic caused by demolition works, roadworks, laying of utility services, landscaping works, works to signals, road closures/diversions, construction and relocation of stops, as well as the movement of works traffic. The Construction Implementation Strategy states: '*The traffic management associated with the various works will change*

*continuously during construction, as will the alterations to the highway network itself*¹⁰¹⁷. It also indicates that some stops may be removed entirely during the period of works¹⁰¹⁸, with consequent effects on the attractiveness of the bus service to potential passengers, and passengers made to walk further to stops. What is 'acceptable' would be left to the Promoters and accordingly there is uncertainty and lack of control about the need for and locations of temporary stops.

6.236 The disruption caused by the construction of NGT would reduce the attractiveness of the current bus services due to the mix of increased journey times combined with reduced punctuality resulting from traffic congestion and so a drop in patronage would be caused. The building of the Manchester Metrolink scheme in Oldham had significant effects on services provided by FWY's sister subsidiary between 2012 and January 2014, with four main services requiring an increase in scheduled round trip times which reduced the attractiveness of the service to the customer. The net result across all Oldham services was an additional resource requirement for 10 peak vehicles and an increase in over 800 bus hours, at the same time as the less attractive service being provided which caused a passenger and revenue loss to First Group. During 2013, costs of bus operation in Oldham increased by £1.5 million. FWY estimate that similar adverse impacts on services and operations in Leeds could be in the range of 3 to 6 times or more of those experienced in Oldham, given the nature of the corridors NGT is proposed for, and also the significant disruption which would be caused during the construction of the NGT route through the City Centre on bus routes¹⁰¹⁹.

6.237 Digging up the roads, laying or removing utilities and laying road surfaces are 'typical' highway maintenance and utility maintenance activities¹⁰²⁰. It does not follow, however, that there would not be major disruption from such

¹⁰¹⁶ Document A-08g-03 page 23

¹⁰¹⁷ Document A-08g-04 page 22

¹⁰¹⁸ Document A-08g-04 page 21

¹⁰¹⁹ Document OBJ/923/06: Mr Alexander PoE paragraph 8.3

¹⁰²⁰ Document A-08e-5: Environmental Statement paragraph 4.3 page 21

activities when they are done over a three year period in order to construct a trolley vehicle system running through the heart of Leeds. That is without the disruption that would be caused by laying thousands of traction poles, installing trolley vehicles and bus shelters, and altering junctions.

- 6.238 Any re-routing would alter the travel time or directness of the previous bus route. No modelling has been done of bus routes and no construction programme is in place. It is therefore impossible to assert with any confidence that impacts on public transport capacity and journey times would be within 5% of previous levels at all material times across Leeds. The ES appears to have treated each individual item of roadworks at any given point as being minor and failed to then assess the impacts on public transport journey times, reliability and costs for each bus route and Leeds as a whole¹⁰²¹.
- 6.239 The effects of the expected three year NGT construction period, and equivalent prolonged disruption to that experienced in Oldham as described above, on two major corridors in Leeds, would damage FWY's ability to invest in the West Yorkshire bus network¹⁰²² and its ability to provide value for money services, while also reducing levels of public transport usage. The Promoters have failed to take the latter point into consideration in their Business Case, which is based on abstraction from bus patronage from 100% of current bus patronage levels. However, as bus patronage would drop during the construction period, NGT demand calculations should start from a lower base level. As a result, it is likely that the Promoters have overestimated their passenger demand on this aspect¹⁰²³.

¹⁰²¹ Document A-08e-5: Environmental Statement Appendix L Table 4.1: Summary of Construction Phase Impacts

¹⁰²² Mr Alexander and Mr Turner evidence in chief to Inquiry: FWY would not invest in new faster-boarding New Routemaster vehicles during a period of construction for LTVS, because they would not achieve a return on their investment and passengers would be deterred from travelling on the new buses as a result of disruption

¹⁰²³ Document OBJ/923/02: Mr Cheek PoE Appendix 2 paragraph 3.7.3

6.240 The effects of the operation of the NGT Scheme on FWY's operations and customers are summarised as follows¹⁰²⁴:

- a) NGT would abstract existing passenger demand on routes operated along the corridor, requiring a reduction in frequency and/or hours of operation in order to maintain commercial viability;
- b) the Scheme would result in a risk of increased journey time on the routes that continue to be operated along the corridors affected, which would make them more expensive to operate and less attractive to customers, further threatening the commercial viability of the services and depressing passenger use; and
- c) the resulting reduction in frequency of services would affect a number of outlying areas in the City not served by the NGT, which would mean those areas either being disconnected from the public transport network or experiencing a reduction in the breadth and frequency of service they receive, and thereby depressing passenger use.

6.241 The conclusions of an Electronic Ticket Machine (ETM) data analysis¹⁰²⁵ are summarised as¹⁰²⁶:

- Total patronage on the routes directly affected by NGT is 12.4 million passenger journeys per annum;
- 5.1 million journeys per annum would have the option of a direct switch to NGT;
- 7.3 million journeys per annum would have no alternative to the existing bus service and would therefore be 'at risk' of service reductions prompted by the introduction of NGT;
- In the Cookridge, Tinshill and Holt Park areas, some 683,000 passengers per annum would be directly inconvenienced by the reductions in frequency assumed by the Promoters;

¹⁰²⁴ Document OBJ/923 SOC: FWY Statement of Case paragraph 2.4

¹⁰²⁵ Electronic Ticket Machine data provides analysis of patronage and revenue by service, at loadings by day of week, by time of day, or by individual journey, and offers the facility to look geographically, at different sections of the route or at individual stages

¹⁰²⁶ Document OBJ/923/01: Mr Cheek PoE paragraphs 14.1 to 14.6

- Bus route No 28 would be unlikely to be viable after NGT had opened, thus putting at risk the provision of a bus service to residents of the Weetwood Lane and Adel areas of the City; and
- Service No 97 might have to be reduced in frequency as well in order to maintain viability, so reducing services between Headingley, Horsforth and Guiseley.

Consequently, there would be a risk that a significant proportion of customers could switch to use of their private car, so obviating decongestion benefits forecast on the corridor, particularly in Headingley, Horsforth and Guiseley, given the high levels of car availability in this area¹⁰²⁷.

6.242 Passengers in Leeds benefit from being able to travel on FWY services throughout the City and West Yorkshire using a range of value for money ticket and fares propositions which makes transfer between services seamless, affordable and better value for money. Passengers are also able to purchase the M-Card multi operator ticket range which permit travel on any operators services including rail services and on one bus corridor in Leeds. FWY, along with two other operators, have implemented a joint ticketing arrangement to explore the growth impacts of accepting each other's single operator ticket products. This pilot initiative has been implemented to inform the on-going West Yorkshire Bus Partnership proposals and the impacts of such arrangements, should they be implemented throughout Leeds during the next 1 to 3 years, have not been evaluated by the NGT business case development process¹⁰²⁸.

6.243 The Promoters' assertion that NGT would increase overall person capacity of public transport by 850 passengers per hour¹⁰²⁹ depends upon an assumption that over the next 60 years buses would run at half their current frequency alongside NGT and maintain all routes running even partially along the corridor and extending beyond it.

¹⁰²⁷ Document OBJ/923/02: Mr Cheek PoE Appendix TAS Report Chapter 3 Demographic survey

¹⁰²⁸ Document OBJ/923/06: Mr Alexander PoE paragraph 10.3

¹⁰²⁹ Document REB-1 OBJ/923 paragraph 2.22

- 6.244 The Promoters' case is that only about 1 in 4 of the NGT passengers would be passengers who do not currently use the buses serving the corridor. Those who used active modes previously would have done very little to contribute to vehicular traffic congestion. The priority to trolley vehicles would also inevitably hold up private and bus vehicle traffic and so reduce private car and bus person capacity per hour.
- 6.245 The effect on seating capacity is a critical issue. On the Promoters' figures (assuming a trolley vehicle seating 40 with total capacity of 160 and 11 trolley vehicles in the peak hour, and loss of 8 buses seating 72 per hour¹⁰³⁰) seating capacity would reduce by at least 136 seats in the peak hour. The money for the Scheme¹⁰³¹ would be largely spent before 2020¹⁰³². Even if public transport capacity were increased by 850 at the peak hour, the initial capital cost would work out as £294,000 per additional person of capacity in 2010 prices. The costs would be higher in 2014 prices as, assuming 3% compound inflation since 2010, they would already be 12.5% higher. This is roughly the same capital cost as a new hybrid bus, with a capacity of around 100, for each additional person who could be carried by NGT.
- 6.246 Even if FWY maintained its existing bus services and public transport person capacity was therefore raised by 1,600 passengers per hour in the short term that would still work out at over £156,000 per additional person who could be carried on public transport. The increase in capacity could be provided far more cheaply by laying on additional buses rather than using trolley vehicles. Thus, the overall boost to person capacity on the A660 would be extremely modest and out of all proportion to the cost.
- 6.247 The assumption that FWY would halve its bus frequency makes no sense because one of the most profitable parts of the bus network is that served by NGT and a major competitive advantage of buses over trolley vehicles would be their frequency, so FWY would actively compete on that stretch at a high

¹⁰³⁰ Document OBJ/923/03: Mr Turner PoE paragraphs 1.7 and 2.3

¹⁰³¹ Document C-1 page 10-4 Table 10.1

¹⁰³² Document C-1 Table 19.1 *'the implementation expenditure will be substantially completed*
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frequency so long as it could do so,¹⁰³³ and it would make no commercial sense to run buses at half their current frequency alongside NGT. Either the bus frequency would be maintained or enhanced, thereby knocking out NGT or NGT would knock out the bus operators thereby reducing capacity in the long term.

6.248 Commercial bus operators operate a 'cascade' whereby they introduce new vehicles on their busiest and most profitable routes first (typically every 5 years), move the existing 5 year old vehicles on those routes onto second-tier routes and move the 10 year old vehicles on secondary routes onto tertiary routes. The tertiary route buses are typically either sold for use as school buses when aged between 12 and 15 years, or scrapped. If operators lose revenues on the most profitable routes, it takes longer to earn back a return on any investment in new vehicles and so the cascade is disrupted and there will be less investment in the fleet as a whole¹⁰³⁴. This could happen through an abstraction of demand rendering services such as Nos 1 and 6 less profitable, which is as predicted by the Promoters.

6.249 The use of separate stops and infrastructure would result in the relocation of numerous bus stops to locations that would be on average further apart, and situated less conveniently for local people and businesses than the current ones which have specifically been placed to cater for existing patterns of use¹⁰³⁵. Therefore, on average, those making journeys by bus along the corridor served by NGT would have to walk further to get to bus stops, increasing door-to-door journey times for most bus users. Even on the

by 31 March 2020' and Document REB-1 OBJ/923 paragraph 2.16

¹⁰³³ Document APP/103A Answer 8 second table entitled 'distance travelled (person km and Document OBJ 1719 NWLTF/122 page 47 paragraph C15

¹⁰³⁴ Document OBJ 923 Mr Turner Evidence in Chief

¹⁰³⁵ OBJ 573 Mr Broadbent: The stop near to Tinshill Tower would be removed leaving a distance of about 750m between the Hospital Lane stop and the Holtdale Approach stop; the stop opposite New Adel Lane would be moved about 200m to the north, resulting in a gap of 650m between it and the stop to the south on Otley Old Road; the stop at Churchwood Avenue would be moved northwards by 220m; the stop at Woodhouse Lane close to Cliff Road would be moved almost 250m to the north near 38 Headingley Lane; and the southbound stops currently near Ashwood Villas would be moved to leave a gap of 170m between the new northern stop and the next stop at Hyde Park Corner

Promoters' case, bus would still be the most-used public transport mode¹⁰³⁶.

Bus stops would receive less investment than they otherwise could and would have done due to investment being diverted to NGT stops. The separate off-highway infrastructure for NGT, which would be under-utilised by 10 vph, would require maintenance resources that otherwise could have benefited the highways used by buses. Potential customers would have to choose whether to wait at a bus stop or an NGT stop.

- 6.250 Accordingly, even though the Promoters' assume that the total number of services per hour on the corridor would increase slightly, the actual customer experience would be that the frequency of services had reduced¹⁰³⁷.
- 6.251 Most northbound bus journeys¹⁰³⁸ are shown by the Promoters' figures to be slower, particularly on the southern part of the route and in the evening peak period. The faster journeys are shown to be faster by 30 seconds or less, which would be barely noticeable. Southbound, the predicted improvements would not be a significant benefit for bus passengers, and would not offset the reduction in frequency of buses that is predicted by the Promoters¹⁰³⁹. There would be a 1 minute increase for commuters between the City and Belle Isle in the evening commuter peak. These predictions are highly unreliable, and it is far from clear that NGT would benefit bus journey times and punctuality along the corridor. If anything, it seems likely to make them worse¹⁰⁴⁰.

¹⁰³⁶ Document OBJ 1719 NWLTF/122 sections C2 and C3 and Document APP/103A Answer 8 Table showing trips by 'NGT' as approximately 2,600 in the AM peak hour, compared to Document OBJ/923 SOC: FWY Statement of Case Appendix 2 TAS Report and Document OBJ/923/03: Mr Turner PoE page 7 Table 4 showing that daily use of the Headingley Lane buses is around 21,700

¹⁰³⁷ Mr Henkel Evidence in Chief accepted

¹⁰³⁸ These are not figures for *trips* ie they do not take account of the numbers of people getting on and off at each stop

¹⁰³⁹ Document C-1-13 paragraph 1.2 Executive Summary of the Runtime Assessment: the Promoters have quoted a 2 minute journey time saving between Bodington and the City Centre southbound during the AM peak, but Table 4.1 reveals, the actual prediction is for a difference of 1.3 minutes and they seem to achieve this only by rounding the 31.2 'with NGT' figure down to 31 and rounding the 32.5 DM up to 33

¹⁰⁴⁰ Document C-1-13 Runtime Assessment paragraphs 1.8 to 1.9: They '*are not precise forecasts*' and represent only '*a reasonable expectation for the future*'. They state that '*the forecasts...rely on numerous assumptions and judgements and are influenced by external circumstances that can change quickly*'

- 6.252 The Promoters' modelling projections show an increase in the number of kilometres travelled in cars in Leeds annually as a result of the NGT and a reduction in the number of kilometres covered in public transport and active modes¹⁰⁴¹. Thus, their own projection is for a small modal shift away from public transport and active modes towards cars. Although distance travelled by car, fuel consumption and emissions are predicted to increase, the Promoters have argued that car trips would reduce slightly in the modelling. However, only about 4% of the predicted demand for NGT is contributed by a reduction in car trips and the predicted reduction in car trips is 0.02% of the total car trips in Leeds¹⁰⁴². This figure is well within the wide margin of error of the modelling¹⁰⁴³. Accordingly, no weight could be placed on any claim that car trips would reduce or that there would be any benefits whatsoever in terms of the share of trips made using sustainable modes of travel.
- 6.253 The modelling greatly overstates the extent to which car users would take NGT instead of driving for the following reasons:
- a) Traffic count data shows that traffic flows had fallen since the modelling work was done, by about 6% since 2007 so that *'the model is currently overstating the potential flows from which NGT could gain its car transfers, and also may be overstating the levels of congestion currently being experienced, so reducing the generalised cost of car travel and thus the propensity to transfer to public transport directly or to park & ride'*¹⁰⁴⁴.
 - b) The Promoters' modelling exaggerated the attractiveness of the park and ride sites¹⁰⁴⁵, as the Bodington Park and Ride site is not the optimum

¹⁰⁴¹ Document APP/103A Answer 8 second table entitled 'distance travelled (person km and Document OBJ 1719 NWLTF/122 page 47 paragraph C15

¹⁰⁴² Document OBJ 1719 NWLTF/122 page 48 paragraph C15.

¹⁰⁴³ Mr Hanson cross examination: indicated the margin of error was plus or minus 50% for park and ride trips and an unknown level but perhaps plus or minus 30% for demand generally

¹⁰⁴⁴ Document OBJ/923 SOC: FWY Statement of Case Appendix 2 Mr Cheek analysis paragraphs 5.11.7 to 5.11.9

¹⁰⁴⁵ Mr Cheek cross examination: *'We have grave doubts about the appropriateness of the methodology used in forecasting the number of park and ride trips, whilst noting that the Bodington site is unlikely to be able to accommodate the number of cars it would need to in order to match the demand forecast. We have other concerns about the market attractiveness of the Park & Ride offer from the two sites. On this basis, we would recommend a reduction in the forecast of 20% at Stourton and 50% at Bodington, based on its capacity limitations and*

location in Leeds because the A61 and A65 have much greater Annual Average Daily Flows into the City¹⁰⁴⁶. If the Promoters' demand forecasts were accurate, the park and ride sites would be too full for it to be easy to find an available car parking space, which would in turn reduce the attractiveness of the service as customers would have to drive around looking for a space¹⁰⁴⁷. They were inaccurate due to the modelling using an Alternative Specific Constant for the Stourton and Bodington Park and Ride sites of 70 minutes; predicting that people living closer into the City Centre would drive out to the Park and Ride and travel back in to the City on the trolley vehicle; and using a value of the constant based on the constants for the Garforth and Pudsey Park and Ride sites which have much faster express rail shuttles into the City Centre and more available seating out of the City Centre¹⁰⁴⁸.

- c) There are very significant numbers of City Centre car parks and 'private' car parking in Leeds for offices, shops, houses and residential developments, and on-street parking on residential streets, which means that park and ride would not be an attractive proposition without an express shuttle bus¹⁰⁴⁹. No up-to-date assessment has been made as to the extent of private parking capacity. There has not been any analysis presented to the Inquiry of the price elasticity of parking behaviour to changes in supply of the public car parking spaces and the extent to which that might impact on NGT patronage as opposed to resulting in increased parking elsewhere or use of the buses, or of the sensitivity of NGT demand

the lack of seating accommodation for passengers joining every other vehicle during the bulk of the day'

¹⁰⁴⁶ Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 4.11

¹⁰⁴⁷ Mr Cheek cross examination

¹⁰⁴⁸ Document OBJ 1719 NWLTF/122 pages 14 to 15.

¹⁰⁴⁹ Document C-1 paragraphs 3.69 and 3.70: '*Private car parking accounts for approximately three quarters of the total car parking in the city centre core area. Whilst LCC controls on-street parking, this only makes up a small proportion of the parking supply. Of the off-street car parks available to the public, LCC has control of less than one fifth of the spaces... The proportion of permanent public off street parking in the core of the city centre (Inner Ring Road and river as boundary) controlled by LCC has been steadily decreasing since 2007. LCC's ability to influence patterns of travel demand directly through parking supply is therefore limited'* and Table 3.6 and Footnote 28 page 3-21 show that it is based on data from the year

to changes in parking costs at different locations¹⁰⁵⁰. Closing car parks is not part of the TWA Order application and measures to increase parking charges¹⁰⁵¹ are not part of the NGT proposal either. The SP survey indicated that choices whether to use a car were strongly linked to the cost and availability of car parking¹⁰⁵².

- d) The Promoters are unable to commit to ensuring that fares would be more attractive than current bus fares, current assumptions being that they would be about 25 to 30% higher than FWY's fares, or competitive with private cars and taxis. There was no assessment for instance of the future cost of motoring. Therefore, there must be considerable uncertainty over any assumption that there would be direct modal shift from car.
- e) The Promoters failed to take account of the prospect that closure or reduction of other bus services such as the Nos 97 and 28 services would require more residents to fall back on the motor car¹⁰⁵³. 7.3 million passengers would not have the option of a direct switch to LTVS and so would be 'at risk' of service reductions caused by the Project¹⁰⁵⁴.

6.254 The assumed journey time benefits for buses operating on the corridor are affected by the following:

- a) They are based on modelling a 'notional' bus service¹⁰⁵⁵.

2011-2012

¹⁰⁵⁰ Document C-4-28 paragraph 2.46 page 13: *'It has been acknowledged that a more detailed representation of parking supply would have been desirable. Ideally, this could enhance the sensitivity of the model to travel behaviour of individuals within each zone that are subject to much higher parking charges than the average. However, the level of detail of the available input data did not allow such further enhancement'*

¹⁰⁵¹ Document E-1-22: Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006, rule 11(2) and paragraph 4 of Schedule 1: Parking charge measures would have economic costs on businesses in Leeds and environmental effects which would need to be modelled and assessed if they formed part of the Project or were relied upon as contributing to an overall in-combination effect of the Project

¹⁰⁵² Document C-4-24 paragraphs 4.44 page 26 and 6.15 page 36.

¹⁰⁵³ Document OBJ/923 SOC: FWY Statement of Case Appendix 2 pages 22 to 23

¹⁰⁵⁴ Document OBJ/923 SOC: FWY Statement of Case Appendix 2 paragraph 4.1.7 page 22

¹⁰⁵⁵ Document C-1-13 paragraph 2.27: *'There is no existing bus service directly equivalent to the proposed NGT service. A notional service has therefore been modelled that follows the NGT route as far as possible to allow for comparisons in journey times between the two modes.'*

- b) The comparison of 'Bus with NGT' times with observed times do not show a benefit to bus times for all journeys¹⁰⁵⁶ and the bus journey times that the Promoters observed on the surveyed days in March 2013¹⁰⁵⁷ were not typical¹⁰⁵⁸.
- c) No allowance has been made for buses being slowed down when travelling through the 'shared space' areas such as in front of the University of Leeds and the narrow lane that would be shared with cyclists northbound past the University Engineering Department¹⁰⁵⁹.
- d) No allowance has been made for increases in general road traffic congestion in the LTM¹⁰⁶⁰, which indicates that general congestion would be worsened by NGT insofar as it reduces the road space and priorities available to other vehicles, and where buses would be unsegregated from general traffic that would slow them down. As trolley vehicles would have priority over other traffic, any increases in congestion would be expected to affect buses disproportionately compared to trolley vehicles¹⁰⁶¹.
- e) Individual junctions have not been subject to detailed modelling, as the LTM was not designed for this purpose, but the LTM predicts increased flows which would have adverse effects on various junctions and local roads¹⁰⁶². Moreover, the times for the green phases of the traffic lights were not reduced to take into account use of Strategic Traffic Management

¹⁰⁵⁶ Document C-1-13 paragraph 1.2: The Table shows 'Bus with NGT' a minute slower than the observed times between Belle Isle and the City and predicted journey times for City-bound buses from Bodington in the AM peak would be 31 minutes, which is a minute slower than the current timetabled journey time of 30 minutes

¹⁰⁵⁷ Document C-1-13 Annex B: 2 separate surveys, one in April 2013 observed journey times of 30 minutes (not cited), and the other in March observed times of 33 minutes (cited)

¹⁰⁵⁸ Document OBJ/1719 PoE2: NWLTF Prof Bonsall PoE paragraph A1(ii) and (iii): The March survey used 5 out of 14 observations on Monday mornings (when there are generally longer boarding times) when the highway journey times were to be estimated for Tuesday to Thursday

¹⁰⁵⁹ Document C-1-13 Annex page 7, Mr Smith cross examination: Mr Jones '*no remodelling has been done on the basis of 10 miles per hour?*' Mr Smith-'*I don't believe so.*'

¹⁰⁶⁰ Document OBJ 1719 NWLTF/122 paragraph B6 pages 4 to 5.

¹⁰⁶¹ Mr Hanson cross examination: Removal of the T_h (congestion) factor in the generalised time equation of LTM in January 2014 was justified on the basis that what was relevant was the differential between journey times of bus and NGT

¹⁰⁶² Document OBJ/1719 PoE2: NWLTF Prof Bonsall PoE paragraph A2; Document NWLTF/122 paragraphs B9 to B10: Traffic blocking back from the North Lane/Otley Road junction could stop the Alma Road junction from functioning, or affect the Shaw Lane junction

software at 'upstream' junctions to avoid 'blocking back' at downstream junctions. Thus, the overall forecasts of flows along the A660 have been exaggerated¹⁰⁶³.

- f) No reasoning, modelling or specific examples have been given to justify the generalised assertion made that junction layout changes would benefit buses.
- g) Late bus priority at all relevant junctions would be at a lower level than exists at the moment and those that would have priority have not been identified¹⁰⁶⁴. Therefore, late-running buses would potentially cause greater 'bunching' of buses and more delayed services.
- h) The combined length of bus lanes and 'bus plus NGT' lanes would be 109m longer than the length of the existing bus lanes in the southern part of the corridor, and 1026m in the northern part of the corridor¹⁰⁶⁵. While there could potentially be some marginal benefits from the greater segregation from motor cars in the northern stretch, buses would still have to negotiate the North Lane junction, which is the major congestion hotspot on the corridor.
- i) Buses would not get the signal priority that NGT would get¹⁰⁶⁶ and no modelling has been done of where and when buses would come into conflict with NGT at signal junctions, or how that would affect the punctuality or reliability of buses¹⁰⁶⁷.
- j) Buses would have to share 'bus plus NGT' lanes with the trolley vehicles, which could result in buses being slowed down by trolley vehicles having to stop and move off in front of them due to there being no lay-bys or due

¹⁰⁶³ Document OBJ 1719 NWLTF/122 paragraph B10.

¹⁰⁶⁴ Mr Robertson cross-examination: Late bus priority *'is something we will do when we implement the system. It depends on capacity, how many buses there are...proximity of bus stops to signals'*

¹⁰⁶⁵ Document APP/120: PI Note – Northbound and Southbound Bus Lane Provision on A660 (22 May 2014), pages 2 to 3

¹⁰⁶⁶ Document C-1-13 paragraph 2.26: 'it has been assumed that buses will not receive the same high degree of prioritisation through the SPRUCE system as NGT vehicles at traffic signal controlled junctions. This assumption reflects the practical limit on the number of public transport vehicles that can be given a high degree of priority through a junction...' and Table 3.3 on pages 19 to 20: 'no prioritisation for buses'

¹⁰⁶⁷ Mr Robertson cross-examination

to the OLE, particularly if the power infrastructure failed or wires came down in adverse weather¹⁰⁶⁸.

k) The policing of TROs' to prevent cars from parking in the bus lanes at any time would not be effective¹⁰⁶⁹.

6.255 FWY intends to continue to compete on the NGT corridor¹⁰⁷⁰. It would be able to do so by increasing the speed of services (through the introduction of express services and/or faster boarding times), altering its fares and ticketing structure, increasing frequency, improving the quality of its services through enhancements to vehicles or staff training, or any combination of these. FWY has ample financial provision to support this position and has recently demonstrated that it is prepared to forego short term profits to protect and grow its customer base for the long term, has a history of competing actively for business elsewhere¹⁰⁷¹, has long experience in operating commercial buses, and has a detailed knowledge of its customers' usage patterns and fares paid.

6.256 The response by First Group to an investigation into competition and barriers to entry in relation to operators within the bus market¹⁰⁷² confirms that FWY would be prepared to compete on the profitable A660 route. FWY did not choose not to compete on the Leeds-Bradford Airport route but was prevented from doing so¹⁰⁷³.

6.257 If FWY actively competed with NGT by increasing frequency, bus customers living directly on the central stretch of the A660 could experience a benefit in

¹⁰⁶⁸ Mr Smith cross examination: *'Delay to NGT will delay other buses following it as well...there may be occasions where buses do have to wait behind an NGT at a stop'*

¹⁰⁶⁹ Document OBJ 1719 NWLTF/122 paragraph C5 pages 39 to 40: the Promoters have assumed for the purpose of their run-times that the TROs will not improve journey times as against the DM case

¹⁰⁷⁰ Mr Alexander Evidence in Chief

¹⁰⁷¹ Mr Alexander Evidence in Chief: he is not aware of a market that First operates in within the UK where it does not compete vigorously, for example Sheffield where First and Stagecoach compete with the tram (also now operated by Stagecoach)

¹⁰⁷² Document APP/109 paragraph 28: *'when FirstGroup made a change to its services, whether in response to competition or not, it would expect to maintain that change over the medium term so it could determine whether or not it was a good move. FirstGroup tended to take a strategic approach to competition and did not engage in short-term tactics'*

the short to medium term, but NGT would be unsustainable without significant public subsidy. The extent of the public subsidy is not known as no sensitivity testing for such a scenario has been done. If the Promoters were not prepared to subsidise NGT, the long-term result would be that NGT would close.

6.258 NGT would directly impact upon the overlapping bus routes through abstraction of bus passengers and increasing road traffic congestion¹⁰⁷⁴. Although the Promoters have assumed that FWY would surrender its most profitable routes, it would make economic sense to continue them by cutting more marginal services, such as the Nos 28 and 97 and the night-time services, which would put those services at risk. If these services had to reduce frequency or close because of a loss of revenue on route Nos 1 and 6, many current customers would be left with reduced or no bus services in the Weetwood Lane, Adel, Horsforth and Guiseley areas of the City¹⁰⁷⁵. There is *'not a viable route'* to *'places like Adel and Tinshill where the route depends on the corridor'*¹⁰⁷⁶. The walk to an NGT stop would be 15 to 20 minutes¹⁰⁷⁷, which would be an unacceptable reduction in accessibility for affected residents and those residents who would be able to do so would turn to private cars instead.

6.259 There is no evidence to show that another operator would step in to run the routes whose viability was threatened:

- a) The TAS Report showing approximate target average annual operating profits before tax and interest returns of 14% would provide shareholders with typically just 14% of it¹⁰⁷⁸.

¹⁰⁷³ Mr Alexander Evidence in Chief

¹⁰⁷⁴ Document C-1: Business Case Review paragraph 13.27 page 13-4- *'In response to revenue abstraction... the existing bus network will be rationalised and...bus operators will partially offset the impact by reducing their Operating Costs'*

¹⁰⁷⁵ Document OBJ/923/01: MrCheek PoE paragraph 14.5: services 97 and 28 would be at risk

¹⁰⁷⁶ Mr Turner cross-examination

¹⁰⁷⁷ Mr Farrington cross examination

¹⁰⁷⁸ Document G-4-82 pages 83 to 85 and 88.

- b) No evidence has been adduced about expected target returns for investors in the bus market in 2014, or in the future.
- c) The gross profits figure is a misleading indicator of overall profitability as it fails to account for fixed costs or pension obligations¹⁰⁷⁹.
- d) The 2012/13 financial year profit margin had halved from the previous year to 9.8% and in absolute terms from £25 million to £12 million, and the audited but unpublished management accounting figures for the 2013/14 year show about a 10.5% margin¹⁰⁸⁰.
- e) FWY's profit margins do not give the viability of individual routes if patronage falls.
- f) Operators target a return across a network as a whole. If the more profitable routes are weakened, that weakens the case for investing in the others and disrupts the 'cascading' of new vehicles onto the less profitable routes.

6.260 According to the predictions of the Promoters' business plan and transport modelling, reduction in bus patronage on the most profitable bus routes in Leeds would reduce the net revenues available for FWY and other bus operators to reinvest in Leeds buses by around £267 million in 2010 present value terms over the life of the NGT¹⁰⁸¹. Based on this, FWY would probably reduce its investment in new and existing buses, and axe marginal bus routes, and NGT could result in a net reduction in public transport investment.

6.261 If bus operators stopped or cut back services by more than predicted by the Promoters, NGT would only run 10 times per hour and would not run after midnight. The corridor could be left with a lower combined frequency of NGT and bus vehicles, no, or reduced night-time services, as well as reduced services on other routes such as the Nos 28 and 97. Overall public transport provision would decline¹⁰⁸². NGT would have no capacity to increase

¹⁰⁷⁹ Mr Cheek cross-examination

¹⁰⁸⁰ Mr Alexander Evidence in Chief; Document REB-2 OBJ/923: Rebuttal to Mr Turner page 20

¹⁰⁸¹ Document C-1 Table 13.2 page 13-5

¹⁰⁸² Document OBJ 923 FWY/114: Currently the buses can take 1757 passengers hourly in each direction during the daytime, compared with between 1200 and 1600 per hour with NGT (assuming 10 vehicles with a passenger capacity of between 120 and 160). NGT would

frequency to make up the shortfall without detriment to run times¹⁰⁸³, and without purchasing additional vehicles, at 3 times the cost of a bus¹⁰⁸⁴.

- 6.262 At each junction along the corridor, there would be at least 20 movements of trolley vehicles per hour (22 at peak hours). A considerable number of high frequency bus services cross the corridor at these junctions. They would be expected to suffer delays if their movement was impeded by the prioritisation of the trolley vehicles, and/or by additional general traffic congestion resulting from the segregation of the NGT, narrowing of the highway space left for additional traffic on the A660, rat-running and re-routing of traffic by TROs. The affected services would be route Nos 2, 3/3A, 4/4A, 5, 12,13/13A, 16/16A, 19/19A, 42, 48, 49, 50/50A, 51/52, 56, 62/62A, 64 (cross-city services); 7/ 7A/7S/ X7, 55, 72, 508, 670/1, 760, X14 and X98/9, which would be affected in the City Centre either at City Square, Boar Lane or the Headrow; as well as the 74, 84, 87, 110, 167, 168, 189, 410, 444 and 446, which would interact with the NGT in the south of the City¹⁰⁸⁵. The model did not set out to model individual bus routes¹⁰⁸⁶.
- 6.263 Overall, journeys of 59% of passengers on 12 bus routes (a total of 7.3 million passenger journeys per annum) would be at substantial risk of being made less frequent, slower and more expensive¹⁰⁸⁷. Door-to-door journey times, summed across all modes of transport, would increase slightly with the introduction of NGT compared to a DM scenario¹⁰⁸⁸.
- 6.264 With regard to the impact of NGT on pedestrians and cyclists, there would not be a fully segregated cycle lane along the length of the Scheme. This would

therefore only increase public transport capacity if buses ran alongside it

¹⁰⁸³ Document C-1-13 paragraph 2.26 and Mr Robertson cross examination: *'in the vast majority of cases, it would be the trolleybus that would suffer delay if we were upping the number of trolleybuses'*

¹⁰⁸⁴ Document OBJ/923/01: Mr Cheek PoE paragraph 9.6(a)

¹⁰⁸⁵ Document OBJ/923 SOC: FWY Statement of Case Appendix 2 pages 35 to 42 and Figures C and D, Appendices 4 and 5 schedules and a map

¹⁰⁸⁶ Mr Hanson evidence: *'there are uncertainties for individual routes which reflect the accuracy of the model'*

¹⁰⁸⁷ Document OBJ/923/01: Mr Cheek PoE paragraph 9.5

¹⁰⁸⁸ Document APP/103A: Answer to Question 9 page 7: Door to door journey times would

cause danger to cyclists¹⁰⁸⁹ through conflict near Windsor House over Bridge End¹⁰⁹⁰, Portland Gate and Portland Crescent¹⁰⁹¹, the University Engineering Faculty¹⁰⁹², near the western corner of the Ring Road, West Park and Otley Road¹⁰⁹³. The removal of safety barriers at locations such as Hyde Park Corner is predicted to increase accidents. The Promoters' Business Case in 2012 forecast that of 14.91 million annual passengers on the trolley vehicle system, 10.67 million would have transferred from existing bus routes and 0.99 million would have transferred from active modes such as walking and cycling. Thus, NGT would actually be less healthy and shift people from active travel.

Matter 8: The likely impacts of the Scheme on ecological interests

6.265 With regard to the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines¹⁰⁹⁴, many basic matters have not been assessed, including the potential for birds or bats to be affected by the electric cables through electrocution when flying into or perching on the cables, and the potential for ultra violet light to be emitted and affect bats. Furthermore, the Promoters' noise assessment showing predicted increases in noise levels leads to the conclusion that '*Undoubtedly construction noise will have some effect on birds*'¹⁰⁹⁵.

increase from 769,750 person hours to 769,866 person hours

¹⁰⁸⁹ OBJ 573 Mr Broadbent evidence

¹⁰⁹⁰ Document A-11 Drawing No 312694/TD/030

¹⁰⁹¹ Document A-11 Drawing No 312694/TD/027

¹⁰⁹² Document A-11 Drawing No 312694/TD/023

¹⁰⁹³ Document A-11 Drawing No 312694/TD/010

¹⁰⁹⁴ Document G-4-3, paragraph 6.5 page 49: '*The competent authority must obtain all the information needed to assess and evaluate the likely significant environmental effects of a project before it reaches its decision regarding the grant of consent. For EIA development, it has been confirmed in a recent judgement ...that the competent authority cannot adopt a 'wait and see' approach or impose a condition requesting further work to identify the likely environmental impacts after permission has been granted. It is therefore crucial that all information relevant to describing likely significant ecological impacts is collected prior to the submission of an ES.*'

¹⁰⁹⁵ Documents APP-13-2 and APP-13-3: Mr Forni PoE and Appendices

- 6.266 In relation to birds, although no bird nests were noted in the Phase 1 survey, it was done late in the season in 2009¹⁰⁹⁶ and the purpose of such a survey is to identify the types of habitat present, not specifically to look for bird nests or to spot birds. The survey notes that birds could potentially have nested anywhere along the route. The ES Technical Appendix states that '*an assessment of suitable habitat prior to the commencement of the works will be required*'¹⁰⁹⁷. This does not comply with CIEEM guidance.
- 6.267 There was also non-compliance with the CIEEM guidance in relation to bats¹⁰⁹⁸. Pipistrelle bats are recognised by the Habitats Directive because they are threatened at European level and the UK has a large and significant population of them¹⁰⁹⁹. They should therefore have been judged to be sensitive receptors, but the ES assessed the bats as being of 'local value'¹¹⁰⁰ and, using WebTAG, the effect as 'minor'¹¹⁰¹. Given the information that the Promoters have provided, it is not possible to say how many bats would be affected by the NGT project, as there were inadequate surveys done to determine precisely which roosts were regularly used. Therefore, there would be likely to be many more bats than the 12 pipistrelle bats actually found to be roosting in specific buildings.
- 6.268 The Promoters have identified a 'moderate adverse impact' at construction phase with loss of the habitats¹¹⁰², when over 400 mature trees would be cut down and many more would need to be trimmed or pruned to prevent them interfering with OLE cables. There would also be loss of sports pitches, the current habitat on the off-road section at Headingley and at the park and ride sites. In addition, brighter lighting of the new NGT stops, the illumination and

¹⁰⁹⁶ Document A-08d paragraph 3.44 page 37 Technical Appendix D

¹⁰⁹⁷ Document A-08d paragraph 3.44 page 37 Technical Appendix D

¹⁰⁹⁸ Document G-4-3 paragraphs 3.7 (defined geographical context), 3.32 (consider distribution and status of species) and 3.34 (higher level of importance assigned to rare or declining species)

¹⁰⁹⁹ Document APP-12-3: Prof Purseglove PoE Appendix 2

¹¹⁰⁰ Document A-08b: ES Main Statement Chapter 7 paragraph 7.56 page 82 and paragraph 7.73 page 84

¹¹⁰¹ Document A-08d: Technical Appendix D Table 2.2 page 12

¹¹⁰² Document APP-12-2: Prof Purseglove PoE page 28

noise of the trolley vehicles, potential electrocution from the OLE and ultra violet light would all affect bats. There are no details about lighting in the current plans and no assessment has been made of the numbers of bats that are supported by the habitats that would be lost, nor the carrying capacity of those other habitats and how many bats they already support. Accordingly, NE's professed belief that the population would be sustained lacks evidential foundation¹¹⁰³.

6.269 Cumulatively, on a precautionary basis, it is safe to assume that there would be at least a moderate adverse disturbance effect on a significant population of bats, which is of more than local significance applying CIEEM guidance.

6.270 The mitigation given for the ecological impact would include new lighting, planting and habitat creation measures¹¹⁰⁴. However, the habitat creation measures would not be 'mitigation' (harm-reduction measures), but 'compensation' (making up for lost habitat with new)¹¹⁰⁵. Due to the uncertainty associated with the success of proposed mitigation (and particularly compensation) measures, evidence should be provided of the effectiveness of recommended mitigation, compensation and enhancement measures and to what extent their success could be guaranteed.

6.271 The Stourton Park and Ride site would be compensated for by an area planted with trees, which would be a different habitat. Bat boxes would replace warm, internal, spacious roof voids and the 'pocket park' at Headingley Hill would be concentrated in one area rather than forming a corridor. It would not be like-for-like compensation for loss of trees and neutral grassland and there is no evidence that the bats which used the new park and ride sites some distance away at Stourton and Bodington would use this new site, or that its relatively

¹¹⁰³ Natural England have worked solely from the information provided by the Promoters

¹¹⁰⁴ To make up for lost tree habitat and roosts, it is proposed to plant new trees, create a new meadow area at Headingley Hill and install bat and bird boxes

¹¹⁰⁵ Document G-4-3: CIEEM's guidance page 30 and pages 55 to 56: establishes a hierarchy of avoidance, mitigation and compensation, with compensation being a last resort, and what is proposed in terms of habitat-creation is 'compensation' not 'mitigation'; NPPF, paragraph 118 first bullet and Case C-521/12, *TC Briels v Minister van Infrastructuur en Milieu* at [31]-[34] Article 6: habitat creation measures are not 'mitigation'

small area (about 0.5ha) would make up for what has been lost. Also, no budget or management plan for tree care and irrigation have been presented¹¹⁰⁶, given that a high proportion of trees die within 10 years of planting¹¹⁰⁷ and that the new trees would take about 15 years before they would replace the mature trees that had been lost in terms of function¹¹⁰⁸. This would be too late for many generations of bats or small birds which would be likely to suffer declines in population in the meantime.

- 6.272 No evidence was presented in the ES about the degree of confidence that the new measures would be effective in compensating for the lost habitat, or that there would not be permanent or temporary population decline of protected species. No specific evidence has been given of any other similar project where robust monitoring had found that new planting had compensated fully for harm to bats¹¹⁰⁹. Given that no reliable baseline in terms of numbers of bats currently living and foraging along the NGT corridor has been established, it would be impossible to monitor whether the proposed measures had been effective. The Promoters have not put forward any alternative suite of measures that could be used as a 'fall back' position if it were found that bats had declined.

Matter 9: The measures proposed by the Promoters for mitigating any adverse impacts of the Scheme

- 6.273 The new tree planting in a 3 to 1 ratio to make up for trees that would be lost, has been presented as 'mitigation' but would be 'compensation', as it would not reduce the number of trees felled in the works. With no detailed planting

¹¹⁰⁶ Document APP-12-2: Prof Purseglove PoE paragraph 9.8: new planting would be managed with a CEMP plan but this has not yet been drafted and would need to be secured before the Order was made, if it was to be relied upon as a compensatory measure

¹¹⁰⁷ OBJ 1727 DCRA Mrs Pickering evidence

¹¹⁰⁸ Prof Purseglove evidence

¹¹⁰⁹ Document G-4-3: CIEEM guidance paragraphs 5.8 to 5.9: *'it is good practice to monitor the success of mitigation or compensation measures that are proposed as part of an EIA, and to remedy the situation should any of the implemented measures fail (eg due to lack of management)...Follow-up and monitoring is more likely to take place if it is built into legal agreements or planning conditions. Ideally, measurable objectives, which set the trigger thresholds for remedial management action, should be agreed'*

and tree maintenance plans at this stage, the mitigation cannot be relied upon to actually deliver 3 trees for every 1 tree lost, or for specimen trees to be compensated for effectively.

- 6.274 With regard to noise, the Promoters have treated use of '*best practicable means*' to reduce noise as 'mitigation'¹¹¹⁰. However, '*best practicable means*' is a defence to nuisance proceedings which applies only after it has been established that there was a nuisance, if the defendant can prove that he could not reasonably have been quieter.
- 6.275 In terms of electromagnetic interference, following the work done to identify sensitive machinery at the University of Leeds¹¹¹¹, a document was produced setting out potential mitigation measures¹¹¹². However, the Promoters have not committed to implementing any particular mitigation measure at this point in time and the amount of disruption to sensitive measuring equipment at the University is unknown. None of the mitigation options have been shown to work or to be compatible with the Promoters' business case¹¹¹³ and there is no evidence that such measures would be practical.
- 6.276 The options for '*Mitigation at Source*', include '*Increase the traction voltage*', when 750V is considered by the Promoters to be generally accepted internationally as the standard for street running LRT and trolleybus systems and anything else would require approval by the Office of the Rail Regulator, and '*the vehicle mounted equipment is likely to be the bigger issue*'¹¹¹⁴. No assessment has been carried out of the impacts on costs, reliability and passenger capacity in terms of the overall operational and business case.

¹¹¹⁰ Document APP-13-3: Mr Forni PoE Appendix 1 Table 4.1 'mitigation' column

¹¹¹¹ Document A-08c-5 paragraph 5.7

¹¹¹² Document APP-14-2: Mr Webb PoE paragraph 4.17 gives summary of mitigation measures; and Document G-4-35 page ii: the intention is to set out a potential range of the necessary mitigation measures, and that '*further investigation would then be required during future phases of design when specifics related to the vehicles, OCS design, traction power design and alignment have been finalised and individual components have been selected*'

¹¹¹³ Document G-4-35 Table 2.1 page 4: '*Mitigation at Victim, Shielded room*' option '*requires detailed modelling to establish viable design parameters*' page 5: in respect of the '*Mitigation at Victim, Shield at Equipment*' option, '*the equipment needs to be fully enclosed for this to be effective which may be incompatible with the practicalities of operating the equipment*'

With respect to the option under '*Automatic reduction in traction current demand from vehicles*', the Promoters state that '*it is estimated that costs of £10-20k/vehicle would be associated with equipment to automatically limit traction demand*'¹¹¹⁵. There is no evidence of any assessment on what that would do to leasing costs.

- 6.277 With regard to a contact-free solution, the Promoters have stated that it '*would need further consideration*'¹¹¹⁶, including substation locations, which would impact on landscape and heritage parts of the Scheme. This conflicts with the Promoters' case that a trolley vehicle is the optimum solution and that wires are desirable to provide 'permanence'¹¹¹⁷. The use of no overhead contact on the University section of route would involve fitting more equipment to the NGT vehicles, which would increase the weight and could reduce floor space and hence passenger capacity of the trolley vehicles. The suggested '*Hybrid system with batteries and/or supercapacitors on the trolleybus vehicles*' would not be a measure to reduce electromagnetic effect below that assessed if those features have already been allowed for and could not be duplicated. They should therefore not have been included as a mitigation option or, if they had not been allowed for, the increased costs would need to be considered in the Business Case if that option were adopted.
- 6.278 The suggestion for a '*Hybrid system with an internal combustion (fuel) engine*'¹¹¹⁸ conflicts with the Promoters' case that they do not consider diesel engines in the trolley vehicles to be suitable for the Scheme¹¹¹⁹. No impact assessment has been carried out on the use of diesel propulsion along the route in terms of the environmental impacts that this would cause and the Business Case for the Scheme.

¹¹¹⁴ Document G-4-35 Table 2.1 page 6

¹¹¹⁵ Document G-4-35 Table 2.1 page 9

¹¹¹⁶ Document G-4-35 second paragraph page 10

¹¹¹⁷ Document C-1-12

¹¹¹⁸ Document G-4-35 Table 2.3 page 11

¹¹¹⁹ For example Document C-1 paragraph 15.73 page 15-10

6.279 Of the shortlisted options¹¹²⁰, only physically moving the laboratories would even have 'potential' to mitigate against DC and RF interference¹¹²¹ and there is no evidence before the Inquiry as to where these would relocate to, what the cost would be or how feasible this would be. Contact-free power would apparently work for DC/low frequency interference, but that is not what has been proposed and budgeted for. If the Promoters wanted a contact-free solution then they would have to use a bus rather than a trolley vehicle as the vehicle of choice. Active cancellation might work for DC interference but could affect other equipment itself and would be costly (cost unknown)¹¹²². Only shielding or relocating the equipment would have 'potential' to protect it from RF frequencies and the practicalities of doing so have not been explored.

Matter 10: The adequacy of the Environmental Statement (ES) submitted with the application for the TWA Order

6.280 An ES must include *'the data required to identify and assess the main effects which the project is likely to have on the environment'*¹¹²³; and in particular, but not only, cover the effects listed in Annex IV. It must include a description of *'the physical characteristics of the whole project'* and of *'the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors'*¹¹²⁴. It also has to cover both direct and indirect *'secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project'*.

¹¹²⁰ Document G-4-35 Table 3.1

¹¹²¹ Document G-4-35 Table 3.1 page 13 Summary of mitigation options recommended for further consideration to protect the University's equipment: shows a 'No' and a question-mark against the potential to mitigate against RF and DC radiation

¹¹²² Document G-4-35 Table 2.2

¹¹²³ Document OBJ 923 FWY/162 Tab 2: Directive 2011/92/EU Article 5

¹¹²⁴ Document OBJ 923 FWY/162 Tab 2: Directive 2011/92/EU Annex IV paragraph 3 referred to in Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2000 Rule 11 and Schedule 1

6.281 If an application or ES is too vague, the decision cannot lawfully be taken¹¹²⁵ because it would be taken without the decision-maker having taken reasonable steps to acquaint himself with the subject-matter of the decision¹¹²⁶. An assessment must be made using reliable and up-to-date data in order to comply with the Habitats, Birds and EIA directives and be based on the best available scientific information¹¹²⁷. There has been no updated and reliable information on emissions, birds or bats in particular. An environmental assessment must be made '*at the earliest possible stage*', for all impacts which are identifiable (can reasonably be anticipated as being likely to occur) at the time of the application. Unless the facts change later or something has in good faith been overlooked, it is not permissible later on to leave assessment for approval of details or 'reserved matters' that are within the scope of an 'outline' planning permission¹¹²⁸. It was unlawful to fail to properly assess the impacts on visual amenity, air pollution, bats, birds and heritage interests.

6.282 The following are additional failings of the ES:

- a) Failure to assess the impacts of street works outside the Order limits, including to run utilities between Northern Area Power substations and NGT substations, which are permitted by the draft Order and would be part of the Scheme¹¹²⁹, even though no plans have been provided.
- b) Failure to assess works taking place in the River Aire, for which the application seeks permission via the draft Order.

¹¹²⁵ For example Document OBJ 923 FWY/163 Tab 32: Case *R v Rochdale BC ex parte Milne* (no 1) [2000] Env L.R. 1 at 13-31

¹¹²⁶ Case *Secretary of State for Education and Science v Tameside Metropolitan Borough Council* [1977] AC 1014 at 1065B; and Document OBJ 923 FWY/163 Tab 32: Case *ex parte Milne* page 14 Mr Justice Sullivan stated '*for example in Conservation Areas, a great deal of detail will be required*'

¹¹²⁷ For example Case C-43/10 *Nomarchiaki Aftodioikisi Aitolokarnanias* at [AG138-AG144] and [106]-[117] in relation to bird species

¹¹²⁸ An example where it was permissible Document OBJ 923 FWY/163 Tab 33: Case *R (Buglife) v Medway DC* [2011] EWHC 746 [2011] 3 CMLR 39 at [46], [50]-[51], [76]-[78], [85] where what was at issue was a mosaic of habitats that were in a rapid state of constant change and where accordingly it was not possible to predict effects at the earliest stage

¹¹²⁹ Document A-01-4: Draft Order Article 4(8)

- c) Failure to assess the impacts of diverting the NGT routes as contemplated by the draft Order¹¹³⁰.
- d) Failure to assess the impacts of altering traffic regulations¹¹³¹, and layouts of streets¹¹³² beyond those changes in the schedules and plans, for which powers have been sought.
- e) Failure to assess the construction impacts of the proposal in terms of traffic modelling and impacts upon bus routes.
- f) Failure to assess the operational impacts on the bus network in any meaningful way.
- g) Failure to assess the impacts that would arise from the decommissioning phase of the Scheme in accordance with the draft Order¹¹³³.
- h) Failure to assess the changes to the proposals made in March 2014.

Matter 11: The conditions proposed to be attached to deemed planning permission for the Scheme

6.283 With regard to the adequacy of the proposed planning conditions which have gone through several iterations, on matters of detail, the following principles should be noted:

- a) Tailpieces that give the planning authority discretion to waive or vary conditions are unlawful¹¹³⁴.
- b) Planning conditions that are intended to be conditions precedent (ie for works not to start unless and until they are complied with) must be phrased '*No development shall commence unless and until...*', rather than '*Prior to commencement...*'¹¹³⁵.

¹¹³⁰ Document A-01-4: Draft Order Articles 4(8) and 21

¹¹³¹ Document A-01-4: Draft Order Article 41(2)

¹¹³² Document A-01-4: Draft Order Article 6

¹¹³³ Document A-01-4: Draft Order Article 14

¹¹³⁴ Document OBJ 923 FWY/162 Tab 27: Case *R (Halebank BC) v Halton* [2012] EWHC 1889 (Admin); [2013] JPL 56 (QB) (Admin)) at [95]-[102]

¹¹³⁵ Document OBJ 923 FWY/162 Tab 25: Case *Bedford Borough Council v SSCLG* [2008] EWHC 2304 [2009] JPL 604 at [25]-[26] and [47]

Matter 12: Whether the Scheme is reasonably capable of attracting the necessary funding, having regard to the Promoters' Business Case Review

- 6.284 While the proposed Scheme does have conditional funding from the DfT, the TWA Order submitted by the Promoters in September 2013 was for a scheme and business case that was different from the one that was given Programme Entry approval by the DfT in 2012, and the justification is materially different from the one originally approved by the DfT¹¹³⁶.
- 6.285 There would be increased emissions and street noise together with a predicted reduction in active modes of travel, which would translate into higher morbidity and mortality. This has not been quantified in economic terms. A parade of shops would be demolished at Hyde Park Corner, resulting in a loss of economic activity there. The ambience that attracts custom to restaurants at Far Headingley and the café LS6, amongst other businesses, would be damaged¹¹³⁷. The harm to the streetscape and amenity of the City has not been appraised in socio-economic terms. There would be reductions in accessibility to services in many parts of Leeds through reduced bus services, relocated bus stops, alterations to traffic flows and pedestrian crossings. There would also be injuries and fatalities from increased accidents which were not considered in the socio-economic section of the ES but were considered as a negative effect by the Business Case Review¹¹³⁸. Impacts on the environment and public health also affect the socio-economic wellbeing of the community in terms of reduced output and diversion of resources eg caring for the affected people or installing mitigation measures.
- 6.286 The Business Case does not include the statutory requirement for bus services to be provided in accordance with minimum standards. This has not been considered either during the construction phases of NGT or its ultimate operation, and furthermore no consideration has been given to the potential costs associated with the additional significant bus resource deployment

¹¹³⁶ Document OBJ/923/02: Mr Cheek PoE Appendix 1 paragraph 2.3

¹¹³⁷ OBJ 1641 SHCA Ms Carey-Jones evidence: a shelter would be installed directly interfering with LS6's external tables

required in order to meet these obligations, nor the resulting increased costs of operation and likely erosion of established value for money for both customers and West Yorkshire local authorities.

- 6.287 In terms of the operation of the NGT, it was not designed to relieve congestion¹¹³⁹, and the traffic signal designs and the proposed method of operation for junctions along the NGT route were supposed to be 'congestion-neutral'¹¹⁴⁰. Thus, no attempt is being made to relieve the congestion that is at the root of the traffic problems on the corridor and enhance passenger capacity through either signalling, junction interventions or road widening. Journey times for private motor vehicles are predicted to increase and average speeds would reduce¹¹⁴¹. There would be an increase in costs to businesses attributable to longer travel times and higher operating costs for light and heavy goods vehicles and business cars¹¹⁴². Any gains in speed for LTVS users would come at the expense of failing to alleviate and likely worsen, the congestion problem for the majority of road users, who would on the Promoters' projections still be using other modes including buses, both on¹¹⁴³ and off¹¹⁴⁴ the corridor.
- 6.288 The patronage forecast for the Scheme is seriously overstated, whilst the operating costs are under-stated¹¹⁴⁵. As such, the Scheme has significant risks of running over budget and requiring on-going subsidies. High operating

¹¹³⁸ Document C-1 Business Case Review valued these as a loss of £25 million to the economy

¹¹³⁹ Mr Smith cross-examination Mr Jones QC: *'it's not been designed to relieve road congestion on the A660, correct?' Mr Smith: 'Correct, it's been designed to put in a RTS that will be punctual'*

¹¹⁴⁰ Document APP-6-2: Mr Robertson PoE paragraph 1.3 and cross-examination

¹¹⁴¹ Document C-1-9 paragraph 3.4 and Table 7 pages 10 to 11: show reduced average speed on the highway by 0.3km/h.

¹¹⁴² Document C-1: Business Case Review Table 17.1 page 17-2

¹¹⁴³ Document OBJ/923/03: Mr Turner PoE paragraphs 1.16 and 2.5(b).

¹¹⁴⁴ Document APP/103A Answer 8: Notional 2031 year: no of trips would be 3363 on NGT and 30,212 on other public transport in Leeds, and no of person-kilometres would be 14532 on NGT against 403,445 on other public transport

¹¹⁴⁵ Document OBJ/923/02: Mr Cheek PoE Appendix: TAS report suggesting that costs quoted by the Promoters are understated by some 23%

costs are assumed by the Promoters for NGT compared to the current operating costs for FWY bus services on the corridor¹¹⁴⁶.

6.289 The revenue side of the Business Case depends upon the patronage that would be achieved by the NGT. The patronage has been over-estimated for the following reasons:

- a) The Promoters significantly over-estimated the number of existing bus users who would be liable to switch to NGT¹¹⁴⁷.
- b) There would be suppression of public transport demand resulting from construction work, which would probably recover but not for 5 to 10 years, resulting in a smaller market than assumed¹¹⁴⁸.
- c) The Promoters assumed an unjustified vehicle penalty of 5.5 minutes for bus journeys over NGT journeys¹¹⁴⁹, which was unsupported by any empirical evidence¹¹⁵⁰. Something like 32% of the claimed patronage, revenue and economic benefits in the Business Case Review derive from the mode constant for vehicles¹¹⁵¹. Accordingly, if there was no relative penalty for buses as against NGT, the patronage would be over 30% lower. If there was an equal and opposite penalty applied to trolley vehicles, to reflect perceptions indicated by the SP survey, the patronage would be 60% lower.
- d) Modelling inputs greatly exaggerated the effect of 'quality factors' at stops, such as CCTV or lighting on perceived journey times, 'generalised costs' and 'willingness to pay' for NGT over bus. The SP survey was undertaken in the winter, after an unusual spate of serious crimes and the illustration

¹¹⁴⁶ Document OBJ/923/03: Mr Turner PoE paragraph 8.2

¹¹⁴⁷ Document OBJ/923 SOC: FWY Statement of Case Appendix 2 TAS Report

¹¹⁴⁸ Document OBJ/923 SOC: FWY Statement of Case Appendix 2 TAS Report

¹¹⁴⁹ Mr Turner oral evidence to Inquiry

¹¹⁵⁰ Document C-1-16 Sub Mode Option Report page 38: *'The use of common vehicle platforms and suspension components across sub modes means that ride quality is more likely to be influenced by the infrastructure on which the vehicles are operating than the characteristics of the vehicle itself. We have not identified any significant differences in vehicle-related ride quality between the sub modes under consideration'*

¹¹⁵¹ Document C-1 paragraph 5.17 and Tables 12.4 and 12.6 pages 12-28 to 12-29: the 'Next Best Alternative' where all other things were held constant and a hybrid 18m bus vehicle was represented is forecast to generate 1,779 trips in an average AM peak hour against 2,595 trips on the 'Preferred Option'

used in relation to lighting was of a stop in the hours of darkness. The preference for a shelter could have been influenced by the poorer winter weather. The survey also did not question concessionary pass-holders or those using the service after 0900 hours, and so would have understated the average aversion to standing and crowding¹¹⁵². The SP results were not 'rescaled' to adjust for the well-known tendency of respondents to be enthusiastic about novelties¹¹⁵³. The values used were completely out of line with the values used elsewhere, including the AECOM package prepared for the DfT¹¹⁵⁴.

- e) It has been assumed that buses and bus stops would never improve, and differences in perceived quality would remain constant over the next 60 years¹¹⁵⁵. No allowance has been made for 'quality factors' such as lighting, shelters and real-time information displays improving over time at bus stops¹¹⁵⁶, which would reduce the overall penalty applied compared with NGT stops.
- f) The modelling applied an entirely inappropriate penalty to rail transport, thereby suggesting that rail passengers would switch to NGT even if their journey took 13.6 minutes longer¹¹⁵⁷, which could amount to up to an 11% overstatement of patronage¹¹⁵⁸.

¹¹⁵² Document C-4-24 page 16 (lighting graphic), page 27 paragraphs 5.2 to 5.3: December 2007 and January 2008; paragraph 5.9: not free pass holders, page 31 paragraph 6.9: senior citizens under-represented; Document NWLTF/122 page 11 paragraph B28: serious attacks at bus stops

¹¹⁵³ Document C-4-24 paragraphs 2.8 and 2.10: the Promoters' survey team had stipulated: *'To avoid bias that results from the hypothetical nature of the SP choice situations, the SP-based model should be rescaled once finalised using RP (revealed preference) data.'*

¹¹⁵⁴ Document OBJ 1719 NWLTF/122 paragraphs B17 page 7 and C6 pages 40 to 41

¹¹⁵⁵ Document C-1-16: Sub Mode Option Report paragraph 3.1.6: *'The trends for development of common vehicle platforms with alternative power/fuel options and move towards electric hybrid drivelines for diesel and gas powered vehicles is expected to result in a convergence between the level of ride quality offered by the alternative sub modes under consideration.'*

¹¹⁵⁶ Mr Hanson Evidence in Chief: *'No assumptions that there would be improvements in bus stop facilities is allowed for'*

¹¹⁵⁷ Document OBJ 1719 NWLTF/122 paragraphs C12 page 45 to 46 and D4(c)(i) and (ii) page 59

¹¹⁵⁸ Document OBJ/923/01: Mr Cheek PoE paragraphs 2.3.6 and 4.3.6

- g) The fares assumed for NGT are now about 25% to 30% higher than typical FWY bus fares, and would have no 'short hop' fare so they would be unattractive compared with bus fares¹¹⁵⁹.
- h) The forecasts rely upon unrealistic assumptions as to improvements to run-times and punctuality along the NGT corridor, which make no realistic allowance for bunching of vehicles and how long it takes for passengers to board and alight from vehicles at stops.
- i) The impact on the willingness to travel at peak times of it being harder to get a seat with more passengers standing has not been modelled¹¹⁶⁰. Difficulty getting a seat would suppress patronage and willingness to pay to use the service.
- j) No allowance was made for a response by bus operators in terms of changing their fares structure, increasing frequency, operating faster express services, changing routes, or operating new or refurbished vehicles. No sensitivity test was done for a price war with bus operators. The system would be vulnerable for many years to active competition¹¹⁶¹ and there is no contingency fund or political commitment to indefinitely subsidise NGT.
- k) The inadequate number of spare vehicles that are budgeted for would not enable consistent service levels to be maintained at peak times¹¹⁶².
- l) The lack of integration and seamless interchange with buses would make the service unattractive.
- m) The park and ride facilities would not prove convenient.

¹¹⁵⁹ Document C-4-28 page 26 paragraph 4.15: *'the elasticity to public transport fares is high. It implies that a 10% increase in costs will result in a 19% decrease in ridership for commuters, or about 9% decrease for other purposes'*

¹¹⁶⁰ Document E-3-16: WebTAG Unit 3.11.2 paragraphs 5.6.4, 6.4.1 and 6.4.4: modelling of capacity and crowding is required where *'demand...would be constrained'*, or it would be *'likely to have a significant effect on traveller behaviour or where an effect on crowding is one of the objectives of the scheme'*, and recommends applying penalty equivalent to 50% of journey time for crowding

¹¹⁶¹ Mr Henkel in cross examination confirmed that it would not break even until year 8 even if all the Promoters' assumptions were valid; Mr Chadwick in cross examination: *'at some stage the authorities will have to have some contingencies in place...particularly in the delicate period of revenue build up which is difficult to build up a forecast for.'*

¹¹⁶² Document OBJ/923/13: Mr Turner Rebuttal PoE paragraph 5.5 and Document OBJ/923/03: Mr Turner PoE paragraph 3.5

- n) The specification of the model was flawed, including the modelling zones and centroid connectors; and the model has inherent limitations such as using average walking distances and wait times within zones and supposing even distributions of those, making no allowance for periodicity, unreliably predicting the extent of traffic congestion problems at any individual junction across or close to the NGT route, and not being able to account for travel within its zones¹¹⁶³. The model was validated against only 4 surveys on the corridor done in 2008 which may not have been representative even at that time¹¹⁶⁴, and has not been updated since¹¹⁶⁵. Its public transport passenger predictions were validated against a single-day count at each validation location¹¹⁶⁶. There is no evidence as to the reliability of the LTM and the confidence intervals have not been worked out¹¹⁶⁷. The cumulative result of the deficiencies in the model is to exaggerate the attractiveness of NGT.

6.290 The Supertram scheme had its funding withdrawn '*because of excessive cost increases*'. Approval in 2001 was based on an estimated cost of £355 million which had spiralled to over £500 million by July 2004. While efforts were then made to cut costs, the DfT considered that costs '*nearly 40% higher than originally planned*' were unaffordable¹¹⁶⁸.

6.291 There is clear potential for the construction costs to rise and to take the BCR down, and to require further local funding. In particular:

- a) The allowance for inflation is only 11% of the capital budget, allowing for limited scope for delays to the construction programme (or for higher

¹¹⁶³ Document C-1-3 paragraph 3.3: The validation criterion for the public transport model was as follows: '*For corridors where flows exceed 150 passengers, the test is that modelled flows should be within +/-25% of counts*'

¹¹⁶⁴ Document C-2-9 page 27: WebTAG guidance requires models to be updated if data is more than 6 years old and Mr Hanson in cross examination Mr Jones: 'How do we know this 12 hour count of 2 June 2009 is typical and representative?', Mr Hanson: 'We don't'

¹¹⁶⁵ Mr Hanson in cross examination: At the time of validation, it was observed that the journey times between 0700 and 0800 hours were '*unlikely to be a true representation*'

¹¹⁶⁶ Document C-2-9 page 28

¹¹⁶⁷ Mr Hanson in cross examination: '*I am very near certain that the forecasts I have set out will not happen. There will be a range around them...May be appreciably higher or lower either way*'

inflation). The Inquiry has taken longer than planned and a decision may well not be made until after May 2015. There is no other allowance for risks such as finding below-ground heritage assets, protected species or land contamination, or legal challenges brought, resulting in delays to construction work.

- b) The allowance for 'risk' is only about 10% of the estimated construction costs¹¹⁶⁹.
- c) The Business Case only uses 'P50 costs figures' (figures which the Promoters' modelling predicted have up to a 50% chance of being exceeded)¹¹⁷⁰. No evidence was presented to the Inquiry about the inputs into the costs modelling or the confidence intervals around the costs figures as generated by the Promoters' consultants, particularly when the trolley vehicle capacity has not been specified, the engineering design of the OLE infrastructure has not been done, the Promoters cannot say how many traction poles would be needed, what existing street furniture would be removed etc, and there is no construction programme.
- d) There is evidence that the Promoters have failed to properly consider the costs involved in a number of instances, particularly the Promoters' claim that 66 bus stops could be relocated in their Preferred Option scenario for only £500,000, but that £4.35 million would be required for the construction and upgrading of 58 stops for the LCA¹¹⁷¹; the Promoters have wholly failed to include a realistic figure for the cost of electrical works in a total cost estimate of £5.0 million for 7 substations¹¹⁷² when there are proposed to be 10 substations; and Edinburgh's tram started out costing £315 million and ended up escalating to £1 billion, owing to hand-digging of cables through the centre of Edinburgh¹¹⁷³.

¹¹⁶⁸ Document C-6-1: letter from Derek Twigg

¹¹⁶⁹ Document C-1 page 10-4 Table 10.1: £22 million allowance on top of £199 million

¹¹⁷⁰ Document C-1 page 10-4 paragraph 10.12

¹¹⁷¹ Document APP/103A Answer 7

¹¹⁷² Document C-2-19 second page and OBJ 617 Mr Geapin evidence

¹¹⁷³ Mr Geapin Evidence in Chief: The Promoters' calculations were that they would need to lay 44km of cables to connect NGT substations to Northern Area Power substations, at a significant cost. Trenches would have to be excavated by hand at a cost of at least £110 per

6.292 The operating costs are understated¹¹⁷⁴. There are also the following risks with the way that the operation of the NGT is to be structured:

- a) The service is to be run by an operator who is to be paid a fixed rate to operate it but the financial risk is to be borne by the taxpayer. With no financial incentive to operate the service to deliver most profit to the owners, there would be no reason for the operator to manage it effectively in the best interests of taxpayers and there would be nothing to stop the operator running its own bus services in competition with the NGT.
- b) The vehicles are to be leased from a company¹¹⁷⁵, which would also maintain them when the operator, who would have to run the trolley services, would have the biggest incentive to keep the vehicles in good repair. The result is that the overall projected cost to taxpayers would increase substantially for no real benefit over purchasing the vehicles and contracting a specialist firm to maintain them¹¹⁷⁶.

6.293 No scenario-testing has been done to indicate what would happen to the predicted financial surplus if multiple assumptions made by the Promoters were incorrect. For instance, no test has been done applying the inverse mode specific constant (or no mode specific constant) to buses and trolley vehicles, no penalty to rail compared with NGT, 25% lower bus fares than NGT

metre (approximately £4.8 million in total) for the labour. The National Grid have written to Mr Geapin to state that 'careful hand-digging...must be carried out' as a trial along the whole route as cable depths are not generally shown in their records. The Promoters would be responsible to repair any damaged utilities. The trenches that are dug would have to be lined with plywood reinforcement, at further cost. The cables would then need to be tiled over at a cost of about £1.3 million, and then backfilled (at still further cost). None of the National Area Power substations have spare circuit breakers and the Promoters would have to supply spare breakers to the substations, which would have to be added. The Promoters' drawings do not show water mains, gas mains and telephone cables so it is not known what the extent of relocation works would be. That would be in addition to the cost of actually constructing and fitting out the NGT substations

¹¹⁷⁴ Mr Cheek Evidence in Chief: operating costs were understated by around 20% since in reality additional staff would be needed for revenue protection

¹¹⁷⁵ Leased in order to keep the initial capital expenditure within the capital budget of £250 million because an additional £13 million would take the scheme outside the £250 million envelope but the £54.7 million cost of the lease counts as an 'operating' cost

¹¹⁷⁶ Document C-1 Table 13.2 page 13-5 gives difference between the costs of the leasing company and its public sector grant (i.e. its profit) as £33 million with total grant as £110 million. Some of this would be in respect of maintenance.

fares, and 20% higher operating costs. In these tests the Business Case would fail¹¹⁷⁷.

- 6.294 About half of the claimed 'generalised journey time savings' in the economic case are directly accounted for by the 'quality factors'¹¹⁷⁸. The Business Case failed to produce monetised estimates of many of the negative externalities¹¹⁷⁹, contrary to WebTAG guidance¹¹⁸⁰. In particular, the following were not included as monetised costs:
- a) Construction-phase impacts.
 - b) Adverse landscape impact¹¹⁸¹.
 - c) Noise impacts.
 - d) Impacts on air quality.
 - e) Health impacts of reduced use of active modes¹¹⁸².
 - f) Dismantling phase impacts.
- 6.295 While impacts on biodiversity and townscape/heritage are not required to be monetised by the WebTAG Guidance, they also need to be taken into account. Since the 2012 Business Case and the Business Case Review, it has come to light at the Inquiry that impacts on heritage, townscape, air quality, greenhouse gas emissions and ecology were more negative than had previously been claimed on behalf of the Promoters. This will affect the Treasury's calculation of the value for money of the Scheme.
- 6.296 In the light of the above, the Promoters cannot rely upon approval of the 2012 Business Case submission as evidence that there is a real likelihood that the DfT will fund the Scheme, as the DfT were not aware of, and/or were misled

¹¹⁷⁷ Mr Chadwick evidence: acknowledged that the extent of contingency needed to subsidise the Scheme was 'relevant to the viability of the whole project'

¹¹⁷⁸ Document C-1 paragraph 197

¹¹⁷⁹ Document C-1 Table 17.4 page 17-5

¹¹⁸⁰ Document OBJ 1719 NWLTF/122 page 49: DfT Advice Note on Value for Money Assessment for Local Transport Decision-Makers

¹¹⁸¹ Document OBJ 1719 NWLTF/122 pages.48 to 49: estimated between £98 million to £141 million

¹¹⁸² Document OBJ 1719 NWLTF/122 page 50: estimated at between £2.9 million and £4.2 million

about the following factors at the time when it approved the 2012 Business Case:

- a) The SP result showing willingness to pay to travel on trolley vehicles;
- b) The comparison of the penalty values with those recommended by AECOM to the DfT;
- c) Applying the vehicle penalty to trains;
- d) Applying an exaggerated stop penalty to train stations;
- e) Not attempting to rescale the SP parameters;
- f) The poor performance of the SATURN model in depicting an 'area of detailed modelling' and the inability of the modelling to accurately replicate observed flows at individual junctions or on individual side roads in terms of either magnitude or direction¹¹⁸³; and
- g) The dropping of the T_h factor to represent traffic congestion growth from the traffic modelling subsequent to submission of the 2012 Business Case.

6.297 It is evident therefore, that the SofS can have no confidence in the Business Case. He can have no confidence that this Scheme would be financially viable and run an operating surplus as is forecast. Nor can he be confident that it represents value for the public money that would be spent. The £250 million investment in NGT would use public money on an unnecessary scheme full of risk, which could even require on-going future subsidy to operate.

Matter 13: Whether there is a compelling case in the public interest for conferring on the Promoters' powers compulsorily to acquire and use land for the purposes of the Scheme

6.298 The Promoters have not made a compelling case in the public interest for them to be granted powers to acquire land compulsorily to enable satisfactory implementation of the proposed Scheme. The base data used for the Scheme is inaccurate, modelling assumptions were flawed, and the demand and revenue are overestimated while operating costs are underestimated. If built, the Scheme would involve significant risk to public finances and could require

¹¹⁸³ Mr Hanson in cross examination

ongoing public subsidy to operate and adversely affect the current bus network. Furthermore, the failure of the Promoters to properly assess realistic alternatives, including a bus-based option, makes it very difficult to accept that there is a valid case for compulsory acquisition to be granted¹¹⁸⁴.

Matter 15: Any other relevant matters which may be raised at the Inquiry

Consultation

- 6.299 The Promoters have wholly failed to proactively consult FWY in designing and modelling the NGT Scheme, as opposed to telling it what they intended to do at 'briefings'.
- 6.300 On 26 June 2013, FWY wrote to Metro stating *'the forecasts assume 70% of NGT's customers will be abstracted from the existing bus services, yet the routes in question are the prime corridors within the network. As in any bus network such prime corridors support levels of service, frequencies and hours/days of operation, on a host of other routes'*. Accordingly, Metro ought to have been aware that other routes were at risk but this was not factored into the assumptions on 'competitive response' or the Business Case generally. Not even a 'sensitivity test' was done on those assumptions, which appear to disregard any impacts on the existing public transport system.
- 6.301 FWY stated that *'First is unique...in having the data to understand to a greater extent the inter-dependency of all bus services in Leeds...We are very willing to work with Metro in assessing these effects...for the Transport and Works Act Order. We would obviously require firm confidentiality agreements to be entered before this work commences...in assessing the effects on the network, it will be necessary to understand the fares and ENCT¹¹⁸⁵ demand assumptions that are currently within the NGT base case. The NGT model will also need to be capable of assessing changes to the current fares offering on the bus*

¹¹⁸⁴ Document OBJ/923/06: Mr Alexander PoE paragraphs 12.1 to 12.5

¹¹⁸⁵ English National Concession Travel Pass

*network that may be applied before NGT starts operation*¹¹⁸⁶. On 16 August 2013, FWY repeated the offer to Metro¹¹⁸⁷.

- 6.302 Metro's reply stated '*LCC/Metro can agree in principle to enter into a confidentiality agreement in relation to commercially sensitive First data to be inputted into NGT appraisals...and can also agree in principle to share with First key modelling assumptions*'. However, it also stated that '*this will need to recognise that:...should First reserve its right to...oppose the grant of the TWA Order, which it is hoped it will not, that may become a material consideration in Metro/LCC's ability and willingness to participate in joint working*.' This suggested that Metro had already predetermined that it would go through with the NGT Scheme regardless of the scale of impact on FWY's business, the implications of FWY data for the Business Case and the actual impact on the public transport system of Leeds as revealed by the modelling with the FWY data. No prudent bus operating company would surrender its right to object to a project that could seriously affect its network in advance of understanding how it would be impacted. It amounted to a threat, given that the Promoters control the stops and infrastructure that FWY relies upon.
- 6.303 Only after submission of Statements of Case, in a meeting on 6 February 2014, did Metro first ask for details about FWY's proposal for a bus-based alternative to NGT¹¹⁸⁸. The minutes of the meeting indicate that the Promoters were proceeding with the LTVS even though they apparently believed that technology had moved on, that the question whether the Scheme represented the best value for money should not be asked; and that it would render FWY's network unviable. This did not amount to the good faith partnership working that is encouraged by the NPPF¹¹⁸⁹.

¹¹⁸⁶ Document OBJ/923/07 Mr Alexander PoE Appendix I: Letter to Metro, 26 June 2013

¹¹⁸⁷ Document OBJ/923/07 Mr Alexander PoE Appendix J: Letter to Metro, 16 August 2013

¹¹⁸⁸ Document OBJ 923 FWY/141: Email from Mr Alexander, FWY, dated 21 March 2014

¹¹⁸⁹ Document E-4-21 NPPF paragraph 31: '*Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development*'

6.304 It is the Promoters' unwillingness to proactively engage with FWY in good faith, without ultimatums, that has led to a situation whereby they have designed and promoted a major public transport scheme with a £250 million estimated cost which is deliberately not integrated with the existing public transport system. The end product would be neither economically nor environmentally sustainable, would be harmful to the City's transport system and a waste of taxpayers' money.

Electromagnetic effects

6.305 There would be electromagnetic effects from the operation of NGT's overhead line infrastructure, which would require to be mitigated¹¹⁹⁰. No evidence has been presented to show that an acceptable solution has been found regarding the effect on the University of Leeds.

6.306 Regarding construction impacts, it is not guaranteed that construction equipment would comply with certain EU legislation¹¹⁹¹ and the ES identifies significant residual effects on sensitive medical equipment, including at the Leeds Student Medical Practice¹¹⁹². In the operational phase after mitigation, there is predicted to be a significant residual effect on National Rail equipment, the University of Leeds, Leeds Beckett University (formerly Leeds Metropolitan University) and the Leeds Student Medical Practice¹¹⁹³.

Modifications to the Order

6.307 If the Order is made because the SofS is satisfied that some or the entire off-highway infrastructure is necessary, the SofS should make it with the following modifications. It should be made into a guided busway, open without

¹¹⁹⁰ Document APP-14-2: Mr Webb PoE paragraph 4.16- '*the calculations carried out indicate that operation of NGT is likely to disrupt some, but not all of the equipment present without the application of mitigating measures*'; and Document A-08c-5 Technical Appendix E paragraph 5.7 page 19: '*For scientific measuring equipment, the results from that EMC assessment at the University of Leeds shows that mitigation will be required in order minimise the risk of interference to certain items of equipment*' and '*These issues will continue to be investigated further in discussion with the University as the scheme design progresses.*'

¹¹⁹¹ Document APP-14-2: Mr Webb PoE paragraphs 4.8 and 4.9

¹¹⁹² Document A-08b: ES Main Statement page 94

¹¹⁹³ Document A-08b: ES Main Statement pages 96 to 97

discrimination to any bus operator subject to specific provision for proportionate, fair and equitable regulation if that is necessary. This would be a more efficient use of the new infrastructure, potential for competition between services using the new infrastructure resulting in better customer choice and service, and a saving in public funding in not having to install OLEs and run a risky project, as well as reduction in harm to the environment.

6.308 The TWA 1992 includes express power to make an order with modifications, subject to consultations with the parties. Furthermore, there is express provision for an Order to make provision for more than one mode of transport¹¹⁹⁴. FWY have produced a modified draft Order¹¹⁹⁵ to serve as a basis for such a modified Order.

6.309 A further alternative is, if NGT is to be approved as a trolley vehicle system, for it to be on terms that the Order be modified along the lines set out¹¹⁹⁶. In particular:

- a) There should be a duty imposed to design, construct and regulate the system as part of an integrated public transport network with integrated stops for buses and trolley vehicles, and to do so with the least reasonably possible disruption to bus operators.
- b) There should be provision for the infrastructure to be open without discrimination and on reasonable terms to all bus operators.
- c) There should be provision for compensating bus operators for effects on their business resulting from construction works.
- d) The liability for maintenance of the off-highway sections and new system generally should not be less strict than for the general highway.
- e) Rights of action against the Promoters arising out of matters such as access to the busways, nuisance or highway maintenance should not be taken away and replaced with a right to go to an arbitrator which would deprive the operators of effective remedies such as an injunction.

¹¹⁹⁴ Document E-1-15: Transport and Works Act 1992 sections 1-3, 5, 6, 13, and 16

¹¹⁹⁵ Document OBJ 923 FWY/158: Modifications to the draft Order

¹¹⁹⁶ Document OBJ 923 FWY/158: Modifications to the draft Order

- f) The Promoters must not be given powers to run a bus service contrary to the Transport Act 1985 section 66 under the guise of 'temporary' powers.

North West Leeds Transport Forum (NWLTF) OBJ 1719

The material points¹¹⁹⁷, other than those associated with the LBC and CAC applications¹¹⁹⁸, were:

6.310 NWLTF represents communities and businesses in North West Leeds who wish to see transport improvement. The objection is based on the following concerns:

- a) The case for the TWA Order is fundamentally flawed and, were the Order to be granted and the system constructed, substantial harm would be done to Leeds' public transport system, to the environment in North West Leeds and to the communities along the route, and there would be a significant risk of an on-going call on local funding to service the accumulated debt.
- b) The proposed trolley vehicle system would represent an inefficient use of road space and of existing public transport infrastructure and the Promoters have failed to explore alternative, more cost-effective and less damaging, means of improving the public transport offer and thus increasing the efficiency of transport systems in that part of Leeds.
- c) The decision to develop a trolleybus-based proposal as a successor to the failed bid for Supertram was driven by the prospect of access to funding from Central Government and it would allow use of TWA Order procedures which would in turn allow the Promoters to control the operations of the system and gain access to any revenue from it.
- d) The analysis presented by the Promoters in support of their application is flawed, particularly with regard to their forecast of NGT patronage. The lack of detail in the LTM means that important local impacts are unknown

¹¹⁹⁷ Document OBJ 1719 NWLTF/122 Supplement to Proof of Evidence submitted by Professor Bonsall; Document OBJ/1719 REB NWLTF Rebuttal, and Document NWLTF/128: Closing Statement

¹¹⁹⁸ See Appendix D to this report: Report on the Listed Building and Conservation Area Consents

and other features of the modelling render it not fit for purpose. The failure to conduct meaningful sensitivity analyses leaves the Business Case exposed to obvious risks and uncertainties.

- e) Based on the Promoters' own analysis, the project would fail to meet many of the key objectives which were set for it and is inconsistent with key elements of national and local policy.
- f) The investigation of impacts on heritage and landscape assets was unsatisfactory and failed properly to identify and quantify those impacts.
- g) The Promoters' claim that benefits from the Scheme outweigh the harm done to heritage and landscape assets, and that compulsory purchase of properties is justified, is unfounded and based on a grossly exaggerated estimate of benefits and an underestimation of harm.
- h) Consultation with local residents, businesses and community groups along the NGT route has been unsatisfactory. Further, the public, local political leaders, and some members of the Promoters' team have not been fully informed about key assumptions underlying the Business Case or about some of the predicted impacts of the Scheme.

6.311 Overall, it would be wholly wrong and unsafe to grant the Order because the Business Case is weak, flawed and misleading and the supposed benefits have been grossly exaggerated. Also, the assessment of planning balance is based on false premises.

Matter 1 (the aims and objectives and need for the Scheme)

6.312 The A660 functions primarily as a local distributor serving the residential communities and businesses which lie along it. This function is successfully achieved at most times of day and throughout much of the year despite significant flows of traffic from one end of the corridor to the other and crossing the corridor at a dog-leg between Shaw Lane and North Lane. The corridor enjoys very good high frequency bus services serving many parts of Leeds and beyond and is characterised by above average proportions of

walking and cycling¹¹⁹⁹.

6.313 There are the following problems in the A660 corridor for which solutions should be sought:

- a) traffic congestion which is most marked during weekday peak periods at university and school term times and associated with major events at Headingley Stadium;
- b) extended bus journey times caused by the traffic congestion during the peaks and by long dwell times associated with slow boarding;
- c) some unreliability in bus arrival times due, in the main, to bus-bunching associated with long dwell times;
- d) high bus fares (although they have recently been reduced);
- e) excessive parking in residential streets (associated with the University campuses and motorists driving into areas such as Weetwood and parking for the day while using bus services to access the City Centre); and
- f) a perception that cycling on the A660 is very unsafe (particularly where cycle lanes are absent or shared with buses or where traffic turns across the cycle lane).

6.314 It is likely that, if new housing developments are permitted further out along the A660, there will be an increased demand for movement along the A660 corridor (broadly defined) and that, unless some action is taken, the existing peak periods are likely to extend over a larger part of the day.

6.315 Considering Leeds as a whole, there is benefit to be gained by:

- a) improving transport links to areas of Leeds which are designated for regeneration (most of which are to be found to the south and east of the City Centre);
- b) encouraging a shift from car to public transport (and, for shorter trips, to active modes);
- c) increasing public transport capacity on radial routes;
- d) improving links, particularly public transport links, to the airport¹²⁰⁰;

¹¹⁹⁹ Document OBJ/1719 SOC: NWLTF Statement of Case Appendix A

- e) making more intensive use of existing rail lines;
- f) seeking to promote park and ride;
- g) encouraging use of active modes; and
- h) seeking to reduce road accidents and greenhouse gas emissions.

Matter 2 (the justification for the particular proposals, including its anticipated impacts)

6.316 The problems on the A660, or the NWLTF's aspirations, do not warrant the introduction of the proposed LTVS and the proposed system would not successfully address the current and anticipated problems. It would introduce a new and distinct public transport system which could only be accommodated in such a tight corridor by compromising the ambience of the area, the viability of local businesses, the provision for active modes and the needs of local traffic; would represent an inefficient use of limited road space by devoting valuable space to only 10 vph; would represent an inefficient use of existing transport infrastructure; would abstract patronage from the existing buses and thus compromise the commercial sustainability of the existing network of services; and would result in a reduced number of public transport seats per hour and not provide an increase in public transport capacity on the A660.

6.317 With regard to required capacities and consequent seat availability, it is fairly well known in the bus business that the busiest 15 mins in the peak hour is about a third busier than the average 15 minute period in the peak hour. Using a factor of about 1.27, taken from FWY, the busiest 15 minutes for the medium growth scenario shows that there would be no spare seats available for passengers boarding at stops along much of the route at most times of day. It also shows that even a capacity of 160 with 40 seats would be insufficient to allow all passengers to get on the first vehicle to arrive, which

¹²⁰⁰ Document APP-1-3: Mr Farrington PoE Appendix 4 shows that, according to the European Cities Monitor, European businesses perceive Leeds to have no serious problem respecting 'travelling around within the city' but that it does have problems of international connectivity

would increase their typical wait time from the 3 minutes assumed in the LTM to around 9 minutes¹²⁰¹.

6.318 The proposed LTVS would represent a backward step in terms of the quality of the overall public transport offer in Leeds and would do little to attract people out of their cars. This is because:

- a) The introduction of a separate and distinct system would require passengers to make a pre-trip decision as to whether to walk to the bus stop or NGT stop; result in there being a reduced frequency of services from any given stop; require passengers to be aware that the fare structure on NGT would differ from that on buses (a higher minimum fare is proposed¹²⁰²); make transfer between services more onerous¹²⁰³; and increase the likelihood that different tickets might be valid on different services.
- b) The average walking distance to and from NGT stops would be greater than that to and from existing bus stops and the average walking distance to a bus stop would be greater as a consequence of the removal of some stops and many being moved away from intersections (more passengers approach bus stops from intersections than from mid-link locations).
- c) Journey comfort would be lower for many users of the trolley vehicles because, even during the off-peak period, there would be insufficient seats to accommodate the demand and many passengers would have to stand in crowded conditions¹²⁰⁴.
- d) Door-to-door journey times would be higher for many users of public transport because reductions in in-vehicle time would be more than offset by increases in walking and waiting time¹²⁰⁵.

¹²⁰¹ Document OBJ 1719 NWLTF/122 section C7

¹²⁰² Document C-1 paragraph 15.136

¹²⁰³ Document OBJ 1719 NWLTF/122 paragraph B144.2: the journey from Leeds City Station to Adel is currently effected most efficiently by switching from the No 1 bus to the No 28 bus at the Arndale Centre

¹²⁰⁴ Documents OBJ 1719 NWLTF/122 Section C7 and FWY131: up to 7 people per square metre

¹²⁰⁵ Document OBJ 1719 NWLTF/122 sections C2 and C3

- e) Perceived journey times (actual journey times weighted to allow for the different values of time spent walking, waiting and travelling in crowded conditions) would be greater for most journeys in the A660 corridor¹²⁰⁶.
- f) Many passengers would be faced with the predicted reduction in bus frequency without the compensation of a faster in-vehicle journey time.

6.319 NGT would not serve the airport, the bus station, the main areas designated for economic regeneration, major retail and cultural attractions in the eastern part of the City Centre (Merrion Centre, St Johns Centre, The Core, Victoria Gate, Victoria Quarter, Leeds Market, Leeds Grand Theatre, Leeds Minster, West Yorkshire Playhouse, Northern Ballet and Phoenix Dance Theatre), or other important destinations such as St James's Hospital, Seacroft Hospital and the Elland Road Stadium.

6.320 NGT would be unique in its commitment to trolley vehicle technology and that, given the pace of technological development, there can no guarantee that any other systems would ever be commissioned using the same technology. The consequences are that there would be a large risk of shortages in spare parts and replacement equipment; it would be difficult to negotiate favourable terms on contracts for ongoing maintenance and renewal of the vehicles; it cannot be assumed that any future extension of BRT in Leeds would use the same technology; and the possibility of having to scrap and replace the trolley vehicle technology before the end of its assumed 60 year life must be recognised and allowed for in the costings.

6.321 The public transport run time analyses¹²⁰⁷ are crucial to the case for NGT. They are a key determinant of the demand forecasts and of the appraisal results and a difference of a few minutes can make a significant difference to the results. However, their accuracy and fitness for purpose must be in doubt given the large number of anomalies and/or errors evident in the documentation. For example:

¹²⁰⁶ Document OBJ 1719 NWLTF/122 section C3

¹²⁰⁷ Document C-1-13

- a) The run time model predictions provided¹²⁰⁸ indicate that, between 2008 and 2016, the journey times between Bodington and the City would increase more for buses than for cars (except inbound in the interpeak and pm peak). Given that the buses run in the general traffic for most of the route, this difference could only happen if bus boarding times were increasing (which would not be consistent with the DM prediction¹²⁰⁹) or the enforcement of bus lanes was to become less effective.
- b) It appears that data which puts the performance of bus services in a better light has been ignored¹²¹⁰. If all the survey data had been used, the average value would be just under 32 minutes. Also, 5 of the 14 bus journey time observations were made on Monday mornings, when the highway journey times were estimated for an average Tuesday to Thursday.
- c) The trolley vehicles are assumed to receive priority from the SPRUCE system such that they would have minimal delays at junctions and none from free-standing pedestrian crossings while buses would not receive the same level of priority and would therefore be delayed¹²¹¹. There is no justification for the assumption that, when a bus would approach signals immediately ahead of a trolley vehicle, the latter would receive priority while the former would not.
- d) Buses have been assumed to be delayed at bus stops¹²¹² but it has been assumed that the NGT vehicles would not be delayed by these stationary buses, even though some of these bus stops have no lay-bys.
- e) Southbound along the A660 in the morning peak, the DM bus is assumed to experience 10 seconds 'junction delay' at Weetwood Lane and at St

¹²⁰⁸ Document C-1-8 Table 13

¹²⁰⁹ Document C-1-8 Table 48: shows that the number of bus passengers on the A660 will have fallen by 23% between 2008 and 2016

¹²¹⁰ Document C-1-8 Paragraph 1.2 of the executive summary reports that the 'observed' am peak period bus journey time from Bodington to the City by bus is 33 minutes, but the data presented in Appendix B gives two surveys: one based on 8 observations in March 2013 gave an average of 33 minutes 21 seconds and one- based on six observations in April 2013 gave an average of 30 minutes and 3 seconds

¹²¹¹ Document C-1-13 paragraphs 2.17, 2.18 and 2.26

¹²¹² Document C-1-13 Table 3.1 and Appendix A

Michael's Lane¹²¹³ even though, under current conditions, they have full priority at these junctions.

- f) It has been noted that junction delays are an important element of overall run times¹²¹⁴ but many of the estimates have relied upon judgment informed by advice from Urban Traffic Management and Control (UTMC) personnel and by data from any available modelling¹²¹⁵. However, the modelling work extant at the time that the run time estimates were made has been superseded; the quality of the junction modelling work is questionable; and the subjective judgment does not necessarily equate to objective accuracy.

6.322 The estimated journey times by the various modes in the various scenarios are crucial inputs to the demand model and to the appraisal. A key contributor to these estimates (particularly for the car mode) is the estimation of delays at junctions. The approach adopted¹²¹⁶ involves using software (notably ARCADY and PICARDY) to model the ability of individual junctions to cope with flows predicted by the LTM. This approach is safe provided that the junctions do not interact with one another (the most important assumption being that flows held up at a downstream junction do not back up so far that they prevent the smooth discharge of an upstream junction); and the flows assumed at individual junctions are consistent with each other and with the overall assumed pattern of demand. There is reason to doubt that these conditions hold. For example:

- a) The with-NGT case shows that congestion is building up whereas the without-NGT case shows that it is not, which suggests that blocking back (due to build-up of congestion at the downstream end of the link) is most particularly marked in the with-NGT case¹²¹⁷.
- b) It is known that, in the morning peak, southbound traffic queuing to pass through the junction of the A660 with North Lane in Headingley often

¹²¹³ Document C-1-13 Annexes 33-35

¹²¹⁴ Document C-1-13 paragraph 2.13

¹²¹⁵ Document C-1-13 paragraph 2.14

¹²¹⁶ Document B-9

¹²¹⁷ Document B-9 Chapter 5: performance of individual junctions

backs up to or beyond Alma Road (and sometimes back to Shaw Lane and beyond)¹²¹⁸ but, for the NGT scenarios, it is assumed that the southbound output from the junction of the A660 with Alma Road is unconstrained, and it is indicated that the predicted morning peak performance of the Shaw Lane/A660/Alma Road junction is dependent on an assumed reduction of 137 passenger car units (pcu) in the traffic turning right from Shaw Lane and a reduction of 84 pcu (after allowing for the 30 pcu contributed by NGT vehicles) in the traffic turning left into Alma Road¹²¹⁹.

6.323 A key contributor to generalised cost, and thus to the predicted demand for trolley vehicles, is the assumed walking time to and from public transport. There are anomalies arising from analysis of the predicted numbers of passengers boarding and alighting the NGT at each stop¹²²⁰, such as the prediction that the NGT stop on Headingley Hill would attract more passengers than the NGT stop at the Arndale Centre. These anomalies could be caused by errors in the locations of the centroid connections eg the centroid connectors from the zones centred on St Anne's Road, and Wood Lane will route public transport users via the Headingley Hill NGT stop rather than the bus or NGT stops at the Arndale Centre (to which they are much closer), and the centroid connectors from the zone centred on St Michael's Road will route public transport users via the NGT stop on Headingley Hill rather than the bus stop at St Michael's Church (which is much closer). This affects the reliability of the model predictions and the errors noted above will have boosted NGT patronage at the expense of bus patronage.

6.324 The predicted demand for the NGT is dependent, not only on the assumed journey times, but also on 'quality factors' and 'penalties' which have been assumed to influence mode choice. A rough estimate of the contribution of

¹²¹⁸ Document C-1-13 Table 3.1 page 11 states that, the Otley Road between Shaw Lane and North Lane, '*is a heavily congested link*' and that, at Otley Road between Shaw Lane and Alma Road, the DM scenario should assume '*a 10kph speed restriction in AM peak to reflect queuing traffic*'

¹²¹⁹ Document B-9 sections 5.5.4.1 and 5.5.4.2 flow diagrams

¹²²⁰ For example Document C-1-8 Table 5.3

'quality factors' to the £701 million of 'time savings' is £279 million¹²²¹. The quality factor for a trolley vehicle over a bus of 5.55 minutes was derived from the SP surveys by dividing the willingness to pay for a journey on a 'very new bus' rather than on an 'old bus' by the value of time while travelling on a vehicle with 'plenty of seating spaces'. Seat availability has been given a higher value than any other vehicle characteristic in all the studies which have considered it¹²²².

- 6.325 A boarding penalty (sometimes called the 'stop penalty') is used in the LTM to reflect deficiencies in facilities at boarding points and more specifically the absence of facilities¹²²³. With regard to bus stop penalties, no allowance has been made for improvement of facilities at bus stops¹²²⁴. The average bus stop penalty of the capped Leeds package applied in the LTM is calculated as 16.50 minutes¹²²⁵. Therefore, the average penalty faced by someone wanting to use their nearest bus stop would be something between 16.50 minutes and 7.1 minutes, quoted as the demand weighted average¹²²⁶ (reflecting behaviour and thus the natural tendency to choose stops with lower penalties).
- 6.326 In the absence of information on facilities at each rail station, an 'intermediate value' for a stop penalty was applied at all rail stations¹²²⁷. With regard to the four relevant stations at Horsforth, Headingley, Burley Park and Leeds, they all have good lighting, shelter with seating, and real time information provided via RTI displays and/or audio announcements, and only Headingley does not have CCTV. This would suggest that an average penalty of about 4.2 minutes

¹²²¹ Document OBJ 1719 NWLTF/122 section C1

¹²²² Document G-4-13: AECOM report paragraph 3.6 page 191- '*Seat availability has the highest value in every study in which it appears*'

¹²²³ Document C-2-4 Appendix A Table 1 (second half) lists those facilities considered

¹²²⁴ Document OBJ 1719 NWLTF/122 section B31

¹²²⁵ Document OBJ 1719 NWLTF/122 section C13 and Document C-2-8 Table 10: '*The bus stop penalties were put together based on a series of 'package component' penalties representing features such as poor lighting, no real times information and no cctv*'

¹²²⁶ Document APP/103A Answer No 1

¹²²⁷ Document C-2-8 paragraph 4.10

could be justified at rail stations, rather than the 9.4 minutes that was used¹²²⁸.

- 6.327 The penalties used to represent the absence of desirable features at boarding points of 1.3 for NGT, 7.1 for buses and 9.4 for rail are therefore exaggerated. Those for buses are based on a demand weighted average of the capped boarding penalty package, with a reduction from 11.73 minutes to 7.1 minutes to reflect the presence of CCTV on buses. The values from AECOM's research for DfT¹²²⁹, used as a comparison, were based on a 'maximal' package comprising all the relevant attributes to calculate a value of 9.51 minutes, or 6.97 minutes allowing for CCTV on buses. However, the equivalent penalty based on values used should be the capped value of maximal bus boarding penalty minus the capped value of the maximal NGT boarding penalty, which arrives at a maximal differential penalty of 13.755 minutes (20.115–6.36). This indicates that the penalty applied in the NGT work (13.755 minutes) was 97% greater than the equivalent penalty based on the AECOM work (6.97 minutes). A comparison of average bus stop values gives an even greater difference¹²³⁰.
- 6.328 A net penalty of 11.3 minutes for bus (made up of an average bus stop penalty of 7.1 minus an average NGT stop penalty of 1.3 plus a bus quality penalty of 5.5)¹²³¹ and 13.6 minutes for rail is applied in the LTM. The tram preference over bus found in a recent analysis of stated preference studies carried out for UK Tram is 8.8 minutes¹²³². Thus the preference used in LTM for trolley vehicles is 28% higher than that found for trams, and even the Promoters had not claimed that trolley vehicles would be perceived more positively than trams¹²³³. They are also greater than the in-vehicle journey

¹²²⁸ Document APP/172

¹²²⁹ Document OBJ 1719 NWLTF/122 section C6

¹²³⁰ Document OBJ 1719 NWLTF/122 section C6

¹²³¹ Document OBJ 1719 NWLTF/122 section B25

¹²³² Document OBJ 1719 NWLTF/119: Analysis of Quantitative Research on Quality Attributes for Trams by Johnson et al Table 5.1 (people without cars available)

¹²³³ Document OBJ 1719 NWLTF/122 section B17

time for some journeys¹²³⁴. These penalties are largely responsible for the predicted shift from bus and rail to trolley vehicle and are therefore the key driver for predicted revenues and 'journey time benefits'. An illustration of their impact is that someone living midway between Horsforth Rail station and Holt Park and wanting to travel to City Square would be predicted to use the NGT rather than the train even if the journey took 13½ minutes longer by NGT than it would by train.

- 6.329 The penalties were derived from SP surveys but have not been scaled down to overcome a well known tendency of SP to exaggerate willingness to pay to use new modes, despite indications in the Promoters' documentation that this would be done¹²³⁵. It is not reasonable to assume that any initial superiority in trolley vehicle ride quality would not in due course be achieved by new buses (the LTM assumes that the differential continues undiminished for 60 years)¹²³⁶. If these penalty factors were replaced by more realistic values, the revenue stream and benefits would reduce dramatically and the Business Case would fail completely.
- 6.330 The large negative Alternative Specific Constants (ASCs) in the park and ride model¹²³⁷ take approximately 70 minutes off the 'cost' of park and ride trips, which will have increased the predicted demand for park and ride very markedly. Their impact is illustrated by the model predicting use of the park and ride site for a journey into the City Centre even if the park and ride option involved an extra hour of travel time. The ASCs are adjustments to generalised costs to represent factors that are not allowed for in order to

¹²³⁴ Document OBJ 1719 NWLTF/122 section C6: The argument made to DfT (and repeated in Document C-2-4) that the penalties are reasonable is misleading because the comparison was between a demand weighted average value and a maximal value

¹²³⁵ Documents OBJ 1719 NWLTF/122 section B27 and NWLTF/125: Document C-4-24 paragraph 2.10 states '*To avoid bias that results from the hypothetical nature of the SP choice situations, the SP-based model should be re-scaled, once finalised, using RP data.*'

¹²³⁶ Document OBJ 1719 NWLTF/122 section B32 and Document C-1-16 paragraph 3.1.6: '*The trends for development of common vehicle platforms with alternative power/fuel options and move towards electric hybrid drivelines for diesel and gas powered vehicles is expected to result in a convergence between the level of ride quality offered by the alternative sub modes under consideration*'

correlate with what actually happens. They were used because the park and ride model had needed adjustments of this magnitude in order to replicate demand for rail based park and ride at Garforth and New Pudsey, but there is no reason to assume that similar adjustment is appropriate for the trolley vehicle based park and ride at Bodington and Stourton¹²³⁸.

- 6.331 There has been an over-optimistic assessment of NGT's journey time because no allowance has been made for delay to NGT vehicles when behind a bus¹²³⁹, degraded priority for NGT vehicles when there are more than 10 vph¹²⁴⁰ and the lower NGT speeds achievable in the shared space outside Leeds University and in the narrow lanes shared with cyclists¹²⁴¹.
- 6.332 Bus journey times are assumed to remain constant throughout the life of the NGT Scheme and changes in road congestion not to affect public transport¹²⁴². However, run times on the A660 would be particularly vulnerable to increased delay at approaches to junctions where public transport shares road space with general traffic eg at the southbound approach to the Hyde Park junction and at the northbound approach to the Thornbury Avenue junction (close to saturation in 2016)¹²⁴³. The assumption of no change in NGT run times is contrary to the fact that when trolley vehicle frequencies increase to more than 10 per hour (the proposal is for 12 per hour in the peak period in 2031), signal priority constraints would inevitably lead to increased run times¹²⁴⁴.
- 6.333 Where input to a link is greater than outflow from it, blocking back would occur¹²⁴⁵. Although blocking back need not occur if the maximum flows allowed for in the junction modelling are lower than the flows predicted by the

¹²³⁷ Document OBJ 1719 NWLTF/122 section B35

¹²³⁸ Document OBJ 1719 NWLTF/122 section B35 ii

¹²³⁹ Document OBJ/1719 PoE2: NWLTF Prof Bonsall PoE paragraph A1 iv and v

¹²⁴⁰ Document OBJ 1719 NWLTF/122 last sentence of section B6

¹²⁴¹ Document OBJ 1719 NWLTF/122 section B4

¹²⁴² Document OBJ 1719 NWLTF/122 section B6

¹²⁴³ Document E-3-16: WebTAG Unit 3.11.2 paragraph 6.4.5 states that '*For submodes that run on-street and share road space with other vehicles (mainly bus, but some LRT schemes) it is important that journey times in the PT assignment model are consistent with the level of traffic congestion*'

¹²⁴⁴ Mr Robertson during cross-examination

LTM assignment model, this has not been proven. Flows predicted by the LTM are greater than those considered by TRANSYT at the Shaw Lane junction¹²⁴⁶. Traffic blocking back from the North Lane junction would prevent the Alma Road junction from operating as desired. LTM predicts an increased flow into North Lane¹²⁴⁷ and North Lane is already a key capacity restraint on the performance of this part of the network¹²⁴⁸. Queue detectors outside the Arndale Centre to trigger restrictions on the inflow to Shaw Lane junction could be possible but would reduce the capacity of the Shaw Lane junction below that assumed in the LTM¹²⁴⁹.

6.334 The impact on employment and economic activity was predicted using the UDM. Its prediction of nearly 4,000 new jobs consequent upon improved accessibility is a significant over-estimate due to the following deficiencies in the assumptions about changes in generalised trip times which were fed into the model:

- a) The only changes in generalised time fed into the model were the reductions in the perceived generalised trip durations of public transport journeys which had been output by the LTM. No account was taken of the increases in the generalised trip durations of highway journeys (car, van, HGV etc) produced by the LTM; and
- b) The reductions in the perceived generalised duration of public transport journeys produced by the LTM were in large part due, not to real reductions in journey times, but to the reductions in 'quality penalties' which the Promoters have assumed would be associated with a switch to use of NGT.

Overall, the introduction of NGT would lead to increases in the average time spent travelling (summed over all modes and time periods)¹²⁵⁰, which would

¹²⁴⁵ Document OBJ 1719 NWLTF/122 section B8

¹²⁴⁶ Document APP/103B Appendix

¹²⁴⁷ Document APP/103B Appendix pages 18 and 28 identify an increase of 150 pcu using node 2152 between 2016 and 2031

¹²⁴⁸ Mr Robertson during cross-examination

¹²⁴⁹ Document OBJ 1719 NWLTF/122 section B9

¹²⁵⁰ Document OBJ 1719 NWLTF/122 section C9: Figures released during the Inquiry

be expected to lead to a reduction, rather than an increase, in economic activity.

- 6.335 Estimations of NGT's benefits, and thus of its BCR, are exaggerated. This is because the performance of the DM comparator is under-estimated as no allowance is made for increases in the perceived quality of bus vehicles beyond that pertaining in 2008, improvements in bus boarding times¹²⁵¹, readily achievable improvements in bus priority at various points along the A660¹²⁵² and potential improvements in junction performance achieved by optimisation of signals¹²⁵³.
- 6.336 The Promoters' claim that the approval of their PEBC in 2012 can be taken to signify that DfT had approved all aspects of their analytical work¹²⁵⁴ is unrealistic. Examples of issues of which the DfT is unlikely to have been aware and of misleading evidence which had been put to it by the Promoters include¹²⁵⁵ the suppression of the SP result of the willingness to pay to travel on trolleybuses; the comparison of penalty values; the application of the vehicle penalty to train journeys; the exaggerated stop penalty applied to train journeys; the failure to scale the SP derived parameters; the failure to allow the increases in highway costs/times to influence the UDM; and the poor performance of the SATURN model in the 'Area of Detailed Modelling'.
- 6.337 The LTM's prediction of the impacts of the NGT Scheme cannot be relied upon for the following reasons:
- a) The impact on traffic flows and delays on local links is not known. Although WebTAG expects a good fit between observed and predicted flows in the 'Area of Detailed Modelling'¹²⁵⁶, the LTM has not been able to replicate local flows accurately¹²⁵⁷. This is probably associated with the

¹²⁵¹ Document OBJ 1719 NWLTF/122 section B58: Cashless fares, smart ticketing and contactless ticket readers

¹²⁵² Document OBJ 1719 NWLTF/122 section B59

¹²⁵³ Document OBJ 1719 NWLTF/122 section A18i and section B60

¹²⁵⁴ Applicants' PoEs and witnesses in cross-examination

¹²⁵⁵ Document OBJ 1719 NWLTF/122 section D4

¹²⁵⁶ Document OBJ 1719 NWLTF/122 section D1d

¹²⁵⁷ Document OBJ 1719 NWLTF/122 section C14

LTM's network and zoning in the 'Area of Detailed Modelling' not meeting WebTAG requirements¹²⁵⁸ because the zones are too large and centroid connectors are incorrectly placed¹²⁵⁹, some links are missing¹²⁶⁰, there are apparent errors in the coding of the junction at Shaw lane¹²⁶¹, and the sophistication of the TRANSYT models are not being reflected in the strategic LTM¹²⁶².

- b) The impact on cycling and walking is not known. There is no proper model of active modes and so it is not possible to estimate the net effect on active mode use with any degree of certainty¹²⁶³.
- c) The demand for Bodington and Stourton Park and Ride sites is not known with any degree of certainty. The model forecasts have an error of plus or minus 50%¹²⁶⁴ but the error is likely to be even larger than that because use of such large ASCs is an indication that the model had failed to capture the factors explaining demand for, or aversion to, park and ride services¹²⁶⁵; and the LTM has predicted unusual patterns of usage of the sites¹²⁶⁶.
- d) The impact of NGT on the Leeds economy is not known. The UDM's forecasts are flawed¹²⁶⁷. If the model were to be run with more realistic generalised costs it might show that NGT would lead to a loss of jobs in

¹²⁵⁸ Document OBJ 1719 NWLTF/122 section D1

¹²⁵⁹ Document OBJ 1719 NWLTF/122 sections D1a and B12

¹²⁶⁰ Document OBJ 1719 NWLTF/122 section D1b

¹²⁶¹ Document OBJ 1719 NWLTF/122 section C11: Shaw Lane junction performance is critical to the ability of the A660 to accommodate NGT

¹²⁶² Document OBJ 1719 NWLTF/122 section B10: For example: The failure of LTM to allow for reduced capacity which would result from use of STM to avoid blocking-back; the SATURN network is insufficiently detailed to pick up locally-important effects eg 'q' turns necessitated by banned movements, and potential loss of A660 capacity due to removal of right turn pockets; the large zone sizes prevented detailed examination of fit between the TRANSYT and SATURN models; and the consistency check which was employed will not have detected problems only apparent on the side roads

¹²⁶³ Document OBJ 1719 NWLTF/122 section D1c

¹²⁶⁴ Mr Hanson in evidence at the Inquiry

¹²⁶⁵ Document C-1-3 bottom of page 43

¹²⁶⁶ Document OBJ 1719 NWLTF/122 section B39: For example drivers are predicted to drive away from the City centre to the park and ride site before catching the NGT back in again; and no usage has been predicted by drivers from more obvious catchments, such as Wakefield for Stourton

¹²⁶⁷ Document OBJ 1719 NWLTF/122 section B41 second paragraph

the City. The impact of parking restrictions and degradation of townscape on the viability of local businesses is not known. This is one of the potentially important impacts which are not easily modelled.

- e) The robustness of all the forecasts, but most particularly those relating to NGT patronage and revenue, is unknown due to the failure to conduct meaningful sensitivity analysis, despite very clear WebTAG guidance on this issue¹²⁶⁸. Particular aspects which should have been subject to systematic sensitivity analysis include the passengers' assumed preference for trolleybus over bus and rail; the passengers' assumed lack of concern about lack of seating and of sometimes having to stand in very crowded conditions¹²⁶⁹; the passengers' assumed, but unexplained, preference for park and ride; the assumed ability of NGT to achieve much faster boarding times than could be achieved by conventional buses; the assumed absence of serious and sustained competition from bus operators¹²⁷⁰; and the potential impact of City Centre parking policy on demand for park and ride¹²⁷¹.

6.338 The Business Case is deficient in failing to document uncertainties in the eventual level of service to be provided. These include not giving any indication of how the Promoters would respond to a failure to achieve predicted revenues¹²⁷², and failing to explore the financial consequences of an outcome in which, if competition were to lead to lower fares, the Promoters might be left with lower than anticipated revenues and a requirement to subsidise socially necessary bus services which had become uneconomic due to reduced margins earned by the bus operators.

¹²⁶⁸ Document E-3-24; Document E-3-12 section 1.8; and Document E-3-22 section 3.4

¹²⁶⁹ Document OBJ 1719 NWLTF/122 section C8 the test mentioned in the Promoters' rebuttal of Professor Bonsall PoE was not a serious test because the value placed on lack of seating/crowding was too low

¹²⁷⁰ Document OBJ 1719 NWLTF/122 section B33

¹²⁷¹ Document E-3-22 paragraph 3.4.10 makes a particular point of mentioning the need to explore the impact of parking policy via sensitivity testing

¹²⁷² Mr Henkel in cross-examination indicated some potential responses which would save money but which would further depress demand, potentially leading to the trolley vehicle service being further reduced or withdrawn completely leaving redundant infrastructure

- 6.339 The assumptions about the impact on the environment in the Business Case Appraisal Summary Table¹²⁷³ give the impact on the historic environment prior to the preparation of Document B-13 and the impacts on landscape and townscape based on assumed mitigations whose detail and affordability is unknown¹²⁷⁴.
- 6.340 There are a large number of errors in the Business Case analysis¹²⁷⁵. Errors and mistakes in the 2014 Business Case followed others in the 2012 Business Case¹²⁷⁶. This must raise some doubts as to the standard of work undertaken, but there seems to be a tendency for the errors to have inflated the case for NGT¹²⁷⁷. The main issues are summarised below:
- a) Mode use¹²⁷⁸ predictions in the LTM are for an increase in car miles, despite the Business Case Review suggesting that there would be a switch from car use¹²⁷⁹, and for a reduction in use of active modes, even though the Business Case Review suggests that there would be a beneficial impact on physical activity¹²⁸⁰.
 - b) Safety predictions, using the accepted calculation methodology, are that NGT would result in an increase in road casualties, and the NGT run times which underlie the Business Case are based on the assumption that speeds in the shared space area outside the University of Leeds exceed the 10 mph recommended in the safety audit, when the commentary in the Business Case Review suggests, without any evidence, that pedestrian and cyclist casualties would fall¹²⁸¹.

¹²⁷³ Document C-1 Table 17.11

¹²⁷⁴ Document APP-8-2: Mr Speak PoE Appendices- proposed Condition 6 suggests that these issues be left as reserved matters

¹²⁷⁵ Document OBJ 1719 NWLTF/122 sections B12, B77, B78, B81, B83, B84 and C12

¹²⁷⁶ Mr Chadwick in cross examination stated that, on both occasions, the team had had to submit the case before they were fully ready to do so

¹²⁷⁷ Document OBJ 1719 NWLTF/122 section D3

¹²⁷⁸ Document OBJ 1719 NWLTF/122 section C15 for detailed figures

¹²⁷⁹ Document C-1 Text in Table 6.1

¹²⁸⁰ Document C-1 Text in Table 17.12

¹²⁸¹ Document C-1 Table 7.3

- c) Emissions in greenhouse gases are predicted to increase when the Business Case Review claims a reduction and that NGT would make a positive contribution towards the target to reduce CO₂ emissions¹²⁸².
- d) Connectivity and Access does not mention that journeys by car would, on average, take longer; journeys by bus would generally take longer¹²⁸³; the northern extremities of bus route Nos 1 and 6, whose frequency is assumed to be cut by about half, would not be served by NGT, nor would the northern extremities of bus route Nos 28 and 97, whose frequencies must also be expected to fall; NGT would provide access to or from a very small part of the Leeds conurbation, would not serve many of the key destinations in the City Centre and would not penetrate the main areas identified for regeneration; and elderly or infirm travellers' access to facilities would be particularly adversely affected by the longer average walk to public transport boarding points, the longer average waiting times and the reduced likelihood of getting a seat.
- e) Journey time savings include about 50% of the claimed reduction as being the assumed reduction in quality penalties rather than a real reduction in journey times¹²⁸⁴. This is not mentioned anywhere in the Business Case and the LTM predicts that the introduction of NGT would result in an increase in total journey time, summed over all modes¹²⁸⁵.
- f) Efficiency savings¹²⁸⁶ do not include the increased congestion¹²⁸⁷, the overall increase in time spent travelling summed over all modes and the increased fuel consumption.
- g) Employment¹²⁸⁸ predictions come from the UDM, but are questionable.
- h) Service reliability¹²⁸⁹ is an exaggerated estimate in the Business Case because it does not allow for the difference between journey times in and

¹²⁸² Document C-1 Table 7.2 claims a greenhouse gas reduction worth £6.2 million (corrected in Document APP-7-3 Table B1 to an increase of £3.1 million); and Table 7.3

¹²⁸³ Document OBJ 1719 NWLTF/122 Section C2

¹²⁸⁴ Document C-1 Table 7.2 claims £701 million of public transport passenger journey time benefits; and Table 17.4 suggests that the journey quality benefits have not been monetised

¹²⁸⁵ Document OBJ 1719 NWLTF/122 Section C9

¹²⁸⁶ Document OBJ 1719 NWLTF/122 sections B129 and B130

¹²⁸⁷ Document C-1 Table 17.1 cost £12 million

¹²⁸⁸ Document C-1 section 13.80 claims 3687 new jobs would be generated as a result of NGT

out of term time being allowed for by most travellers¹²⁹⁰; it is based on stop-to-stop variation and so ignores the relatively invariant walk element¹²⁹¹; and it does not allow for the possible reduction in bus punctuality due to the removal of the current signal priority for late running buses¹²⁹².

- i) The calculated BCR is misleading because the costs exclude the cost of disruption during construction and costs attributable to the predicted reduction in active mode use.
- j) The adjusted BCR includes the 'wider benefits' which the DfT does not accept within the basic BCR, misleadingly includes benefit from the forecast increase in employment and reliability and excludes the cost of degraded landscape¹²⁹³.

6.341 The predicted benefits of the NGT Scheme¹²⁹⁴ cannot be relied upon as evidence to justify it because they have been grossly exaggerated, the analysis is unreliable, and the interpretation of the results has been misleading.

Matter 3 (the main alternative options)

6.342 The NBA and LCA cannot be regarded as indicative of what might be achieved by way of alternatives to the proposed trolley vehicle system¹²⁹⁵ and the claimed superiority of the Promoters' 'Preferred Option' is unproven.

6.343 The NBA differs from the Promoters' Preferred Option only in respect of the power source. Therefore, it shares many of the Preferred Option's drawbacks

¹²⁸⁹ Document C-1 Table 17.4 identifies a benefit of £84 million from improved reliability

¹²⁹⁰ Document OBJ 1719 NWLTF/122 section B67

¹²⁹¹ Document OBJ 1719 NWLTF/122 section B69

¹²⁹² Document OBJ 1719 NWLTF/122 section B70

¹²⁹³ Document OBJ 1719 NWLTF/122 section C16: DfT guidance now includes it within the adjusted BCR and it might exceed £100 million

¹²⁹⁴ Document C-1: Revised Business Case Review

¹²⁹⁵ Mr Chadwick in oral evidence at the Inquiry stated that the NBA and LCA options were developed simply to justify the application for funding of the major investment and that they should not be regarded as representing the best that could be achieved at lower cost; Document APP-7-2: Mr Chadwick PoE paragraph 3-146- *'the LCA is specified in order to confirm that the scale of investment in the Preferred Alternative is justified'*

(provision of separate stops, limited number of priority vehicles per hour and hence lower frequency, deleterious impact on bus services and high capital cost). Some of its impact on landscape, townscape and heritage is reduced, due to the absence of OLE but the overall impact is still significantly adverse.

- 6.344 The LCA is not a serious attempt to show what could be achieved at lower cost. Much more could be achieved in respect of:
- a) Vehicle quality, as the LCA was specified on the assumption that the buses used would be perceived as having no improvement over 2008 vehicles.
 - b) Bus stop facilities, as the LCA was specified to include very modest improvement despite the fact that improvements in bus stop facilities are known to be very cost effective¹²⁹⁶.
 - c) Reduced boarding times, and hence improvements in journey times and punctuality, as the LCA was specified to assume no improvement over the situation pertaining in 2012 despite the clear potential offered by a combination of vehicle design and ticketing and of fare structures designed to accelerate the move to cashless fares¹²⁹⁷.
 - d) Bus priority, as the priority included in the specification of the LCA is represented as singularly ineffective¹²⁹⁸.
 - e) Bus routing eg provision, if justified, of more limited stop services (to provide an 'express' service'), increased frequencies (to provide increased capacity), and new cross-city links (to provide improved links to growth areas).
- 6.345 The Promoters have made no serious attempt to explore the extent to which the needs might be better met by alternatives to NGT. They have thus failed to follow WebTAG advice respecting generation of alternatives¹²⁹⁹. More specifically:
- a) Attention has been focused on NGT as the only solution.

¹²⁹⁶ Document OBJ 1719 NWLTF/122 section B102

¹²⁹⁷ Document OBJ 1719 NWLTF/122 sections B33 and B100

¹²⁹⁸ Document OBJ 1719 NWLTF/122 sections B60 and C4

¹²⁹⁹ Document OBJ 1719 NWLTF/122 Section D5

- b) The A660 corridor seems to have been chosen because it was thought likely to generate the best revenue not because it needs NGT.
- c) The trolley vehicle technology seems to have been chosen because it allows use of a TWA Order procedure. The dangers of too rapid a commitment to a trolleybus-based approach were identified in the 2007 Gateway review¹³⁰⁰.
- d) There has never been a detailed examination of alternative means of meeting the transport needs of North West Leeds, particularly with regard to interventions which could yield significant improvements for all users of public transport much more quickly and at much lower initial and ongoing cost to public funds.

6.346 The NWLTF alternative proposals¹³⁰¹ are that the existing bus service should be improved, ideally by means of a partnership between bus operators and the passenger transport authority, so as to provide increased priority for buses within the existing roadspace, higher quality stops and vehicles, and various measures designed to reduce dwell times. Many of the measures that have been identified are of relatively low cost and could be implemented quite quickly. Additional suggestions have been made with respect to traffic management and possible modifications to bus routes, which could be implemented at low cost on a short time scale.

6.347 NWLTF also identifies a number of higher cost interventions which should be considered on their merits, particularly a redesign of the A660 Hyde Park intersection, signalisation of the Lawnswood roundabout (within the existing carriageway and without a dedicated BRT lane running through the centre) and a northbound bus lane up Headingley Hill. However, much could be achieved by implementing a northbound bus lane within the existing carriageway on the southern approach to Headingley which, with very minor widening at one point on the bend, could stretch all the way from Richmond Road to St Michael's Road.

¹³⁰⁰ Document C-4-7

¹³⁰¹ Document OBJ/1719 SOC: NWLTF Statement of Case Appendix A

- 6.348 NWLTF advocates a wider role for park and ride, the success of which is dependent on the implementation of an appropriate policy on City Centre parking, and the Bodington Park and Ride should be trialled at a modest scale before any major investment is undertaken. It also promotes more intensive use of the existing rail lines to provide increased high quality capacity for public transport (recognising that significant investment may be required in order to accommodate additional services on the Harrogate Line).
- 6.349 In terms of vehicle technology, many second generation hybrid double decker buses are already in service and all-electric buses are being promoted as the natural progression from hybrids and could be introduced as and when appropriate. All-electric buses are already in service in York¹³⁰² and the double decker version of Optare's all-electric *Versa* (the all-electric *Metrodecker*, built in Leeds) should be available in 2015¹³⁰³. A commitment to trolleybus technology would close off the possibility of making use of this new technology and of the innovative, high-capacity, multi-door, double decker vehicles which are becoming available, and of adjusting the fleet size and mix to meet the emerging demand in the NGT corridors.
- 6.350 Potential solutions to problems in the A660 corridor were identified following a review of problems and opportunities in 2006¹³⁰⁴, but the ideas were shelved because it was thought that they would conflict with, and be rendered unnecessary by, the NGT Scheme¹³⁰⁵.

Matter 4 (consistency with policy)

- 6.351 Reduced emission of CO₂ and other greenhouse gases is an objective of the LTP and is a specific objective of the NGT Scheme¹³⁰⁶. However, the LTM predicts that introduction of NGT would result in an increase in greenhouse gas emissions.

¹³⁰² Document OBJ/171 SOC: Statement of Case pages 24 and 25

¹³⁰³ Documents OBJ/1354 SOC3: Statement of Case Appendix C paragraph 3.2; and OBJ/1166 SOC: Statement of Case paragraph 4.9 footnote 9

¹³⁰⁴ Document G-4-5

¹³⁰⁵ Mr Haskins in cross examination

¹³⁰⁶ Document C-1-15 paragraph 2.6 objective 5

- 6.352 A long standing objective of national transport policy (endorsed in the 2010 Coalition Agreement), which is specifically identified in the LTP, is to seek reductions in road casualties. However the LTM predicts that introduction of NGT would result in an increase in accidents¹³⁰⁷, the NGT run times which underlie the Business Case are based on the assumption that speeds in the shared space area outside the University of Leeds would exceed those recommended in the original safety audit¹³⁰⁸, and DF7 creates numerous safety hazards¹³⁰⁹.
- 6.353 Increased use of sustainable modes is an objective of the national Door-to-Door strategy, which specifically refers to the benefits of travel by the 'healthiest' modes. It is also an objective of the NPPF, the 'Leeds Climate Change Strategy - Vision for Action', which gives particular priority to the promotion of smarter choices including walking and cycling, and the LTP. The Department of Health has issued guidelines indicating the desirability of increased physical activity. However, the LTM predicts that the introduction of NGT would result in reduced cycling and walking¹³¹⁰.
- 6.354 An objective of the LTP is to encourage economic growth by improving connectivity. Introduction of NGT would provide lower in-vehicle journey times for some journeys and, in a few cases, lower door-to-door journey times but, based on LTM forecasts, the broader picture is of reduced connectivity¹³¹¹.

¹³⁰⁷ Document C-1 paragraph 15.85

¹³⁰⁸ Document C-1-13 Table 3.1 indicates a speed limit of 30kph (18.6mph), whereas the original July 2013 Safety Audit by LCC recommended a maximum of 10mph in shared areas and APP/106 page 3 indicates a 15mph speed restriction in those areas

¹³⁰⁹ OBJ 573 Mr Broadbent: safety hazards to children and pedestrians caused by the proposed siting of the bus and NGT stops outside Lawnswood School and on opposite sides of the entrance to 'the Village' and the reduction of footway widths; to traffic due to the loss of right turn pockets resulting in unexpected stationary traffic in the centre of the highway and pressure on right turners to complete their manoeuvre quickly; to cyclists and pedestrians created by the proposal to allow cyclists to make an unexpected right turn from the A660 into St Anne's Parade and then ride contra-flow along it; to cyclists due to the narrow 3.65m width of the shared NGT/Bus/Cycle lane northbound outside Leeds University Engineering Faculty

¹³¹⁰ Document OBJ 1719 NWLTF/122 section C15

¹³¹¹ Document C-1-8 Table 59 shows that introduction of NGT causes highway trip durations to increase; Document NWLTF/122 sections C2 and C3 shows that average door-to-door journey times would be longer for most journeys by bus in the NGT corridor and even for some journeys by trolley vehicle and perceived journey times (actual door-to-door times weighted to

These reductions in connectivity would tend to depress, rather than generate, economic growth.

- 6.355 The desire for regeneration of specified sites is also a stated objective. However, NGT is very poorly aligned with most of the areas in need of regeneration.
- 6.356 One of the broader objectives of the LTP is to improve the quality of life of people living in the region¹³¹². NGT's impact on the quality of life would be negative.
- 6.357 In terms of '*respecting improvement in the quality of life through a safe and healthy built and natural environment*', the LTM predicts that introduction of NGT would increase congestion, noise, fuel consumption, emissions and KSI (Killed or Seriously Injured) casualties and reduce the use of active modes. The Promoters accept its introduction would have an adverse effect on landscape, townscape and heritage. There is a concern (unexplored in the modelling) that local congestion caused by road closures and signalisation could increase local emissions. In addition, there is a risk (unexplored in the modelling) that parking restrictions¹³¹³ could lead customers to drive to more distant facilities which, together with the disruption during construction and reduced quality of townscape, could undermine the viability of local facilities. The disappearance of these facilities would constitute a deterioration in the quality of life for local residents and would tend to result in reduced walking and increased driving thereby further increasing congestion and emissions.
- 6.358 With regard to '*respecting improvement in the quality of life by improving access for all to jobs and services*', average journeys by car, and many journeys by public transport, would take longer if NGT were introduced. NGT would serve only two corridors and would not provide a link to important

allow for the different values of time spent walking, waiting and standing) would be higher for many journeys by public transport

¹³¹² Document C-1-15 paragraph 2.6 objectives 6 and 7: to improve the quality of life through (promotion of) a safe and healthy built and natural environment and to improve the quality of life by improving access for all to jobs and services

facilities in and around the City. It would be less accessible to people with limited ability to walk or stand, the reduced frequencies envisaged by the Promoters for the Nos 1 and 6 bus services would leave significant areas along the northern parts of these two routes with only 3 buses per hour¹³¹⁴ and vehicular access to premises and side roads along the A660 would become more difficult. Also, the degree of severance between communities on either side of the road would be increased.

- 6.359 An objective of the LTP and a specific objective of the NGT Scheme¹³¹⁵ is that the efficiency of the transport networks should be improved. However, LTM predicts that the introduction of NGT would result in an increase in inputs (journey time and costs) to achieve a given level of output (a fixed number of trips), which indicates a reduction in system efficiency. The increased inputs include those to person hours spent travelling¹³¹⁶, time spent driving¹³¹⁷, fuel consumption¹³¹⁸, expenditure on fares¹³¹⁹ and public expenditure on transport infrastructure and services¹³²⁰, together with a failure to increase efficiency.
- 6.360 UDP policy T1(v)¹³²¹ refers to the intention to '*encourage integration between travel modes through better interchange between and within modes*' and a widely quoted objective of NGT¹³²² is that it would form part of an integrated transport system. However the northbound NGT stop would be further from the station than is the existing No 1 bus stop on Bishopgate, NGT would not provide a link to the bus station (whereas the No 6 bus, whose frequency is assumed to reduce, does) and the provision of separate NGT stops and bus stops would make interchange with bus services less convenient than it is

¹³¹³ Document OBJ 1719 NWLTF/122 section C5

¹³¹⁴ Document D-1-1: Leeds draft Core Strategy Appendix 2 Table 2: the frequency would fall below the minimum standard of accessibility given in the Table

¹³¹⁵ Document C-1-15 paragraph 2.6 objective 4

¹³¹⁶ Document OBJ 1719 NWLTF/122 section C9

¹³¹⁷ Document C-1-8 Table 58

¹³¹⁸ Document C-1 Table 17.12 mentions the increased fuel duty receipts

¹³¹⁹ Document C-1 Table 17.12 shows increased expenditure of £66 million

¹³²⁰ Document C-1 Table 16.1 shows grant and subsidy costs amounting to £532 million

¹³²¹ Document OBJ/1719 SOC: NWLTF Statement of Case Appendix E.06d

¹³²² Document C-1 paragraph 3.7

now¹³²³. Also, the provision of separate NGT stops and bus stops, the use of a different fare structure, and the separate branding of NGT would result in NGT being perceived as a separate service rather than a fully integrated part of the bus network (further re-enforced if some of the tickets accepted on buses were not accepted on NGT or vice-versa)¹³²⁴.

- 6.361 Policy T2 of the draft CS, dealing with accessibility requirements and new development, indicates minimum accessibility standards for new development¹³²⁵. The reduced frequencies envisaged by the Promoters for the Nos 1 and 6 bus services would result in significant parts of the northern extremities of these routes having below standard accessibility, affecting areas that include new housing development planned in Moseley Wood. The NGT proposal is thus inconsistent with policy T2.
- 6.362 With regard to draft CS policy SP11, dealing with Transport Infrastructure Investment Priorities, City Centre policy CC3 and Map 9, which includes the NGT corridor, a distinction needs to be made between the policy and the proposals¹³²⁶. The desired increase in capacity of radial routes could be provided by enhanced bus services linked to park and ride facilities and this approach would be equally consistent with these draft CS policies. Therefore, they do not require the implementation of the LTVS.
- 6.363 The NGT would not conserve, let alone enhance, the historic environment, as it would pass through 6 CAs along Otley Road corridor between the Lawnswood roundabout and the University that incorporate elements which give Leeds its distinct identity, and Woodhouse Moor, the first public park in Leeds, is part of its legacy of public parks. It would therefore not be consistent with draft CS policy P11. Also, the impact of the NGT proposals on

¹³²³ Document OBJ 1719 NWLTF/122 section B114.2

¹³²⁴ Document OBJ 1719 NWLTF/122 sections B113 to 114 for further details

¹³²⁵ Document D-1-1 Appendix 2 Table 2

¹³²⁶ Document D-1-1 paragraph 6.22 notes that *'should key projects not receive funding, then the Council can respond at that time as necessary through other mechanisms, such as changing the type of infrastructure proposed'* and refers to the fact that NGT 'evolved' from Supertram'; and Mr Speak in cross-examination: *'transport proposals don't stand still – they are dynamic'*

the townscape of Far Headingley would not be consistent with policy P12 in the draft CS, dealing with landscape and townscape, and its impact on veteran trees and the area of tree canopy along the A660 would not be consistent with policy G2 in the draft CS, dealing with the creation of new tree cover.

6.364 With regard to UDP policy T12, mentioning Supertram, UDP policy T13, protecting routes for Supertram, and the UDP Inspector's Report¹³²⁷ of 1999 endorsing this:

- a) the Supertram system envisaged differed from the NGT proposals in being a tram rather than a trolley vehicle, in being segregated from general traffic wherever possible¹³²⁸ and in running along verges or central reservations;
- b) the protected routes identified on Map 9 formed a network only a fraction of which is followed by the now proposed NGT;
- c) the Inspector considered that, while the proposals were worthy of support in principle, they would be scrutinised in detail through the TWA Order process¹³²⁹; and
- d) the fact that Supertram succeeded in passing the TWA Order is of only indirect relevance to the LTVS application because the system was to be based on trams rather than on trolleybuses, there was to be a network of routes rather than only one, and the full range of local opposition was not manifest since it was clear to most people, if not to the Promoters, that the likelihood of achieving funding was remote.

6.365 UDP policy T16 indicates that planning permission granted for park and ride sites associated with rail stations, rapid transit systems and quality bus services would be conditional on the acceptability of the impact on traffic reduction and, since the NGT is predicted to increase traffic levels, granting of the permission would be contrary to the policy. UDP policy T17 includes protection for the sites at Bodington and Stourton in conjunction with

¹³²⁷ Document D-2-5

¹³²⁸ Document D-6-2 paragraph 20.4

¹³²⁹ Document D-2-5 paragraphs 159.8 and 159.16

Supertram lines, but the Supertram was a very different system from the NGT now proposed.

- 6.366 Although LTP3 refers to the NGT¹³³⁰, it is not part of the Local Development Plan and has not had to be approved by bodies other than the WYITA. Spatial policy 11 of the draft CS recognise its objectives, but references to NGT in the LTP are only relevant to the decision on whether to approve the TWA Order in that they confirm that the Promoters had the foresight to include NGT as a proposal within their LTP.
- 6.367 The proposed NGT route would not satisfy LTP3 proposal No 13, as it would not constitute a network; the predicted levels of crowding would mean that it would not be perceived as of high quality and so would not provide an attractive alternative to car travel; and the revenues have been grossly exaggerated so it cannot be said to be financially sustainable.
- 6.368 Aspects of the NGT proposals are inconsistent with the principles of good street design in the Manual for Streets (2007 and 2010). For example NGT would conflict with the principles that *'street furniture and lighting equipment should also be integrated'*, which is *'especially important in historic towns and conservation areas'*¹³³¹ by not ruling out the duplication of lighting columns by OLE poles; having separate NGT and bus stops; and by the inclusion in the NGT Urban Design and Access Statement of an objective to *'reinforce NGT identity and brand'* so that *'NGT routes should be easily identifiable (overhead lines will contribute significantly to this)'*.
- 6.369 NGT would conflict with Metro's policy in respect of bus stop location and design¹³³² by, for example, breaching the standard that any relocation of bus stops should not inconvenience bus passengers or create safety hazards¹³³³

¹³³⁰ Document D-6-11 Proposal No 13

¹³³¹ Documents E-4-15 and G-4-16: Manual for Streets paragraphs 10.1.1 and 10.1.2

¹³³² Document APP/114: Metro's Bus Stop Infrastructure Standards

¹³³³ Document APP/114 section 2e

and the standard for colours of new shelters¹³³⁴, as NGT would have its own strong brand colour.

- 6.370 In terms of the aspiration of the Leeds Vision¹³³⁵ to minimise growth in car use, the LTM forecasts indicate that introduction of NGT would lead to increased car use measured as car miles, a reduction in the number of car trips that would be less than that in the number of trips by active modes and a very much larger reduction in the number of trips by bus and rail.
- 6.371 The Leeds Vision¹³³⁶ seeks, in line with WebTAG guidance on policy formation, to make best use of existing transport assets, but the Promoters accept that the NGT Scheme would result in fewer bus services linking to the bus station and stopping at existing bus stops and reduced use of existing bus and rail services.
- 6.372 If the predictions of NGT usage were corrected (by removing the unwarranted penalties on bus and train use and the unwarranted ASCs for park and ride usage, and allowing for people's aversion to travelling on crowded public transport), the deleterious impact of NGT on congestion, car use, fuel consumption and emissions would be even more apparent. The conflict with the relevant policies, objectives and strategies would thus be even greater.
- 6.373 An appraisal of NGT's impact on employment, omitting the benefit from assumed reductions in penalties and allowing for an increase in highway trip costs, would show that it would increase the average generalised cost of travel. The logic underlying the Promoters' UDM would predict that this would depress employment, thereby conflicting with the employment growth objective.

Matter 5 (the likely impacts on the public, businesses and environment)

- 6.374 Disruption during construction could be expected to impact on the public, businesses and the environment. The Promoters have indicated that they

¹³³⁴ Document APP/114 section 5b

¹³³⁵ Document C-1-15 paragraph 2.23

¹³³⁶ Document C-1-15 paragraph 2.24

would seek to minimise these impacts but they have produced no evidence to quantify the impacts on businesses or to indicate how these would be dealt with. This is a major concern for local businesses who rely on their suppliers and customers being able to access their premises easily and who are concerned that a prolonged period of construction would deter customers. Access difficulties, parking restrictions, noise, dust and visual intrusion are issues of particular concern.

- 6.375 With regard to the impact on the public, the introduction of NGT would lead to deterioration in the quality of the public transport offer and in local accessibility.
- 6.376 In terms of the impact on the environment, introduction of the NGT would lead to loss of mature trees and green space, increased road widths, reduced footway widths, additional street furniture and the unattractive OLE. These would have an adverse effect on the ambience of the A660 corridor, the public who use the area, local businesses for whom the attractive ambience of the locality is an element of their appeal and, possibly, on property prices¹³³⁷.
- 6.377 The LTM predicts that introduction of the NGT would lead to a net increase in the emission of greenhouse gasses.
- 6.378 With regard to archaeology, the Promoters acknowledge that no fieldwork has taken place and that the impacts on the heritage assets are uncertain, contrary to the requirements of paragraph 128 of the NPPF¹³³⁸. No pre-determination evaluation has taken place on any archaeological site, despite the sites being referred to as 'significant' by the WYAAS.

Matter 6 (the likely impacts on service providers)

- 6.379 Disruption during construction could be expected to impact on emergency services, bus operators and on goods vehicles. FWY have pointed out that the impact on bus operations would not be limited to those buses which operate

¹³³⁷ Document OBJ 1727 DCRA/113: report by local estate agent

¹³³⁸ Document A-08c-7: ES Technical Appendix paragraphs 2.26 and 2.29

on the A660 or A61, and the impacts on businesses would not be limited to those whose premises are located within these two corridors.

6.380 The introduction of NGT would have a continued and deleterious impact on bus companies¹³³⁹ and train operating companies¹³⁴⁰ (they are expected to be able to recover this from DfT through reduced franchise costs). The emergency services would have their ability to move quickly along the A660 compromised by the removal of the central hatchings which currently provide them with a passage (the bus/NGT lanes would not provide a good substitute because they would be carrying public transport vehicles which would be unable to get out of the way of an emergency vehicle). Also, delivery services would suffer from the increase in congestion predicted by the LTM and by reductions in the number of parking spaces (the increased number of spaces designated for service vehicles would not accommodate the increasing number of vehicles delivering to residential premises along the route).

Matter 7 (the likely impacts on motorists, cyclists and pedestrians)

6.381 Disruption during construction could be expected to impact on travellers by car or bus as well as those who walk or cycle. The Promoters have made no attempt to estimate or monetise these impacts.

6.382 The introduction of NGT would have a continued and deleterious impact on the following:

- a) pedestrians, who would be faced with reduced footway widths, increased street furniture and reduced priority at signal controlled crossings;
- b) cyclists, who would suffer from the removal of important stretches of cycle-only lane and from the prospect of sharing lanes with near silent articulated vehicles;
- c) highway traffic, which is predicted to suffer from increased journey times, as traffic seeking to access the A660 would be delayed by signal settings

¹³³⁹ Document C-1 Table 13.2 predicted to suffer a loss of revenue of £300 million

¹³⁴⁰ Document C-1 Table 13.2 predicted to suffer a reduction in revenue of £31 million

- designed to give priority to the NGT vehicles, and this could delay NGT vehicles on those stretches of road which they share with general traffic;
- d) local traffic that would be inconvenienced by the closure of some roads and the banning of some turns (eg the right turn into Glen Road), by the removal of right-turn pockets on the A660 and by the removal of short-term parking spaces adjacent to local shops and businesses (eg the loss of off-peak parking spaces on the northeast side of the A660 between Hollin Road and Burton Crescent); and
 - e) users of road based public transport.

6.383 The increased walking distances and reduced availability of onboard seating would be a particular problem for people who are frail or have problems walking or standing for extended periods. This might be deemed to constitute discrimination, as defined in the Equality Act 2010, on the basis of disability or indirect discrimination on the basis of age. Similarly, against a background of significant reductions in parking spaces adjacent to local shops, the failure to provide disabled parking spaces in these areas could be deemed to discriminate against disabled people.

Matters 9d and 9e (mitigation of environmental impacts)

6.384 The full cost of on-going maintenance of the new planting, which is offered as mitigation for the loss of mature trees, has not been budgeted for beyond the first five years¹³⁴¹, which reduces the value of the mitigation because it is known that significant loss of newly-planted trees (25% of the original planting) occurs as a result of reduced maintenance beyond the initial period of properly funded tree maintenance¹³⁴². In the absence of such funding beyond year five, it cannot be assumed that the mitigation would succeed and so should be excluded from the consideration of the planning balance.

6.385 A number of potential improvements to urban realm identified as necessary or desirable are not funded as part of the NGT Scheme. For example page 7 of

¹³⁴¹ Mr Smith in cross examination

¹³⁴² Document OBJ1727 DCRA/111 Barriers to Planting and Retaining Urban Trees E and F
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the West Park Conservation Area Appraisal and Management Plan (2008) identifies the forecourt to the local shops as '*the principal public space in the Conservation Area*'¹³⁴³. However there are no specific proposals or funding to effect such enhancement despite it being in a CA and the fact that the proposals would cause harm by wire fixings and potential tree loss.

- 6.386 Some of the allowance for mitigation which has been included in the assessment of overall impacts is contrary to NPPF. For example, improvements to the surface of Monument Moor '*to replace the scruffy gravel informal parking area*'¹³⁴⁴ is contrary to paragraph 130 of the NPPF, which states that '*where there is evidence of neglect or damage to a heritage asset, the deteriorated state of the heritage asset should not be taken into account in any decision*'.

Matter 10 (the adequacy of the ES submitted with the TWA Order application)

- 6.387 Document B-13, submitted in July 2014, was intended to replace the Historic Environment Technical Appendix¹³⁴⁵ and parts of the Main Statement¹³⁴⁶, the Non-Technical Summary¹³⁴⁷ and relevant parts of the Supplement to the 2014 Environmental Statement¹³⁴⁸. However, it was not accepted by the Inspector as a replacement of the original Statement (he ruled that the original document should still stand as the Historic Environmental Statement) and there has been no opportunity to cross-examine the author of the new document. The many differences between the new document and those it sought to replace are thus indicative of shortcomings in the ES submitted with the TWA Order application.

¹³⁴³ Document A-08c-7 paragraph 3.43 notes that the forecourt has '*poor public realm treatment that offers scope for enhancement*'

¹³⁴⁴ Document B-13 paragraph 4.671

¹³⁴⁵ Document A-08c-7

¹³⁴⁶ Document A-08b

¹³⁴⁷ Document A-08a

¹³⁴⁸ Document B-13 paragraph 1.3

- 6.388 In respect of the Headingley Hill, Hyde Park and Woodhouse Moor Conservation Area, the Main ES¹³⁴⁹, having described the impact upon listed structures within CAs, concludes that it would have 'minor impact' for three Grade II listed buildings. Document B-13 goes some way to rectifying the original inadequate assessment by raising the effect on Buckingham House and Ford House to 'moderate adverse'. However, there are at least nine other listed buildings with close frontages to Headingley Lane whose setting would be moderately adversely affected eg the Elinor Lupton Building and the Lodge House at the entrance to Hinsley Hall.
- 6.389 The NGT non-technical summary¹³⁵⁰ identifies the Woodhouse Lane/Clarendon Road character areas N17 and N18 across Woodhouse Moor as having only '*slight residual beneficial effects both in terms of landscape/townscape and visual amenity*'. This is despite the introduction of OLE infrastructure along Woodhouse Lane and on Monument Moor. The Promoters have agreed that there would be significant residual effects, perhaps moderate/major, and definitely not 'low' as had been stated¹³⁵¹.
- 6.390 Even where there are up to date CA Appraisals, the ES is inadequate. In respect of the route across Woodhouse Moor, it states that '*the Moor is not protected by any heritage designations*'¹³⁵² even though it is within the Headingley Hill, Hyde Park and Woodhouse Moor CA and is designated as 'Protected Greenspace' under UDP policy N1. This error has been recognised in Document B-13¹³⁵³ but the original mistake is repeated in the Landscape Assessment Appendix¹³⁵⁴, where the townscape sensitivity is recorded as only medium (on the mistaken assumption that the Moor is not recognised as being in a CA), when it should be high and the significance should be major adverse. Document B-13 recognises that the character of the CA '*will be changed through the presence of an off-highway route across Woodhouse Moor, OLE,*

¹³⁴⁹ Document A-08b paragraph 7.156

¹³⁵⁰ Document A.08a paragraphs 8.58 and 8.61

¹³⁵¹ Mr Ward in cross examination about paragraph 5.36 of Document APP-9-2: Mr Ward PoE

¹³⁵² Document A-08-c7 paragraph 3.66

¹³⁵³ Document B-13 paragraph 3.71

¹³⁵⁴ Document A-08-e1 Table 4.84 paragraph 4.674

*wider highways, and set-back walls*¹³⁵⁵ but, unlike similar wording for the Headingley CA ¹³⁵⁶, states that this would only have a low impact. This difference is repeated in Table 4.7 for the operational stage.

- 6.391 The NPPF states that *'in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made to their setting'*¹³⁵⁷. In the absence of a detailed CA Appraisal, it was particularly important that the Promoters undertook a thorough assessment of the historic environment of the centre of Headingley. This was not done.
- 6.392 The NGT Main Statement states that there are a number of elements which each result in a moderate adverse effect¹³⁵⁸. However, it concludes that *'following mitigation, it is considered the effects will be not significant'*¹³⁵⁹. Document B-13 states *'However, significant residual effects will remain at the off highway route in Headingley and specifically on Headingley Castle and its lodge and Headingley Conservation Area'*¹³⁶⁰ and *'the proposal also seeks to create green space around the Arndale Centre'* and *'the effects will therefore be minor beneficial'*¹³⁶¹. No mention is made of the loss of trees that currently partly screen the Arndale Centre when viewed from the CA to the east, or of the turn-round facility for the NGT opposite the listed Broderick Court which would significantly affect its setting. These omissions reflect the lack of a thorough assessment of the Headingley CA, notably the lack of consideration of non-designated heritage assets and the impact of trees lost. In respect of trees generally, in the absence of a CA Appraisal, the Promoters should have

¹³⁵⁵ Document B-13 paragraph 4.118

¹³⁵⁶ Document B-13 paragraph 4.117

¹³⁵⁷ Document E-4-21: NPPF paragraph 128

¹³⁵⁸ Document A-08-b paragraph 7.159 examples given are: *'loss of trees along east side of road through road widening north of Alma Road', 'off highway corridor between Headingley Lane and Alma Road will result in the severance of the small paddock areas and hedgerows between Oakfield, Headingley Castle and St. Columba's Church, a loss of trees within the swathe of woodland corridor, which forms part of the character and special interest of the area, providing an important background setting for many of its significant buildings', and severance of local side roads'*

¹³⁵⁹ Document A-08-b paragraph 7.160

¹³⁶⁰ Document B-13 paragraph 3.9

assessed which affected trees were of significance to the character of the area and worthy of consideration for Tree Preservation Order protection.

6.393 In line with WebTAG guidance¹³⁶², a holistic view should be taken of heritage assets in CAs and the Promoters' use of separate assessment methodologies for historic environment, landscape/townscape character and visual impact lacks coherence and fails to recognise the cumulative impact of those assessments in the context of the overall 'special architectural or historic interest' of the CAs. The overall cumulative effect of the NGT Scheme as a whole, particularly for the northern route which passes through eight CAs, should be at least major and, if the value of the City Centre CA is raised to high¹³⁶³, it would be more than major.

6.394 The evidence to the Inquiry¹³⁶⁴ indicates that the harm to the overall historic environment would be significant if not substantial and that, allowing for evidence on the alleged benefits which has come to light during the Inquiry, the Promoters' conclusion on the overall balance is untenable¹³⁶⁵. The harm done by NGT to other planning objectives outweighs the alleged policy support for NGT.

Matter 11 (The conditions proposed to be attached to the deemed planning permission for the Scheme)

6.395 If the Inspector is minded to recommend that the Order is made, the deleterious consequences of the proposed LTVS would be lessened if the

¹³⁶¹ Document B-13 paragraph 4.109

¹³⁶² Document OBJ 1727 DCRA/107: TAG UNIT A3 Environment Impact Appraisal Guidance paragraph 5.3.19 describes how to arrive at the 'overall assessment score for a topic from assessments on a number of separate key environmental resources affected'. The first principle is 'that a scheme as a whole should be assessed according to the most adverse assessment'; the second principle is 'that where it is clear that there is a cumulative effect across a range of key environmental resources, then the scheme as a whole should be scored in a higher category than the key environmental resources in isolation'

¹³⁶³ Document APP-9-2: Mr Ward PoE paragraph 4.4 gives it as 'high'

¹³⁶⁴ Mr Ward's evidence at the Inquiry; and Document B-13

¹³⁶⁵ Document APP-8-1: Mr Speak Summary to PoE paragraph 9.12: 'the impact on heritage assets is recognised' and 'the evidence of Mr Ward is that the harm arising from NGT is less than substantial.'; and in paragraph 9.14: 'the policy support for NGT and its benefits is not outweighed by the harm arising to other planning objectives'

following conditions were imposed¹³⁶⁶:

- a) Trolley vehicles should share stops with buses, to aid with integration, reduce passenger waiting times, improve convenience and avoid the cost and street clutter of duplicate stops. The following is a suggested condition: *'No stops should be constructed for the exclusive use of trolley vehicles, except specified exceptions where sharing is not feasible'*, and accompanied by changes to proposed TROs and other elements of the draft Order. An alternative, but very much weaker condition, is to require the provision at all NGT stops, and at adjacent bus stops, of real time information boards displaying imminent arrivals of buses and NGT vehicles at that stop and at the adjacent ones.
- b) The proposed 24 hour ban on waiting and parking in the southbound bus and NGT lane between Park Terrace and Burton Crescent should be replaced by a ban applying only in weekday morning peak periods to reduce the loss of off-peak parking for customers of the shops, restaurants, pubs and cinema in Far Headingley, as it would have little impact on bus and NGT journey times¹³⁶⁷. A suggested condition is *'The TRO specifying the restrictions applying to waiting and parking on the North East side of the A660 between Park Terrace and Burton Crescent should indicate that restrictions would apply only between the hours of 0730 and 0930 on weekdays and that any change to these restrictions would need to be the subject of a public Inquiry'*.
- c) Certain design features, mitigations, and improvements to the public realm, which have been identified as benefits of the Scheme, should be fully specified and costed as integral elements of the Scheme, to avoid benefits claimed for the Scheme not being allowed for in the costs, to reduce the possibility that mitigation which has been identified as necessary being scaled down as a result of budgetary pressures and never actually be implemented and to ensure a reduction in the net damage done by NGT to the environment. Matters to be included should be

¹³⁶⁶ Document OBJ/1719-503

¹³⁶⁷ Document OBJ 1719 NWLTF/122 section C5

surface materials to be used within CAs, full specifications and costings of the potential improvements in public realm¹³⁶⁸ and fully funded on-going maintenance and irrigation of new planting for 10 years.

Matter 12 (likelihood of attracting necessary funding)

6.396 The general and specific conditions attached to the PEBC funding approval letter of July 2012¹³⁶⁹ give the DfT ample scope to decline to fund the project if it is so minded. It would be unsafe to expect the DfT to not be concerned about the following matters raised during the Inquiry¹³⁷⁰:

- a) Regarding the quality factors incorporated into the forecasts upon which the Business case rests-
- They were substantiated on a value based on the respondents' willingness to pay to travel on a 'very new bus' rather than on an 'old bus' when the SP surveys provided an estimate of bus users' willingness to pay to travel on trolleybuses and its value was negative;
 - They were applied to journeys by rail as well as to journeys by bus;
 - The comparison of stop penalties provided to DfT ¹³⁷¹ underestimated the difference between the values used to forecast demand for NGT and those presented in the AECOM report on soft factors;
 - The stop penalties applied to journeys by rail are higher than could possibly be justified¹³⁷²; and
 - The SP derived penalty factors were not re-scaled to allow for the tendency of SP studies to over-estimate willingness to pay for new options¹³⁷³.

¹³⁶⁸ Document App-8-3: Mr Speak PoE Appendix 5 Condition 7 includes a list of locations but is incomplete (for example, it excludes West Park shopping Forecourt, the area around the Far Headingley/St Chads War Memorial, and the section of Weetwood Lane which would become closed to through traffic)

¹³⁶⁹ Document C-6-15

¹³⁷⁰ Document OBJ 1719 NWLTF/122 section D6a

¹³⁷¹ Document C-2-4 Appendix A page 8

¹³⁷² Document OBJ 1719 NWLTF/122 section C12

¹³⁷³ Document C-4-24 paragraph 2.10 requirement

- b) The required grants and subsidies have increased from £290 million (in 2002 values) in the 2012 PEBC to £532 million (in 2010 values) in the 2014 revised Business Case¹³⁷⁴.
 - c) The flaws in the LTM, including its failure to replicate local flows¹³⁷⁵, the incorrect coding of a key junction (A660/Shaw Lane) in the SATURN model¹³⁷⁶, the failure of the SATURN modelling to allow for the adjustment to green times to avoid blocking-back mode¹³⁷⁷, the hampering of attempts to check for consistency between TRANSYT and SATURN by large zone sizes¹³⁷⁸ and badly placed centroid connectors distorting the demand predictions¹³⁷⁹.
 - d) The UDM's predictions were based on public transport journey times and the quality factors without any account being taken of increases in highway costs/times.
 - e) The introduction of trolley vehicles would degrade many aspects of the public transport offer eg crowding and increased journey times for many people.
- 6.397 Condition iii in the PEBC funding approval letter requires the BCR, as assessed by the DfT, to not fall significantly below 2.70. The BCR calculated by the Promoters in their 2012 PEBC was 3.86. The DfT recalculated it as 2.70 due in no small part to the fact that, in the DfT's opinion, the Promoters had not made sufficient provision for optimism bias. The Promoters' 2014 Business Case has made insufficient allowance for the combined effect of the following:
- a) The risks associated with operating a relatively small fleet of vehicles with a unique specification and thus probably increasing the unit cost of manufacture, making it more difficult to source replacement vehicles or

¹³⁷⁴ Document SOCG/OBJ/1719-1 corrects for the different cost bases and shows that the cost total value of public sector grants and subsidies to the project is 12% higher in the 2014 Business Case than it was in the 2012 Business Case approved by DfT

¹³⁷⁵ Document OBJ 1719 NWLTF/122 section C14

¹³⁷⁶ Document OBJ 1719 NWLTF/122 section C11

¹³⁷⁷ Document OBJ 1719 NWLTF/122 section B10

¹³⁷⁸ Document OBJ 1719 NWLTF/122 section B10

¹³⁷⁹ Document OBJ 1719 NWLTF/122 sections B12 and D1a

spare parts and weakening the Promoters' negotiating position with suppliers.

- b) The risks associated with being committed to a technology which is likely to be rendered obsolete by technological development.
- c) The risks associated with being faced by serious and sustained competition from bus operators.
- d) The unquantified costs associated with dealing with any sub-surface heritage assets.
- e) The possibility that, due perhaps to structural changes in the demand for transport, the potential market in which NGT would be operating might not grow in line with official forecasts¹³⁸⁰.

6.398 The BCR calculated by the Promoters in their 2014 revised Business Case was 2.96 (as at January 2014 but was corrected to 2.90 before the start of the Inquiry). Given that the Promoters have not increased their provision for optimism bias, this figure is likely to be recalculated downwards by the DfT. The BCR would be reduced by the correction of known errors in the LTM and downscaling of the unjustifiably high penalties on journeys made by transit modes other than NGT, significantly reducing the predicted shift to NGT and the benefits labelled as 'time savings', and greater disbenefits associated with the increase in greenhouse gas emissions.

6.399 The BCR will be further reduced when the calculations are modified to include:

- a) the general increase in costs which will be consequent upon the further delay to the project schedule (the 2020 start date was based on a serious under-estimate of the time required for consideration of the TWA Order application);
- b) the costs associated with reduced use of active modes (in line with new advice issued by the DfT in December 2013¹³⁸¹);
- c) the costs of disruption during construction (in line with WebTAG advice);

and

¹³⁸⁰ Document OBJ 1719 NWLTF/110: Goodwin Graph: suggests that official traffic forecasts have generally been too high

- d) the full costs of mitigation and of completion of indicated improvements to the urban realm (if imposed as a condition of acceptance of the TWA Order).

- 6.400 The overall effect of the above corrections would be to reduce the BCR to a level significantly below 2.70.
- 6.401 Condition xi in the PEBC funding approval letter is that the delivered scheme must be substantially that for which PEBC funding was approved. It is inevitable that, when the revenue predictions are corrected to remove errors and unjustifiably optimistic assumptions, the Promoters will be forced to reduce the specification¹³⁸². Such changes would give the DfT grounds to require repayment of part of its funding.
- 6.402 £77 million of the required funding would need to come from local sources, part of which would be £35 million of 'prudential borrowing' which is expected to be paid off using revenue surpluses anticipated by the Promoters. This local contribution and commitment to prudential borrowing is dependent upon continued local political support. It is very unsafe to assume that this support will continue to be forthcoming in the light of the following:
- a) Informed public opinion is clearly opposed to the NGT Scheme and this became very clear to local councillors canvassing prior to the May 2014 elections;
 - b) Local businesses, when consulted, have indicated strong opposition to the Scheme;
 - c) The weaknesses in the Business Case and the fragility of the projected revenue stream will become generally known (there is evidence to suggest that it is not yet understood by local politicians);
 - d) The growing pressure on local Government finances;

¹³⁸¹ Document OBJ 1719 NWLTF/122 section C17

¹³⁸² Mr Henkel evidence to the Inquiry identified potential savings including reduced frequency, particularly off-peak and beyond Bodington as among those that would be first considered

- e) Key individuals have already withdrawn their support for the Scheme¹³⁸³; and
- f) The increasing momentum behind the attempts to persuade the DfT to allow all, or part, of the £173 million to be spent on alternative, more cost-effective solutions to transport issues within the Leeds area.

6.403 The possibility of legal challenge to the operation of NGT could reduce the willingness of the DfT, and of banks, to fund the Scheme.

Matter 13 (whether the case for compulsory purchase powers is compelling)

6.404 It would be unsafe, unfair and unjust to grant the compulsory purchase powers which have been requested because of the Scheme's harm to heritage assets and the wider environment; its impacts being inconsistent with policy; its deleterious impact on the public transport offer; the exaggerated and unproven benefits that are claimed; alternatives have not been fully explored; the financial case is flawed; and the considerable doubt that it would achieve the support and funding required to proceed as planned.

*Matter 15 (inadequacies in the consultation and communication)*¹³⁸⁴

6.405 The Promoters have made no attempt to seek the views of local residents, businesses and transport users on problems in the A660/A61 corridors or on potential solutions to those problems. More particularly, there has never been any serious attempt to seek, from within the NGT corridor, a local perspective on transport issues in the corridor or on how the problems might be addressed; seek, the public reaction to the decision to proceed with the north and south lines while dropping the east line and the City Centre loop, the decision to use trolleybus technology rather than hybrid vehicles (on a trajectory to fully-electric vehicles), or the decision to have separate stops for the two systems.

6.406 Leeds-wide surveys in 2008¹³⁸⁵ sought respondents' views on *'the key attributes that people would like to see in a new public transport system for*

¹³⁸³ Document OBJ 1719 NWLTF/122 section D6b.i
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Leeds'. The results cannot be said to justify the introduction of the LTVS along this route because, for example, the highest ranking improvement (improved reliability) is of limited relevance in the A660 corridor because the service frequency is very high and the main advantage of LTVS (faster in-vehicle times) was ranked much lower than 'more frequent services' and 'less crowding', both of which would be worse if NGT were introduced.

6.407 The results from the consultation during 2009¹³⁸⁶ are of limited relevance to the current proposal because opinions were being sought on the concept of a network of trolleybus routes, including a city loop and an eastern route rather than the northern and southern routes now being proposed; trolleybus technology was described as the preferred choice and the decision to pursue it was presented as a fait accompli; the description of the proposed system was extremely one sided (it indicated several benefits which cannot be claimed for the proposal now under consideration eg helping to tackle congestion and reduce pollution in Leeds, while not mentioning key facts such as that bus services would be reduced and that the two systems would have separate stops or that roads would need to be widened to accommodate the new service); and the description was highly schematic with no detail provided on important facts such as the location of stops.

6.408 Although not part of the formal consultation process, the SP surveys conducted in early 2009¹³⁸⁷ did seek information on bus passengers' willingness to pay to travel on a trolleybus rather than on a bus. The result was that they would be prepared to pay more to travel on a bus, and very much more to travel on a new bus, than on a trolleybus¹³⁸⁸. This appears nowhere in the Promoters' documentation and was completely ignored.

¹³⁸⁴ Document OBJ/1719 SOC: NWLTF Statement of Case section 9

¹³⁸⁵ Document A-01-3 paragraph 2.4 (questionnaire reproduced on page 34 of Annex 3)

¹³⁸⁶ Document A-01-3 paragraph 2.28: source of the 77% support for the NGT proposals

¹³⁸⁷ Document C-4-24

¹³⁸⁸ Document APP/155

6.409 The next stage of the consultation was in 2012/13, by which time the Promoters were '*no longer consulting on the principles of the Scheme*'¹³⁸⁹ on the grounds that '*detailed public consultation*' had shown support for the Scheme. The focus was now on providing information about the supposed benefits of the proposed system and on seeking feedback on design details. It involved a media campaign, provision of a website, distribution of leaflets, a series of drop-in consultation events and targeted discussions with objectors and other interested parties. These have given an unduly positive impression of the impacts of the proposed system and of support for it by, for example, the leaflets referring to reduction in congestion and emissions '*as commuters switch to public transport*', despite the LTM predicting that NGT would result in increased congestion and increased greenhouse gas emissions, the leaflets making no reference to important features of the Scheme, such as that separation of stops would result in a less frequent service at any given stop or that door-to-door journey times would increase for many journeys; photomontages being misleading and subliminally generous to the Scheme¹³⁹⁰; and, as of 16 September 2014, the website still claiming that NGT would offer benefits in congestion, journey times and links to Headingley Stadium, which are not all true¹³⁹¹. Literature and briefings have continued to claim that the Scheme has widespread public support¹³⁹².

6.410 The 'drop-in' events were useful as a means of raising awareness but were extremely poorly organised. The lack of landscape plans and of information about the OLE equipment and about basic facts, such as the location of bus stops, compounded by the refusal to enter into any dialogue about the overall concept, left many participants confused and frustrated. However, some of

¹³⁸⁹ Document APP-2-2: Mr Haskins PoE page 35 paragraphs 6.13 and 6.14

¹³⁹⁰ OBJ/998 evidence; Mr Haskins in cross-examination; and Mr Walker in cross examination

¹³⁹¹ The nearest NGT stop would be 0.6 km from the Stadium (a distance similar to that between the Stadium and Burley Park rail station and greater than that between the stadium and the stops of the existing No 1, No 6, No 28 and No 97 bus services) and the No 19, No 19a and No 56 bus routes already offer a direct link to the Stadium and special buses already run between the City and the Stadium when major events are staged

¹³⁹² Evidence to the contrary- Document OBJ/1719 SOC: NWLTF Statement of Case Appendix I; Document A660JC-103: poll conducted by Yorkshire Evening Post (showing 73% opposition); and Document OBJ/1815 item 5: poll by the local MP (showing 87% opposition)

the residents' comments on detailed design issues appear to have been taken account of in design updates.

- 6.411 Communication and consultation with businesses along the route was very poor. The survey by the Federation of Small Businesses (FSB)¹³⁹³ revealed that many businesses had no recollection of having received any information from the Promoters about the Scheme, let alone having been consulted by them.
- 6.412 Several of the meetings at which the Promoters presented information about the Scheme were organised by others (eg Residents' Associations, FSB), rather than by the Promoters themselves. Most of the meetings with individual organisations and businesses took place after they had objected to the Scheme and were part of the programme of 'objector management' rather than a genuine consultation.
- 6.413 The consultation conducted by the Promoters was deficient and contrary to guidelines in the following ways:
- a) The Leeds-wide surveys in 2008 did not follow WebTAG guidance¹³⁹⁴ with regard to the role of local consultation in the identification of problems and of potential solutions to those problems.
 - b) Respecting consultation on the visual impacts of NGT, due to the lack of effective consultation through anything other than engineering drawings, contrary to GVLIA.
 - c) The first objective of the Promoters' Communication Management Strategy¹³⁹⁵ was neither to consult nor ascertain opinion, which is inconsistent with the Organisation for Economic Co-operation and

¹³⁹³ Document OBJ/1721 PoE: FSB PoE

¹³⁹⁴ Document OBJ 1719 NWLTF/106: WebTAG The Transport Appraisal Process, Jan 2014, box 7 in Figure 1, sections 2.2.3, 2.8.10 and 3.1.4

¹³⁹⁵ Document A-01-3: to '*Establish, develop and maintain active support for and understanding of, the proposed NGT project from key stakeholders, partners and ultimately the public, across Leeds and its City Region through planned, targeted, effective and consistent communications*'

Development guidelines for public consultation¹³⁹⁶ and with the First Principle of The Consultation Institute¹³⁹⁷.

- 6.414 The Promoters' continued insistence that the proposed Scheme has widespread public support is without foundation and ignores the results of their own SP study and of polls and surveys conducted more recently. None of the critical results are mentioned anywhere in the Promoter's literature and the stated reason for this (that the surveys were 'unscientific') is unconvincing in the light of a favourable vote by a relatively small number of students in the Leeds University Union being given prominence on the NGT website.
- 6.415 Communication with the ambulance service has been unsatisfactory¹³⁹⁸. There have also been failures of communication within the Promoters' team and between them and local elected politicians¹³⁹⁹. Even those people (members of the Promoters' team, members of the public, local politicians and other decision makers) who have read the revised Business Case or its predecessors, are likely to have been misled by the unbalanced reporting of results contained therein.

Matter 15 (The possibility of legal challenge)

- 6.416 It would be unsafe to assume that there would be no legal challenge to the NGT on the grounds that it would be anti-competitive; involve an unfair state to one service provider, contrary to European Law¹⁴⁰⁰; constitute discrimination on the basis of disability, or indirectly on the basis of age, under

¹³⁹⁶ Document OBJ/171 SOC: Statement of Case Document 209A: OECD guidelines for public consultation state on Page 1 that it must be '*a two-way flow of information*' based on proper dialogue

¹³⁹⁷ Document OBJ/171 Statement of Case Document 209B: Final Report of the Commission on Fair Access to Political Influence Annex C states '*The Consultor must be willing to listen to the views advanced by consultees, and be prepared to be influenced when making subsequent decisions. If the decisions subject to consultation have already been taken, it is a waste of consultees' time and a fraud upon all participants to undertake a purposeless exercise, and breaches the principle of Consultation Integrity*'

¹³⁹⁸ Document A-01-3.paragraph 7.18: '*No responses have been received from the Ambulance Service*'

¹³⁹⁹ Mr Haskins, Mr Chadwick and Mr Speak in cross examination

¹⁴⁰⁰ Document SOCG/OBJ/1719-1 subsidy of £532 million

the Equality Act 2010; or that the environmental statement had been inadequate, contrary to European Law.

Matter 15 (Modificaitons to the Order)

6.417 The proposed modifications to the Order are for trolley vehicles to share stops with buses, with enhancement of the shared stops; and the replacement of the proposed permanent ban on waiting and parking in the southbound bus and trolley vehicle lane between Park Terrace and Burton Crescent by a ban applying only in the weekday morning peak (as at present), requiring specific changes to the TROs listed in the draft Order¹⁴⁰¹.

Conclusions

6.418 The Business Case for NGT is weak, flawed, and misleading. The benefits of the Scheme have been grossly exaggerated and the harm has been underestimated. The deficiencies in the proposed Scheme are fundamental rather than cosmetic and the corridor does not have the space to accommodate a new, separate and distinct mode of public transport which is prioritised over all other modes. In attempting to accommodate the new mode, significant harm would be done to the existing public transport offer as well as to the area's heritage, ambience and community assets.

6.419 The proposed allocation of priority and road space is fundamentally inefficient. Rather than give absolute priority to up to 10 public transport vehicles per hour, a much better approach would be to give significant priority to all buses and to users of active modes.

South Headingley Community Association (SHCA) OBJ 1641

The material points¹⁴⁰², other than those associated with the LBC and CAC applications¹⁴⁰³, were:

¹⁴⁰¹ Document OBJ 1719 NWLTF/128: NWLTF Closing Statement paragraphs 100 to 102

¹⁴⁰² Documents OBJ 1641 Objection letter 30 October 2013; OBJ/1641 SOC: Statement of Case and Appendices 1 to 39; OBJ/1641 PoE1: PoE; OBJ/1641 PoE2: PoE Appendices SHCA 1 to SHCA 14; OBJ/1641 PoE3: PoE Appendices SHCA 15 to SHCA 39; OBJ/1641-102 Final Submission of 24 October 2014; and OBJ/1641-103 Final Submission of 28 October 2014; and

6.420 SHCA had 192 signed-up members on 8 October 2014. Its constitution seeks to promote and improve the quality of life for people in the south Headingley area. The Committee of SHCA, elected each year at its AGM, decided that the NGT Scheme was not in the interests of the area¹⁴⁰⁴. A petition has been submitted at the Inquiry opposing the NGT Scheme¹⁴⁰⁵.

Consultation

6.421 Many of SHCA's members live less than 600m from the proposed NGT route and did not receive a leaflet of general information about NGT. SHCA committee members attended all of the NGT consultation events held between November 2012 and February 2013. Information provided by different members of the NGT team at these events was often contradictory or vague.

Visual Environment

6.422 The Scheme would have an adverse effect on the visual relationship between the tight busy streetscape of Hyde Park Corner and the open, green Woodhouse Moor. Hyde Park Corner is the gateway between Headingley and the City Centre and a nodal point between Hyde Park and Woodhouse. It is geographically at the centre of the Headingley Hill, Hyde Park and Woodhouse Moor CA¹⁴⁰⁶.

6.423 The advertising hoardings in front of St Augustine's Church would be removed, but they could have been removed at any time over the last few decades as the land is owned by the Promoters. The major visual and heritage impacts of the Scheme in that area would be where property would be demolished to make the road up to twice as wide, causing irreparable damage to the tight streetscape and funnelling effect of Hyde Park Corner before it opens out onto Woodhouse Moor.

oral evidence given at the Inquiry

¹⁴⁰³ See Appendix D to this report: Report on the Listed Building and Conservation Area Consents

¹⁴⁰⁴ Document OBJ/1641-104: Statement of Sue Buckle, Chair of SHCA

¹⁴⁰⁵ Document OBJ/1641-106: Save Hyde Park Corner and Monument Moor Petition

¹⁴⁰⁶ Document D-5-3: Headingley, Hyde Park and Woodhouse Moor Conservation Area

6.424 The left over space after road widening and NGT stop building at Hyde Park Corner has been identified as a '*Regeneration Opportunity Potential future building plot to repair urban grain*', but the plan shows a grassed area with trees¹⁴⁰⁷. It is likely that this area of land would be sold for development¹⁴⁰⁸. If the buildings were demolished and the road widened as proposed, the streetscape could never be restored. The uncertainty of the proposals for this area is unacceptable and a decision should not be made without detailed information. Also, no information has been provided about what would happen to the stone boundary wall at the Victoria Road/Headingley Lane junction.

Viability

- 6.425 Hyde Park Corner has been designated as a shopping centre in the UDP and saved policies in the draft CS¹⁴⁰⁹. The low rent shops are good for the community.
- 6.426 Business owners tenanted the properties due to be demolished (11 to 25 Headingley Lane and Victoria Road) are against the Scheme¹⁴¹⁰. There are 6 businesses occupying the 8 units. The Promoters have increased the rent at these units by 20% this year¹⁴¹¹. The loss of these lower rent retail units to the local retail centre of Hyde Park Corner would adversely impact the viability and diversity of the remaining shops and businesses.
- 6.427 The LS6 Café Bar at Hyde Park Corner would be adversely affected by having a NGT shelter right outside it, which would make it unattractive for people to sit at outside tables and harm the view from the café windows.

Appraisal and Management Plan pages 13 and 20

¹⁴⁰⁷ Document A-05 Drawing No M4931-121 Rev P04

¹⁴⁰⁸ Document OBJ/1641 PoE3 Appendix SHCA 37: Mr Ward in cross examination

¹⁴⁰⁹ Document OBJ/1641 PoE3 Appendix SHCA 35: Proposals Map and Policy S4

¹⁴¹⁰ Document OBJ/1641 PoE3 Appendix SHCA 38: E-mails from businesses

¹⁴¹¹ Document OBJ/1641 PoE3 Appendix SHCA 34: letter to a tenant

Community

- 6.428 All of Hyde Park Corner and Woodhouse Moor are extremely valuable to the inner city communities of Hyde Park and Woodhouse. These areas have the highest percentage of inhabitants without vehicle access in Leeds¹⁴¹² and therefore a large part of the community walks or cycles to Woodhouse Moor, to work, to shops at Hyde Park Corner and around the community. The Scheme would offer no benefits to these communities, but would offer a considerable reduction in parkland.
- 6.429 The Promoters have provided no evidence of community consultation and have not looked closely at how different demographics along the route would be affected by the Scheme despite WebTAG 3.17 requiring them to do Social and Distributional Impact Assessments¹⁴¹³.
- 6.430 The Ward of Hyde Park and Woodhouse is short of green space. As such, parts of Monument Moor, Little Moor, Cinder Moor and The Avenue should not be taken for the Scheme.
- 6.431 The Promoters' Landscape, Townscape and Visual Impact Assessment does not follow GLVIA2 guidelines in terms of the importance that it assigns to visual receptors. No notice has been taken of the particular sensitivity towards the environment that the residents of Hyde Park and Woodhouse have as people who, for a large part, occupy back-to-back terraces or small houses with little or no gardens, in a densely populated area with low vehicle access.
- 6.432 The alteration of traffic flow to prevent traffic turning right from Hyde Park Road onto Woodhouse Lane, left or right from Woodhouse Lane onto Woodhouse Street or Hyde Park Road and left from Headingley Lane onto Woodhouse Street would effectively make shops at that location (The Crescent and the Birdcage) into a traffic roundabout. The widening of Cliff Road and Headingley Lane would severely detract from the current enjoyment had by pedestrians in that area. Instead of being a vibrant shopping centre at a

¹⁴¹² Document C-1-15 Table 3.8

¹⁴¹³ Document OBJ/1641 PoE3 Appendix SHCA 29

crossroads, connected to an inner city park, Hyde Park Corner would become a large traffic intersection. The removal of guardrails at Hyde Park Corner in conjunction with the City bound NGT stop and new pedestrian crossings could be a safety issue.

Parking

6.433 The streets in the Hyde Park and Woodhouse Ward area are used for unofficial car parking for commuters to the universities and Leeds City Centre. Without introducing residents' parking permits, those commuters would be unlikely to cease, even if the Bodington Park and Ride were to be built. Congestion could be reduced by the introduction of parking permits in the Ward and a reduction in City Centre parking.

Conclusions

6.434 There has been inadequate consultation and the Scheme would cause huge and irreparable damage to the character and environment of the South Headingley community, especially to Woodhouse Moor and Hyde Park Corner, but also to other communities along the north and south routes, for no benefit and at great expense to the City of Leeds.

North Hyde Park Neighbourhood Association (NHPNA) OBJ 1624

The material points¹⁴¹⁴ were:

6.435 NHPNA represents the area between Hyde Park Corner and Woodhouse Ridge and was formed in 1972. It has a membership of about 220 households and businesses.

6.436 The average speed of the NGT from Lawnswood to the City Centre would be about 12 mph and the actual time saving from that of using the No 1 bus journey from Holt Park to the City Centre would be either 1 or 3 minutes¹⁴¹⁵. It would not be rapid transit.

¹⁴¹⁴ Documents OBJ/1624 SOC: Statement of Case, OBJ/1624PoE1 and PoE2: PoE and Appendices and OBJ/1624-100 Closing Statement 23 October 2014

¹⁴¹⁵ Document C-2: Programme Entry Business Case

- 6.437 The Scheme would make congestion worse for other traffic¹⁴¹⁶ which, according to the DfT, would cost local business £110 million¹⁴¹⁷. The damaging effects of the Scheme on businesses along the route, both from delays and from construction work, is a serious concern as many would go out of business. This would be because people would be likely to choose to go elsewhere to shop, in order to avoid construction work and traffic held in queues resulting from the NGT being given priority at junctions¹⁴¹⁸. If congestion became worse, rat running would also become worse.
- 6.438 With regard to the alleged benefits of the proposals, the smoothness of the ride of the trolley vehicles depends on the smoothness of the road surface. Those having driven from Otley or Bramhope would not use a park and ride at Bodington when they would be assured of a parking space in the City Centre, or choose to stand on an articulated trolley vehicle.
- 6.439 Because other traffic would be held in traffic stacks, pollution in Headingley and elsewhere along the route would be worse¹⁴¹⁹. If the aim is to reduce pollution, it would be better to spend the money on battery powered buses that serve the entire City than to provide 20 trolley vehicles on just one route. £250 million for 9 miles is not value for money compared with Nottingham, which built the same length of tramline for £229 million¹⁴²⁰.
- 6.440 A route monopoly would be given to whichever company that wins the franchise to operate the NGT. This would be necessary because trolley vehicles cannot compete with other buses. People prefer to travel on the cheaper transport. For the trolley vehicle to succeed, competition would have to be eliminated.

¹⁴¹⁶ Document OBJ/1624 PoE2 Appendix NHPNA4: BBC interview with NGT project director Dave Haskins 15 January 2013

¹⁴¹⁷ Document OBJ/1624 PoE2 Appendix NHPNA5: DfT slide

¹⁴¹⁸ Document OBJ/1624 PoE2 Appendix NHPNA6: Yorkshire Evening Post article 2 November 2013

¹⁴¹⁹ Document C-2-15: PEBC Appendix 16- increased duty to the exchequer from fuel burnt by traffic held in queues

¹⁴²⁰ Document OBJ/1624 PoE2 Appendix NHPNA9: DfT report 'Green Light for Light Rail' Table 4.1

- 6.441 In terms of the environmental effect of the Scheme, Woodhouse Moor would be harmed, shops would be demolished at Hyde Park Corner, the fields on Headingley Hill would have trolley vehicles running across them instead of horses and the Shire Oak Road CA would be affected, as would the broad grass verges at Far Headingley, and trees at West Park. Over 400 mature trees would be cut down and their replacements would not be like-for-like and would take many years before they could have a noticeable impact on the environment.
- 6.442 Narrowed pavements would make life more unpleasant and dangerous for pedestrians. The NGT stop at Lawnswood School would be in the middle of the road, making it dangerous for the pupils. Cyclists would be at extra risk from the loss of cycle paths and the danger from articulated vehicles. People with no car and living at Cookridge, Tinshill, and Adel would be severely affected by the likely reduction by half of the Nos 1 and 6 bus services¹⁴²¹. The road building required by the Scheme would devastate the A660 corridor and the OLE would spoil the view and add to street clutter.
- 6.443 Alternatives have not been considered. From very early on, the Promoters decided to pursue the trolley vehicle option and everything else has followed from that. It is the re-incarnation of a scheme to bring trolleybuses back to Bradford, called Electrobus, launched in 1980. Failure to obtain Government funding prompted Metro to add Leeds to the scheme. When deregulation took place, a private operator announced a scheme to run a diesel bus along the same route and Metro dropped the scheme it had pursued for the previous 11 years. Nothing has changed since the 1980s, except that Government money is on the table. On the continent, large cities which have trolleybuses also have undergrounds and tram systems. They do not rely solely on trolleybuses, which are just buses.
- 6.444 The Scheme is very expensive and risky. No similar scheme exists in the UK. There are problems with bottlenecks at Hyde Park Corner, the junction of

¹⁴²¹ Document OBJ/1624 PoE2 Appendix NHPNA1: Slide from Metro presentation at Holt Park, January 2013

Clarendon Road and Woodhouse Lane, the junction of Otley Road and Shaw Lane, and at Lawnswood roundabout. The only effective ways to reduce congestion would be to go under it or over it, introduce tidal flows, introduce congestion charging or install dedicated cycle lanes with a view to achieving cycling rates equivalent to Western European cities like Amsterdam. The proposed introduction of articulated trolley vehicles to an already congested road would add to congestion. They are costly to buy and they depend on costly infrastructure. If the Scheme went ahead, it would tie Leeds to trolley vehicles for the foreseeable future.

Friends of Woodhouse Moor (FOWM) OBJ 1623

The material points¹⁴²² were:

- 6.445 The FOWM is a group of local residents who use and are interested in Woodhouse Moor as a park.
- 6.446 In 2010, the Promoters offered an alternative route for the NGT which would not have encroached on Monument Moor¹⁴²³. The route across Monument Moor was chosen and, at a public meeting on 25 June 2013, the Promoters said the route would provide '*enhanced traffic stacking*', and would '*future-proof*' the Scheme against traffic increases. It would be dangerous to plant wild flowers on Monument Moor as proposed, as they could attract children onto the area and could lead to fatalities. The proposed pocket park on Headingley Hill would be dangerous for the same reason. It cannot be compensation for Monument Moor, as it would be too far away and would have a trolley vehicle running across it, just like Monument Moor.
- 6.447 Monument and Cinder Moors have been starved of funds for years. As part of a CA, Woodhouse Moor is a 'Designated Heritage Asset' under the NPPF. Caroline Hardie lists the consequences of the Scheme as follows¹⁴²⁴:

¹⁴²² Documents OBJ/1623 SOC: Statement of Case; OBJ/1623 PoE1 and PoE2: PoE and Appendices; and OBJ/1623-100 Closing Statement 23 October 2014

¹⁴²³ Document OBJ/1622 PoE3 BM107: DF6 Option 12

¹⁴²⁴ Document H-1: The Historic Environment Assessment of the Leeds New Generation Transport Environmental Statement pages 16 to 19 and 22 and 23

- a) *'Monument and Cinder Moor significantly reduced by the proposal through the removal of a strip of Moor between Woodhouse Lane and the Henry Rowland Marsden monument and another strip on the opposite side of the road which is currently being 'appropriated' by the Council for the Scheme. It will also be affected by the introduction of new traffic and new road link to Woodhouse Cliff for school access (because the existing roads will become too busy) along Rampart Road displaced by traffic from Hyde Park Corner which will turn part of the Moor into an arterial route. This part of the conservation area will transform from a park with some minor roads to roads with some green space. Also loss of tree cover (on top of deliberate lack of maintenance) along boulevard on the Moor. Introduction of street clutter in a wide boulevard characterised by its lack of street clutter. Change of character also brought about by proposed use of Woodhouse Lane for twice daily traffic stacking so that trolley buses are given priority in bottle neck areas and new pedestrian crossings.'*
- b) *'Views will now include overhead wires and poles when viewed across Woodhouse Lane. Views of Harrison and Potter Trust Homes on Raglan Road which are identified as being significant will also be affected when viewed from Woodhouse Lane.'*
- c) *'The road will be closer to the Marsden statue which currently sits within a landscaped area consisting of a former circular flower bed and paths centering on the statue. When Marsden's statue was moved to the Moor it was referred to as the Valhalla of Leeds' statues in a local newspaper! A new NGT stop will be located near the Queen Victoria and Marsden statues.'*

6.448 Woodhouse Moor is the most intensively used park in the City¹⁴²⁵. The entire park has been included as green space to be protected in the draft CS¹⁴²⁶.

6.449 The proposal to take the NGT route across Monument Moor contravenes UDP policy N1 which states that protected green space has to be replaced if it is

¹⁴²⁵ Document OBJ/1623 PoE2 Appendix FOWM18: LCC's Park & Greenspace Strategy page 59

¹⁴²⁶ Document D-1-1 Map

going to be developed, unless the need in the locality can be shown to be met. The proposal also contravenes paragraph 74 of the NPPF¹⁴²⁷, which states that open space should not be developed unless it is surplus to requirements, or replaced. These matters were apparent to the NGT Project Board¹⁴²⁸ and were not a problem with the Leeds Supertram, as it would not have run across Monument Moor.

- 6.450 To get round the problem, the Promoters have attempted to prove that Hyde Park and Woodhouse has a surplus of open space¹⁴²⁹; mitigation required by the Scheme would enhance the quality of the park and in this way make up for the loss of open space; Monument Moor has little landscape or historical value; and Monument Moor is no longer open space, having been appropriated. Each of these attempts has failed.
- 6.451 With regard to the surplus of open space, Open Space Technical Appendix J only looks at the category 'Amenity Green Space'. This is what Monument Moor falls under in LCC's 'Open Space Sport and Recreation Assessment'¹⁴³⁰, of which Appendix A figures for Hyde Park and Woodhouse have been used to arrive at 0.49 hectares of Amenity Green Space per 1,000 population. That document sets the standard at 0.45 hectares to show that Hyde Park and Woodhouse has a surplus, but includes as Amenity Green Space in Hyde Park and Woodhouse areas that had been built on when it was published. It also shows that Hyde Park and Woodhouse has a shortage of open space in the category 'Parks and Gardens', once errors have been corrected such as the one which categorises the City of Leeds' school playing fields in this category, and recommends that where an area has such a shortage, Amenity Green

¹⁴²⁷ Document E-4-21

¹⁴²⁸ Document H-7 NGT Project Board Minutes 18 June 2013 paragraph 5d page 9: Tom Gifford advised the Group that the open space position in relation to Woodhouse Moor contravened both local and national guidance; 16 September 2013 paragraph 4f page 4 states that Stephen Speak *'raised concerns that it will be difficult to designate the land on Woodhouse Moor as surplus'*; 21 October 2013 paragraph 4f page 4 says that John Henkel stated that *'it is difficult to argue the case for the land (to be appropriated on the 8 January 2014) being classed as surplus.'*

¹⁴²⁹ Document B-5: Open Space Technical Appendix J

¹⁴³⁰ Document D-3-4

Space should be improved to the level of Parks and Gardens¹⁴³¹. Therefore, Monument Moor should be improved.

- 6.452 In terms of mitigation, improvements in quality cannot be used to justify development of open space in areas with a deficit¹⁴³². The Companion Guide to PPG17 states that development which leads to improved quality cannot be justified where it creates a deficit in provision¹⁴³³. The quality scores given at Appendix A of LCC's 'Open Space Sport and Recreation Assessment'¹⁴³⁴ using the LQP standard gives areas of grass with no facilities or trees exceptionally high scores, whilst areas with lots of facilities, like the main area of Woodhouse Moor, have been given low scores. LQP also uses simple averages to arrive at scores, which has meant that the overall score for Woodhouse Moor was calculated by adding together the scores for the five parts of the Moor and then dividing the total by 5, giving the relatively small Monument Moor the same weight as the main Moor.
- 6.453 Monument Moor has great historical value. Monument Moor and Cinder Moor have never been designated as car parks. Marsden's statue, which is Grade II listed, has been placed on Monument Moor, showing that it is an integral part of Woodhouse Moor. In 1951, it hosted the Festival of Britain Land Travelling Exhibition. In 2010, planning officers threatened to withhold planning permission if Leeds University did not drop its demand that £150,000 section 106 money from the St Mark's Flats redevelopment be spent improving these two sections of the Moor, with the result that the demand was dropped¹⁴³⁵. The NPPF states that the deteriorated state of heritage assets which have been deliberately neglected should not be taken into account in any decision¹⁴³⁶. By choosing to route the NGT across Monument Moor, rather than widen the road, greater sensitivity has been given in the landscape

¹⁴³¹ Document D-3-4 paragraph 4.45

¹⁴³² Document OBJ/1623-101: Alex Greaves legal opinion

¹⁴³³ Companion Guide to Planning Policy Guidance 17 paragraph 8.11

¹⁴³⁴ Document D-3-4 Appendix A

¹⁴³⁵ Document OBJ/1623 PoE2 Appendix FOWM15

¹⁴³⁶ Document E-4-21 NPPF paragraph 130

assessment to road users than to park and trail users, and nearby residents, contrary to GLVIA2¹⁴³⁷.

6.454 In relation to the appropriation, the rejection of the application can still be recommended on the ground that no replacement open space is being offered¹⁴³⁸.

6.455 The Promoters have failed to provide Social and Distributional Impact Assessments¹⁴³⁹ to identify the groups that would be negatively impacted by the Scheme. It is therefore impossible to ascertain the appropriateness of the proposed mitigation. People do not want a car park on Monument Moor, since as recently as 2006 a car park proposal was scrapped as a result of massive local opposition.

Bill McKinnon OBJ 1622

The material points¹⁴⁴⁰ were:

6.456 Mr McKinnon is a local resident and a member of NHPNA, FOWM and the A660 Joint Council (A660JC).

6.457 Trolleybuses became widespread in the UK because local authorities could not afford to replace tramlines and because many owned their own power stations and did not want to lose the transport department as a major customer. It was also Government policy at the time to encourage local authorities to adopt means of transport that would lessen dependence on imported oil. When all of this changed in the 1950s, local authorities began to scrap their trolleybus systems in favour of the more flexible and cheaper to run diesel bus.

6.458 Leeds was the first UK city to install trolleybuses, because it wanted to connect Otley and Farnley to the tram system, which was not feasible using trams. It scrapped trolleybuses in 1928 because people preferred to travel the whole

¹⁴³⁷ Document G-4-2

¹⁴³⁸ Document OBJ/1623-101: Alex Greaves legal opinion

¹⁴³⁹ Document OBJ/1641 PoE3: Appendix SHCA 29: WebTAG 3.17

¹⁴⁴⁰ Documents OBJ/1622 SOC: Statement of Case and supporting documents, OBJ/1622 PoE1, PoE2 and PoE3: PoE and Appendices; OBJ/1622-100: Rebuttal; and OBJ/1622-101:

way from Otley to Leeds on motor buses, rather than have to change from trolleybus to tram at the City boundary, and Government policy prevented the Council from using public funds to undercut the fares being charged by the diesel bus operators.

- 6.459 Trolleybuses have not been popular, primarily due to the large number of accidents they were responsible for as a result of their quietness. Recent statistics from America show that a trolleybus is three times as likely to hit a pedestrian, and twice as likely to hit a cyclist, as a diesel bus¹⁴⁴¹. The NGT would run through pedestrian areas, including at the Whitfield housing estate and Millennium Square in the City Centre. The Merseyside trolleybus application¹⁴⁴² was refused partly for this reason. As the trolley vehicles would be silent, the drivers would have to regularly sound their horns as they pass through the area, which could add to the noise.
- 6.460 Headingley has the highest number of cyclists in Leeds, Weetwood the third highest, and Hyde Park and Woodhouse, the fifth highest. The NGT would be a risk to the cyclists on the A660 which has 25% of the cycling casualties on roads in Leeds and carries just 5% of Leeds radial road traffic. On the northern section of the route, there would be a reduced length of cycle only lanes, and a reduced length of shared cycle and bus lanes. This reduction would be matched by an increase in the length of the more dangerous cycle and shared NGT lanes. A substantial increase by more than a km in the length of shared footpath would increase the risk of collision between cyclists and pedestrians. Trolleybuses comprise 12% of Seattle's bus fleet, but are responsible for 27% of accidents caused by buses pulling out from a stop. London articulated buses had an accident rate that was much higher than that for other buses.

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¹⁴⁴¹ Document OBJ/1622 PoE1 page 16 Table 1: Motor Bus and Trolleybus injury data extracted from National Transit Database: Safety and Security Time Series Data show on average between 2008 and 2013, trolleybuses travelled 0.60% of the urban vehicle miles travelled by all buses, but they accounted for 1.32% of the injuries to cyclists, and 2.20% of the injuries to pedestrians.

¹⁴⁴² Document OBJ/1622 PoE2 Appendix BM8

- 6.461 There would be a danger to the fire services from the four overhead power lines, such as when erecting ladders on Park Row in the event of fire, and getting the power switched off would cause delay that could cost lives.
- 6.462 The NGT would be discriminating. The proposed position of many pedestrian crossings and key stops would favour NGT. The A660 has been chosen because it is currently the most lucrative bus route in Leeds. The existing bus operators would have to deploy their buses elsewhere, or sell them, effectively subsidising the NGT.
- 6.463 The proposed following alterations to bus stops would direct passengers away from the existing bus services and onto NGT: The permanent removal of five existing bus stops along the north route, and one existing bus stop along the south route; NGT stops strategically positioned at the shops at West Park and moving the existing bus stops so that they would be further away from the shops; removing the existing northbound bus stop at Tinshill Top making it more convenient for anyone living in that area and coming home to catch the NGT; the permanent removal of the existing northbound bus stop at Hyde Park Corner; and the removal of the existing northbound bus stops from Leeds University's Parkinson steps so that the nearest stop would be an NGT stop.
- 6.464 The majority of the proposed pedestrian crossings would be located so that people using them would find that their nearest stop would be an NGT stop. It would be likely to increase patronage of the NGT, but would put at risk those people wanting to catch an ordinary bus, and those who would not be prepared to walk to a pedestrian crossing.
- 6.465 In terms of noise, in effect the traffic diversions required by the Scheme would also divert noise onto narrow residential roads. Overall, there is expected to be noise effects as a result of increases in traffic noise. This is likely to result in some health impacts, although the magnitude of the change and sensitivity of the receptor to that noise varies along the route and the timescale considered¹⁴⁴³.

¹⁴⁴³ Document A-08h-3 paragraph 5.23

- 6.466 The LTVS was rejected at the start of the year by over 7,000 Yorkshire Post readers (72%) who responded to an online poll. A more recent survey of over 2,000 readers showed the Scheme rejected by 55% of them, with just 24% supporting it. Edmonton scrapped its trolleybus system in 2009, and Wellington has decided to scrap its trolleybus system. The reason why there are still trolleybus systems in Switzerland is primarily because there is cheaply available hydroelectric power in that country.
- 6.467 Trolleybuses are inflexible in operation and cannot reverse¹⁴⁴⁴, which means that they would have to have a single through route from Holt Park to Stourton as there is not enough room in the City Centre for a turning loop. Articulated vehicles would be unsuitable for use along the A660 which is very narrow in parts. Due to the long service-life of trolleybuses, innovations in vehicle construction cannot be implemented as frequently as with diesel buses. Level boarding requires trolley vehicles to stop close to stops, which means following the same path and creating ruts that prevents level boarding. Trolleybuses cause more road damage than other vehicles. Because they cannot overtake one another, they are more prone to 'bunching'. Faster acceleration is only advantageous if trolley vehicles make the same number of stops as other buses, which would not be the case with NGT, and climbing hills easily is only useful in a hilly area.
- 6.468 The Park and Rides only work where there is an express bus service and a lack of parking availability in the City Centre, as at York. The NGT would not provide an express bus service, and motorists would be guaranteed a parking space in the City Centre, as there are more parking spaces in the wider central area than there are cars to fill them¹⁴⁴⁵.

¹⁴⁴⁴ Document OBJ/1622 PoE2 Appendix BM15: German Wikipedia article 'Oberleitungsbus'

¹⁴⁴⁵ Document C-4-9 Major Scheme Business Case Appendix 9 Table 3.4 shows that in 2001, 52,382 people came to work in Leeds City Centre by car and Table 3.5 shows that there are 65,774 parking spaces available in the wider central area; and Document C-1 Business Case Review Table 3.6 shows that there are now significantly more parking spaces in Leeds City Centre than when the Major Scheme Business Case (2009) was submitted

- 6.469 The Promoters have said that of the projected 160 passengers, just 40 would be seated. Tirachini, Hensher and Rose¹⁴⁴⁶ have shown that overcrowding is a serious barrier to modal shift and suggest a load factor of over 80% indicates vehicle crowding and a standing density of 4 or 5 passengers per sq m indicates crowding discomfort. The trolley vehicles would have a factor of about 267% and 7.6 passengers per sq m, which would greatly exceed both the criteria for overcrowding given in the study. The DfT document 'Inclusive Mobility' states that bus use by disabled people falls off sharply where bus stops are more than 200m apart, and for able bodied people where bus stops are more than 250m apart. The NGT stops would be 550m apart and therefore the Scheme would discriminate against disabled people.
- 6.470 The Promoters' originally claimed time savings of 1 or 3 minutes between Holt Park and the City Centre have been revised upwards to 14 minutes. The additional saving was achieved by adjusting the model. Only about 44% of the NGT route would be segregated¹⁴⁴⁷ and trolleybuses are 10% slower than other buses in mixed traffic¹⁴⁴⁸, meaning that the NGT would be a slower option than a diesel bus. To qualify as 'Bus Rapid Transit' most of the route would have to be segregated from other traffic, which would not be the case with the NGT¹⁴⁴⁹.
- 6.471 The Promoters' claim that the overhead cables would attract people to the system and describe this as the 'sparks effect'. Ashley Bruce, a member of the Tbus group and a promoter of trolleybuses, said during a presentation in 2011 that such an effect does not really exist¹⁴⁵⁰.

¹⁴⁴⁶ Document OBJ/1622 PoE3 Appendix BM47: Tirachini, Hensher and Rose 2013 'Crowding in public transport systems: Effects on users, operation and implications for the estimation of demand page 37

¹⁴⁴⁷ Document APP-181

¹⁴⁴⁸ Document OBJ/1622 PoE3 Appendix BM82: Electric Trolley Buses or Thermal Buses? The Case of Athens, Dr Athanasios Matzoros OASA

¹⁴⁴⁹ BRT Standard 2013: 'The scoring system is based on the amount of corridor that has dedicated right-of-way for BRT services'; and Document OBJ/1622 PoE pages 52 to 54: Assessment to show that NGT would not qualify as a bronze standard

¹⁴⁵⁰ Document OBJ/1622 PoE3 Appendix BM101: Presentation by Ashley Bruce to Trolley Marketing Symposium June 2011

6.472 The average cost per mile for UK light rail schemes is £20.3 million and NGT would be £27.7 million. Articulated buses have a higher fare evasion rate than normal double decker buses, as demonstrated in London, and without barriers at stops, there would be likely to be a loss of fare revenue.

The A660 Joint Council (A660JC) OBJ 1644

The material points¹⁴⁵¹ were:

6.473 The A660JC is an unincorporated association with a membership drawn from individuals and residents' groups situated mainly along the A660 road in Leeds, but also including Hunslet and Belle Isle.

Matter 1: The aims and objectives of, and the need for, the proposed system

6.474 In relation to the northern section of the route there already exists a good and frequent bus service. There are problems with 'bunching' of buses, which is largely a result of poor boarding and ticketing arrangements and could easily be alleviated by use of pre-paid 'Oyster' type cards.

6.475 There is a need for a scheme to alleviate congestion along the A660 as it runs through Adel, West Park, Weetwood, Headingley and Hyde Park. However, the proposed Scheme is not the right solution. It would not alleviate congestion¹⁴⁵² and would require a small amount of highway capacity to be removed in some places, which would increase congestion levels¹⁴⁵³. It therefore cannot fulfil a number of its other stated aims, such as facilitating sustainable growth, or improving the efficiency of the City's public transport and road networks. Modal shift cannot be achieved with these proposals.

6.476 There seems to be no attempt to integrate the system with the existing bus services. A major practical issue is the significant distancing of NGT stops from existing bus stops, forcing passengers to make an initial choice of

¹⁴⁵¹ Documents OBJ/1644 SOC1 and SOC2: A660 Joint Council Statement of Case and Appendices 1 to 47; OBJ/1644 PoE: PoE of Mr Foren; and OBJ/1644-110: Final submission on behalf of the A660 Joint Council

¹⁴⁵² Document C-2 Programme Entry Business Case paragraph 8.9

¹⁴⁵³ Oral evidence given by Applicants' witnesses at the Inquiry

transport mode. There is no evidence that the Promoters have consulted with the existing bus service providers on how to combine the resource through transferrable ticketing systems.

- 6.477 The existing local bus services through North Leeds (Nos 1, 6, 28 and 97) serve a much more diverse area of the conurbation than can be conveniently accessed to the proposed NGT route by residents on foot. Impacts on existing bus services would be inevitable, such as their commercial viability, fares, frequency and journey times. Perceived savings in time by NGT¹⁴⁵⁴ might have limited benefit for some, but there would be a significant detrimental result for very many other people on the much more convenient services which travel closer to their homes.
- 6.478 A 'congestion-busting 800-space' park and ride facility is to be built at Elland Road, remote from the proposed NGT line, and with no possibility of a link to it. If the buses are capable of cutting through the congestion from the M621 to provide a six minute journey time provided by FWY from a facility delivered for £2.8 million in a projected time of 6 months, then why is a fixed-line system 100 times more expensive and to be delivered in 6 years even being considered? It is almost certainly the case that NGT would never be expanded beyond the proposed, extremely restrictive 15 km¹⁴⁵⁵.
- 6.479 The proposed 67% standing capacity in a trolley vehicle must be one of the biggest disincentives for its use¹⁴⁵⁶. With overcrowding a disincentive to the use of public transport, those who currently have virtually no choice but to drive from Bramhope, Otley or further in Wharfedale into Leeds City Centre would not wish to leave their cars at the proposed Bodington Park and Ride to stand on an articulated vehicle.

¹⁴⁵⁴ Document A-01-2 paragraph 3.4: '*Journeys to the city centre will be up to 15 minutes quicker than existing buses*'

¹⁴⁵⁵ Document A-08b paragraph 3.10 Potential for system expansion

¹⁴⁵⁶ Document OBJ/1644 SOC: A660 Joint Council Statement of Case Tab 10 Transportation Research Crowding in public transport systems: Effects on users, operation and implications for the estimation of demand page 37 states that '*Together with travel time, cost, trip time reliability and service frequency, crowding is now seen as having a significant influence on modal choice...*'

- 6.480 The trolley vehicles would be tied to the lines without much flexibility in selecting a path. Trolleybuses can usually drive around small obstacles, but this mobility is limited to the next lane on either side. Temporary diversion of a route to a different street (to repave or do major utility work) involves considerable effort and expense in moving and replacing the overhead wires¹⁴⁵⁷. Because of their inability to overtake one another, trolleybuses are more prone than other buses to 'bunching'¹⁴⁵⁸, resulting in passengers having to wait a longer time and some buses becoming overcrowded with others remaining almost empty. This leads to frequent complaints about poor service.
- 6.481 The Applicants now accept that the Scheme would overall increase emissions of CO₂¹⁴⁵⁹. Current hybrid bus technology gives lower 'well to wheel' emissions than a trolleybus technology powered by electricity drawn from the UK grid. The differential, relative to a conventional diesel bus is a reduction of 35% by a 'parallel hybrid' technology vehicle and 40% by a 'series hybrid' technology vehicle versus 24% by a trolleybus¹⁴⁶⁰. There would also be increased greenhouse gas emissions from the congestion of other vehicles¹⁴⁶¹.

¹⁴⁵⁷ Document OBJ/1644 SOC: A660 Joint Council Statement of Case Tab 11 Urban Transportation Systems Chapter 10 Trolleybuses page 431

¹⁴⁵⁸ Document OBJ/1644 PoE Appendix 3: Electric Trolley Buses or Thermal Buses? The Case of Athens Section 3.1: *'Trolley buses, because of their continuous dependency on the overhead distribution network, have, compared to buses, a reduced degree of flexibility in their movements. This problem is especially pronounced in cases of traffic congestion, narrow streets with sharp bends and at bus stops. In the latter case, in particular, trolley buses cannot overtake other trolley buses (unless there is special provision in the overhead network) and they are obliged to wait and suffer each other's delays, giving, thus, rise to platooning phenomena'*

¹⁴⁵⁹ Document OBJ/1644 PoE Appendix 3: Electric Trolley Buses or Thermal Buses? The Case of Athens Section 3.7: *'It must, also, be noted that lack of kerb-side emissions does not, necessarily, imply a totally pollution free operation. Non-exhaust particulate matter (from tyres, brake pads and lubricants) is being produced by both trolley buses and buses. Furthermore, trolley buses, due to their lower speed and manoeuvrability, impede other vehicles in the traffic stream, increasing, thus, their emissions and, finally, the production of electricity consumed by trolley buses, usually by burning fuel, pollutes other areas away from Athens'*

¹⁴⁶⁰ Document OBJ/1644 SOC1: A660 Joint Council Statement of Case Appendix 8: Preparing a low CO₂ technology roadmap for buses, July 2013 pages 50, 47 and 52

¹⁴⁶¹ Document C-2 states: *'Reduced tax receipts from increased spending on untaxed public transport receipts are largely offset by increased receipts from duty resulting from additional fuel consumption from additional congestion/increased highway trip lengths'*

- 6.482 The proposed Scheme would encroach on a number of existing green spaces, including the fields behind St Columba's Church on Headingley Hill, Cinder Moor, Monument Moor and Belle Isle Circus. Mitigation measures are proposed and it is accepted that there is no lawful public access across the fields behind St Columba's Church, which is used by a number of local community groups. However, parts of the fields show evidence of informal paths and people regularly walk their dogs on the fields, which is tolerated¹⁴⁶². They are overlooked by residents at Oakfield, a sheltered housing complex, offer an amenity for many other people¹⁴⁶³ and can be seen by travellers on the A660 itself. Some of the fields are used for grazing horses, which are visited by many people¹⁴⁶⁴. Accordingly, the fields contribute significantly to the quality of life of local people and this would be permanently destroyed if the NGT is built across them.
- 6.483 The proposed mitigation by providing a 'pocket park' would be too small. It would amount to a wedge-shaped piece of land that would be bordered on one side by a busy road and on the other side by the NGT track, which would have trolley vehicles running past every 3 minutes.
- 6.484 With regard to Belle Isle Circus, there would be inadequate mitigation. It appears that it would comprise more seating, some additional planting and 'signage'¹⁴⁶⁵ to compensate local people for the intrusion of the NGT.
- 6.485 The proposed Scheme would diminish the quality of life for residents of Hyde Park and Woodhouse, which is a ward with a deficiency in provision of open space. The NGT is planned to take space from Monument Moor and Cinder Moor, both of which have lawful public access and should, if local policy were followed, be improved and enhanced. The existing A660 across Woodhouse Moor is dual carriageway and therefore there should be sufficient space on the existing carriageway to accommodate the NGT rather than encroaching onto existing green space.

¹⁴⁶² Conceded by the Applicants' witnesses at the Inquiry

¹⁴⁶³ Mr Foren oral evidence at the Inquiry

¹⁴⁶⁴ OBJ 781 Mrs Nelis evidence at the Inquiry

- 6.486 The proposed Scheme would greatly damage the quality of life for people living in Hunslet. The Promoters have chosen to route the NGT through Whitfield Way, which is a pedestrian zone and is bordered on both sides by houses with very small front gardens. The residents of those houses would have their privacy seriously diminished due to trolley vehicles passing close by their windows every 3 minutes. The walls or fences that the Promoters have offered to erect would have to be so high that the residents would inevitably feel 'shut in' and claustrophobic. The route would also run along the periphery of St Joseph's school. The local residents' view that the NGT should remain on the main road was rejected by the Promoters. Alternative routes through Hunslet have been rejected by the Promoters because NGT running times would be increased, thereby diminishing the BCR.
- 6.487 These factors, together with the paucity of trolleybus stops on the southern section strongly suggest that the Scheme is not intended to confer any benefit on the people of south Leeds.

Matter 2: The justification for the particular proposals in the draft TWA Order

- 6.488 Most of the suburbs in the proposed northern route, with the exception of Hyde Park and Woodhouse, are not in need of regeneration. Parts of Headingley ward require regeneration but the NGT would not go near those areas which are in the south part of the ward to the eastern side of Cardigan Road. This area is already served by numerous buses and Burley Park railway station. Hyde Park and Woodhouse ward is so close to the City Centre that speed of access to the Centre is not an impediment to regeneration.
- 6.489 Housing development is already occurring, north of the Ring Road adjacent to the A660 (eg Centurion Fields, Adel 35 new homes; Bodington Manor 106 new homes; Bramhope outline permission pending for 380 homes¹⁴⁶⁶) and more is virtually certain to occur. The Adel properties are too far away for there to be a reasonable expectation that people would choose to walk to the NGT,

¹⁴⁶⁵ Mr Flesher oral evidence at the Inquiry

¹⁴⁶⁶ Leeds planning application ref 13/05134

especially in poor weather conditions. The Bramhope development is so far away that prospective residents would be committed to car use for commuting. By proposing a fixed line system to serve a 500m buffer zone¹⁴⁶⁷, NGT has disowned any responsibility for provision of public transport infrastructure to these areas of new development. NGT contributes nothing to support residential expansion, a key element of economic recovery in the UK and a 'flagship' aspiration of the Government, for which public transport provision is required.

- 6.490 The claim that NGT would lead to the creation of about 4,000 jobs in Leeds City Centre by 2030¹⁴⁶⁸ is not well supported by empirical evidence from other similar projects. According to the National Audit Office, Sheffield's larger Supertram scheme only created 1,600 jobs. In addition, no details are given of the model of economic analysis used by the Promoters or the calculations used to produce the figure.
- 6.491 The benefits of the NGT Scheme depend on the accuracy of passenger demand forecasts. However forecast demand varies considerably according to which parameters are used and what value is assigned to them¹⁴⁶⁹. In addition, some of the parameters are based on essentially subjective factors eg passengers' response to the claimed superior quality of NGT. Consequently, economic benefits may be substantially less than forecast.
- 6.492 Time saving is not a feature that is unique to NGT. Much of it derives from the nature of the limited stop service. The No X84 bus service, which is a 'set down only' service within the Ring Road, travelling inbound from Otley is timetabled to be 7 to 9 minutes faster from Lawnswood to Leeds bus station than is the normal, frequently stopping No 6 bus service. Travel from the outlying districts by bus service would be fast and convenient if limited stop services were provided. NGT is not a pre-requisite for saving journey time.

¹⁴⁶⁷ Document A-08c-3 paragraph 3.2 Community

¹⁴⁶⁸ Document C-2 paragraph 1.5

¹⁴⁶⁹ Document C-2 Appendix 34

- 6.493 Less than 50% of the NGT route along the A660 would be segregated. Where trolleybuses share the road with other traffic, they are slower than diesel buses¹⁴⁷⁰. Many of the current bus stops in Leeds are of very satisfactory quality, real time information is provided and some buses are able to provide low level boarding. These features will be likely to continue to be upgraded within the existing system throughout the City and conurbation, but such improvement would be prohibited if the financial burden of NGT takes resources.
- 6.494 A park and ride site can only be attractive throughout the day if it is not entirely filled during the morning commute. The Bodington Park and Ride site is not fit for this purpose. Given the volume of traffic that comes to Leeds via the northerly routes¹⁴⁷¹, if adopted by commuters, the car park would be full before 0815 hours leaving no option but for drivers to continue towards the City Centre. Those that would have made use of the parking facilities would have committed themselves not only to a stopping journey to the Centre but also the prospect of a standing only, slow journey, in competition with other commuters to Hyde Park and Headingley at the end of the day.
- 6.495 Leeds already has two bus-based park and rides, which are grossly under-used. The evidence indicates that people only use bus-based park and rides when there is a shortage of City Centre parking and there is a dedicated bus link, as at York. Leeds has plenty of City Centre parking and no dedicated bus link from the two park and ride facilities that exist.

Matter 3: The main alternative options considered by the Promoters and the reasons for choosing the proposals comprised in the Scheme

- 6.496 The Promoters' chief reason for proposing trolley vehicle technology is that a fixed line system is the only way for them to retain operational control (ie route, fares, and timetables). Although democratic control of such matters is desirable, it should not be grounds for the choice of technology especially

¹⁴⁷⁰ Document OBJ/1644 PoE Appendix 3: Electric Trolley Buses or Thermal Buses? The Case of Athens Section 3.4 Speed and Acceleration

when the chosen technology has so many inherent drawbacks eg damage to the streetscape in numerous CAs. No other city in the UK is proposing trolley vehicles and better technologies exist with more emerging rapidly. Some cities in the UK are adopting all-electric buses.

- 6.497 Modern technology has not been investigated with sufficient rigour. Such assessments of technology that are claimed to have been made are five years out of date. It is certain that, in the 'lifetime' of NGT, there will be a flourishing 'hydrogen-fuelled' transportation economy. Fixed-line trolleybus technology cannot progress any further, whereas bus technology will offer ever increasing economic and ecological gains. Progress with new technologies for powertrains and fuels will advance so much over the next decades that there will never be any justification for further development of trolley vehicles. NGT would prevent Leeds from being in a position to capitalise on the substantial technological benefits that are certain to be in full use during its lifetime¹⁴⁷².

Matter 4: Consistency with NPPF, local and national planning and transport policy

- 6.498 There is a very poor fit between the proposal and national and local transport and planning policy. The Promoters should not be permitted to rely on UDP policy that provides for a public transport route along the proposed route, as it is a relic of the failed tram project and is wholly inconsistent with more recent policy aimed at the preservation and enhancement of green space.

¹⁴⁷¹ About 3,000 vehicles over 2.5 hours

¹⁴⁷² Document OBJ/1644 SOC1: A660 Joint Council Statement of Case Appendix 11 Urban Transportation Systems Chapter 10 Trolleybuses Urban Transportation Systems page 436: *'Trolleybuses continue to operate, but their future as a general transit mode is not particularly bright. They do have a role in special situations, but the global trends are still negative. Nobody likes the overhead wires (except the copper manufacturers), and the problems of urban air quality are being attacked through means other than hoped-for massive switch of motorists to non-polluting transit. If and when hybrid buses reach a competitive stake in the market, which appears to be quite likely in the near future, the trolleybus may reach the status of cable cars—remaining in use in some places with special characteristics, but otherwise just being remembered with affection'*

Matter 5: Likely impact of constructing and operating the Scheme

- 6.499 Construction of the NGT Scheme would result in major disturbance and upheaval. It is possible that some small businesses would not survive the construction phase.
- 6.500 The Promoters have admitted in evidence that operating the Scheme would result in worse air quality. Considerable nuisance and suffering would be imposed on residents living adjacent to the Bodington Park and Ride facility (on Otley Road, the A660, and the lower part of Otley Old Road) as a result of powerful floodlights throughout long darkness hours.
- 6.501 The NGT would do very serious damage to the townscape, especially in sensitive areas. It is planned to run through a number of CAs along the northern route. The necessity for OLE would do immense damage to the townscape, as would the necessary felling of many healthy mature trees. The proposed replacement trees would take many years to come to maturity and most people do not consider OLE to be an attractive feature.

Matter 7: Likely impact on motorists, cyclists and pedestrians

- 6.502 The Scheme would not have a major effect on motorists, as the Promoters have taken considerable pains to minimise detriment to car drivers. The only major removal of roadspace is the prohibition of traffic on Woodhouse Lane at the front of Leeds University, which would mean that northbound motorists would use Blenheim Terrace, which is at present a one-way street (southbound). In general, the Promoters have preserved space for driving¹⁴⁷³.
- 6.503 The Promoters have refused to compromise vehicle capacity in favour of cycling improvements¹⁴⁷⁴. Articulated buses make roads more dangerous for other road users, as acknowledged in relation to cyclists by Transport Minister Robert Goodwill in December 2013¹⁴⁷⁵. The NGT would not bring about a

¹⁴⁷³ Document B-9: 'NGT will broadly maintain road capacity for general traffic'

¹⁴⁷⁴ OBJ/1470 Dr Reather in cross-examination not challenged

¹⁴⁷⁵ Document OBJ/1644 SOC2: A660 Joint Council Statement of Case Appendix 21

significant increase in cycling, as only a short stretch of the planned route would have the necessary degree of segregation.

6.504 Since the NGT would not share the same stops as buses, choices would have to be made and, for many people, choosing NGT would necessitate walking further to the more widely spaced stops¹⁴⁷⁶. There would then be a much greater likelihood of having to stand on NGT. Choice of a bus would entail a longer wait because the service would become less frequent. The proposed NGT route from Holt Park to the City Centre covers 10.5 km with 17 stops, which means that on average, the stops would be 660m apart. The No.1 bus service covers the same route with 30 stops, which on average are 360m apart.

Matter 12: Whether the Scheme is reasonably capable of attracting the necessary funding

6.505 The DfT contribution is now £173.5 million. This means that local funding may rise to £87 million (up from £19 million in 2009). Currently it is approximately £75 million¹⁴⁷⁷. In addition any unanticipated costs would have to be met through local funding. These could be substantial as evidenced by the Edinburgh Tram Project, which was also reduced in scope and delivered 5 years late. There is no evidence or references about the robustness of the figures or the likelihood of these figures rising substantially. The Promoters do not state how they would fund these additional costs, but they would be likely to have to be generated from local taxation, cuts in other projects or services or by an inflated fare structure.

6.506 Table 4.1 of the DfT publication 'Green Light for Light Rail'¹⁴⁷⁸ shows an average cost of £25.4 million per mile for English light rail schemes at 2010/11 prices. By contrast, the cost of NGT is £27.7 million per mile. This

¹⁴⁷⁶ Document G-4-78: DfT Inclusive Mobility: research shows that: 'for disabled people, bus use falls off sharply if the distance (between stops) is more than 200m (250m for able-bodied people)

¹⁴⁷⁷ Document A-01-11: Estimate of Costs

¹⁴⁷⁸ Document OBJ/1644 SOC2: A660 Joint Council Statement of Case Appendix 18: DfT Green Light for Light Rail page 26 Table 4.1 Capital costs of English light rail schemes

figure has not been revised since at least 2009. The first stage of the Nottingham tram system is exactly the same length as the proposed NGT, and cost just £210 million at 2010/11 prices. The Cambridgeshire guided bus system suffered massive inflation in its final cost, from £150 million to £181 million (and well above the, original, £116 million budget)¹⁴⁷⁹. It was delivered two years late.

- 6.507 The capital costs have been reduced by £29 million from the DF6 cost estimate. This has been achieved in a variety of ways, for example lowering the stop specification, reducing the size of Stourton Park and Ride from 2,200 spaces to 1,500 spaces, and having two lanes, rather than three, over Leeds Bridge. Given the scale of these cuts and the Promoters' inexperience, it is difficult to have confidence in their statement that *'these have been specified to maintain the outcomes and so benefits of the scheme'*¹⁴⁸⁰.

Matter 15: Other relevant matters: Consultation and public opinion

- 6.508 With regard to consultation with local politicians, at the South Inner Area Committee meetings¹⁴⁸¹ (100% Labour representatives) the NGT Team gave a presentation in September 2012 and then the Scheme was never discussed again. At Inner North West Area Committee meetings¹⁴⁸² (75% Labour members) the NGT Team gave one presentation in September 2012 and after that the Scheme was only raised by members of the public in open forum. At North West Outer Area Committee meetings¹⁴⁸³ (no Labour members) the NGT Team gave presentations in September 2012 and March 2013 and asked for a report to be presented to committee in September 2013. This leads to the conclusion that a Labour Whip has been imposed on the Party councillors to support the NGT Scheme¹⁴⁸⁴.

¹⁴⁷⁹ Document OBJ/1644 SOC2: A660 Joint Council Statement of Case Appendix 19: Cambridge News Article

¹⁴⁸⁰ Document C-2 paragraph 5.4

¹⁴⁸¹ Document OBJ/1644 SOC1: A660 Joint Council Statement of Case Appendix 6

¹⁴⁸² Document OBJ/1644 SOC1: A660 Joint Council Statement of Case Appendix 5

¹⁴⁸³ Document OBJ/1644 SOC1: A660 Joint Council Statement of Case Appendix 4

¹⁴⁸⁴ Document OBJ/1644 SOC1: A660 Joint Council Statement of Case Tab 12- Article in Yorkshire Evening Post

- 6.509 Analysis of the agendas and minutes from the Area Committee meetings would suggest that Labour councillors were reluctant to discuss the Scheme with the general public and that the NGT Project Team did not regularly attend.
- 6.510 A number of criticisms have been made relating to the quality of public consultation. The leaflets that were distributed at drop-in sessions made no attempt to present a balanced picture of the proposals. Despite this, repeated surveys have found a large majority of residents to be opposed to the Scheme. The survey conducted by Mr Mulholland MP found that in north west Leeds 87% of respondents were opposed. This is especially significant as Mr Mulholland's constituency contains many of the wards through which the NGT would run. The Scheme is supposedly being promoted for the benefit of those who live and work in Leeds, but those citizens have repeatedly and overwhelmingly said that they reject the Scheme.

The Federation of Small Businesses (FSB) OBJ 1721

The material points¹⁴⁸⁵ were:

- 6.511 Chris Longley is a Member of the West Yorkshire Regional Committee of the FSB and the Yorkshire Representative to the National Policy Committee of the FSB. Between 1989 and 1996 he was the Commercial Manager of South Yorkshire Supertram Ltd.
- 6.512 The FSB is the UK's leading lobbying group for small businesses with over 200,000 members nationally. It has 5,200 members in West Yorkshire County, with about 1,300 based in the Leeds District. Between 23 August and 16 October 2013 FSB surveyed its members in the Leeds District, together with non-members who own businesses located around the NGT route, to solicit their views on the Scheme. It also held a consultation event for local businesses regarding the Scheme on 15 October 2013.

¹⁴⁸⁵ Documents OBJ 1721 Letter of Objection; OBJ/1721 PoE: PoE; and OBJ/1721-100:
371

Main concerns of Members

- 6.513 Over half of the respondents to the survey (56%) were concerned about the impact of the construction on business trade and revenue, with similar transport schemes in Sheffield and Nottingham demonstrating a loss of trade and a compromise to access. At a time when the economy is still recovering, there could be lasting effects and this could impact on local employment levels and business survival in the medium to long term. About 68% were concerned about traffic management during construction and about 62% about the impact on the environment and aesthetic appeal of the area, mainly due to cabling and substations, and the loss of mature trees.
- 6.514 There is concern about the funding and that the NGT would be funded by additional charges or levies on Business Rates and Council Tax. Only 18% surveyed consider the NGT to be good value for money. The general opinion is that it represents poor value for money given the costs, its limited geographical coverage and the loss of trade during construction. The estimates for job creation do not take account of potential loss of jobs at small businesses due to the NGT.
- 6.515 The biggest concern about the operation phase is how traffic flow and congestion on the A660, A61 and adjoining roads would be managed (68% of those surveyed). Delays to traffic could be caused by giving priority to NGT at signal junctions on the Ring Road, Alma Road and Shaw Lane and when entering and exiting the off road section by the Arndale Centre. These delays could nullify the benefits to travellers using the NGT.
- 6.516 Two thirds were concerned about the effect on parking. The introduction of parking permits in about 2010 has resulted in a reduction in trade. There is a need to retain, or increase the availability of, parking outside the business premises, to accommodate delivery lorries and service vehicles and prevent them from blocking the road. There are also concerns about increased congestion and the narrowing of footways.

6.517 The Promoters have not set out any alternative designs of the trolley vehicle system that would allow the vehicles to overtake one another. This means that no express trolley vehicle or skip stop trolley vehicle service have been specified or modelled. Therefore, the trolley vehicle system cannot be shown to be the best system.

Consultation

6.518 FSB West Yorkshire is disappointed with the lack of consultation that has been undertaken with small businesses on the NGT Scheme, particularly with regard to those businesses located along the A660. It is concerned about the disruption to small businesses during the construction phase and how this would affect trade and the lasting effects of the NGT Scheme on trade. The FSB broadly supports the park and ride sites, if they are priced competitively, and accepts the urgent need for a modern, improved and fully integrated transport system to reduce traffic congestion and aid traffic flow. However, the NGT Scheme would not reduce traffic congestion on the A660, but would hinder traffic flow.

Funding

6.519 A comparison between the financing of the South Yorkshire Supertram and that proposed for the NGT Scheme, leaves £75 million additional funding to that which would be Government funding, including an estimated £11 million for the value of land. The same options for repayment would be open to the WYCA as were open to the South Yorkshire Authorities in the absence of any offsetting cash from the sale of a trolley vehicle operating company, as in the case of the South Yorkshire Supertram. The options open to the debtors to deal with the debt are either to pay the interest on an equivalent loan or to repay the debt in combined instalments of capital and interest. In both cases, the annual costs have to be found from the revenue accounts of the authorities. Given the downward pressure on local authority grant, business rate and community charge income, the sources are limited to net increases in charge income or cuts in other services against a constant cost baseline.

Competition

- 6.520 The core essential feature of the Transport Act 1985 is that publicly funded local bus services can only be secured lawfully outside London by open competitive tender from bus operating companies that are not controlled in Metropolitan areas by the Passenger Transport Authority. In 2012/2013 only 104,934,000 bus passenger journeys were made within South Yorkshire according to the South Yorkshire Passenger Transport Executive.
- 6.521 The FSB has invited the Competition and Markets Authority (CMA) to consider whether a LTVS TWA Order restriction that limits access to specified stretches of highway to trolleybuses only and/or where those trolleybuses are owned by a sole and publicly owned operating entity may be anti-competitive¹⁴⁸⁶. If the CMA were to declare that such a restriction is anti-competitive it would allow access to the previously reserved highways to buses of all descriptions, motive power sources and configurations. These might not be bound by the restrictions of power supply to operating only along the NGT route, would have the priority advantages allocated to trolleybuses and thus their speed advantages, could charge whatever fares their operating companies wished and would spread the available passenger demand across many extra vehicles. Therefore, whatever Business Plan assumptions had been made by the Promoters about revenue would be seriously challenged. The CMA view is therefore crucial to the viability of the NGT Business Plan central case.
- 6.522 The Promoters appear to intend to establish an entity under their control to operate the trolley vehicles. Such an action is impossible under the provisions of the Transport Act 1985 unless the authority intends to sell the entity at some future point in time. They also appear to be intending to subsidise directly the operation of the trolley vehicles by paying their operating costs and taking whatever fare revenue is collected. The trolley vehicle operation, if this approach is adopted, would be completely insulated from any revenue risk and this is impossible within the strictures of the Transport Act 1985.

¹⁴⁸⁶ E-mail attached to Document OBJ/1721-100

Alternatives

6.523 A non-stop shuttle bus should be operated between Bodington Park and Ride and the City Centre. Existing parking provision and parking permits around the A660 should be reviewed to ensure that sufficient parking for business vehicles, suppliers and customers would be provided. A Quality Bus Framework should be put in place across the Leeds City Region and investment should be made in hybrid or electric buses.

Leeds Cycling Campaign OBJ 1470

The material points¹⁴⁸⁷ were:

- 6.524 The Leeds Cycling Campaign is a voluntary group consisting of about 300 paid up members with the aim to encourage people to cycle¹⁴⁸⁸.
- 6.525 While the NGT Scheme contains some elements that would improve the situation for cyclists, and while Leeds Cycling Campaign welcomes the changes that have been made to the plans in response to its concerns, it has several fundamental issues with both the principles underlying the Scheme and its detailed implementation.
- 6.526 An increase in population undoubtedly requires an increase in the capacity of Leeds transport infrastructure. One of the most effective ways to increase network capacity is to create a modal shift away from low-occupancy vehicles, the car with one or two passengers, to public transport, walking and cycling. This works because cars are a very inefficient way of moving people around cities. Even if every car had 5 occupants, bicycles are more efficient at moving through junctions. The Organisation for Economic Co-operation and Development's international transport forum cites research from MIT/Boston showing that a shift of just 1% of all journeys to cycling led to an

¹⁴⁸⁷ Documents OBJ/1470 SOC: Statement of Case; OBJ/1470 PoE: PoE and Appendix; and OBJ/1470-100, Public Inquiry Statement and additional Appendices; and oral evidence given at the Inquiry

¹⁴⁸⁸ OBJ 1470 Dr Reather oral evidence at the Inquiry

improvement of up to 18% in journey times for everyone, including those in cars and public transport.

- 6.527 A shift to more sustainable transport supports the city region's strategic objectives to reduce CO₂ emissions, improves health, and helps create liveable environments. It helps to ensure access to employment for households without a car, which is 34% of all households in Leeds and closer to 50% for some wards on the NGT route, and ensures that Leeds can grow as a city without its transport system grinding to a halt. The LTP recognises this by including a target for the total number of car trips to be held at 2011 levels by 2026. To offset planned population growth, this will require real terms reduction in car trips in some areas, and the Plan suggests an increase in walking trips in the order of 20%, bus trips by 50%, and cycling trips by 300% to meet this target.
- 6.528 The LTP identifies 6 'big ideas' that will drive progress towards the objectives. Those most relevant to NGT and cycling are 3 and 5. These state in 3: *'Invest in low-carbon modes of travel by supporting the development of infrastructure for low carbon methods of travel, such as electric trains, Park-and-Ride, buses, tram-train, trolleybuses, walking and cycling'*; and in 5: *'Introduce stronger demand management measures to encourage less car use and 'lock-in' the benefits created by people changing to low-carbon modes'*.
- 6.529 The 2009 MSBC forecasts a mode shift of over 150,000 car journeys and about 400,000 park and ride journeys per year by 2031. This predicted removal of car journeys on the corridor has not been backed up by a reduction of expected demand for vehicle capacity at junctions on the route. Without this, it is likely that no long term reduction in car journeys would occur, as research has shown that creating additional vehicle capacity has at best a short term benefit with additional capacity absorbed by additional journeys within 2 to 5 years. Without measures to curb car use, a key opportunity to reinforce and embed the mode shift from car journeys would be lost. Despite this shift of car journeys, the Business Case indicates that the majority of NGT passengers would be current bus users. If one of the aims of NGT is to

support a mode shift to more efficient and sustainable transport modes, it seems likely to fail in this regard.

- 6.530 There is no reason to believe that any of the figures on active travel are reliable. It appears that despite the massive beneficial impact they can have on health and cost benefit appraisal, active travel modes have not received the attention they deserve from the Promoters.
- 6.531 With regard to design standards and principles, surveys of public opinion¹⁴⁸⁹ show that the key barrier to cycling is fear of traffic, and that significantly increasing cycling mode share will require big changes to the physical environment. In a recent survey of existing cyclists in Leeds, Leeds Cycle Campaign found that mandatory cycle lanes were preferred to shared bus and cycle lanes¹⁴⁹⁰. Comments indicate serious concerns about sharing with NGT, especially among women and children. The recent nationwide 'Space for Cycling' campaign calls on local authorities to provide suitable infrastructure for cycling, including protected space on main roads and at junctions, which is not a feature of most of the NGT route.
- 6.532 Provision of cycle infrastructure should seek to be inclusive, that is to be suitable for use by older and younger people, men and women, all ethnic groups and people of varying physical fitness and with disabilities. This is not the case for cycling in the UK and currently cycling is very unrepresentative of the general population. To enable the majority to choose cycling, separate cycle tracks should be provided alongside main roads, such as those covered by most of the NGT route. The Promoters have now included the bare minimum of cycling provision, most of which would help most existing cyclists, but they do not adhere to current best practice, let alone aim for a future with inclusive cycling infrastructure.

¹⁴⁸⁹ Document OBJ/1470 PoE Appendix 5: Understanding Walking and Cycling Summary of key findings and recommendations

¹⁴⁹⁰ Existing cyclists: 60% said mandatory cycle lanes 'very helpful', 47% said shared bus/cycle lanes 'very helpful'

- 6.533 Even if NGT adhered to guidance such as LTN2/08, it is not sufficient for today's environment where it is recognised that LTN2/08 now falls below the standard required to grow cycling significantly. On-road cycle lanes, that can be encroached on by vehicles, and toucan crossings are not sufficient to make cycling appealing to the majority. Leeds' own cycling scheme 'City Connect' has moved far beyond LTN2/08 and local Governments, including Manchester and TfL, are producing new standards and guidelines to meet this challenge.
- 6.534 The ideal minimum total widths for vehicles passing cyclists are 4.6m for a bus or HGV to safely pass a cyclist at 20 mph and 5.05m at 30 mph¹⁴⁹¹. A bus lane width of 4.5m will enable buses to safely pass cyclists without having to leave the lane. Widths below 4m generally result in buses moving out of the lane when overtaking cyclists and are not recommended for bus lanes physically bounded on both sides, unless they are over very short distances¹⁴⁹². Given the likelihood of a queue of stationary vehicles in the next lane, and the articulated nature of the NGT vehicles, sufficient space needs to be given for NGT to pass safely within the lane. 4.2m¹⁴⁹³ is not mentioned in LTN2/08 and seems to be a compromise chosen by the Promoters between the 4.5m that should be provided and the 4m which is insufficient.
- 6.535 A recent model created by transport researcher Rachel Aldred¹⁴⁹⁴ suggests that buses and bicycles flow better when they are physically separated, and that leap-frogging of cyclists and buses (and this may also apply to NGT) will lead to delays for the buses or NGT. This suggests that, contrary to the design principles employed in NGT, a physically separated cycle track alongside the NGT lane could be beneficial for NGT as well as for cyclists.
- 6.536 Cycle lanes should be 2m wide on busy roads, or where traffic is travelling in excess of 40 mph. A minimum width of 1.5m may be generally acceptable on

¹⁴⁹¹ Document G-04-74 LTN 2/08 Table 2.3

¹⁴⁹² Document G-04-74 LTN 2/08 paragraph 6.2.2

¹⁴⁹³ Document OBJ/1719 SOC: Statement of Case Appendix (x): NGT presentation to the Leeds Cycling Consultation Forum, presented by Andrew Norman and Sean Hewitt, 9 April 2014

¹⁴⁹⁴ Document OBJ/1470 SOC: Statement of Case Appendix (ix): 'Buses and bikes: a different perspective on modelling delays', August 2014, and 'Buses and bikes: slight return',

roads with a 30 mph limit. Cyclists can overtake each other within a 2m wide lane and easily remain within it when looking back to check for traffic, or when avoiding kerbside drainage grates etc¹⁴⁹⁵. In addition, when queuing traffic is likely, there is a considerable danger to straight-on cyclists from right-turning vehicles crossing their path. A wider cycle lane increases visibility and gives more room for manoeuvre in the event of a vehicle starting to turn.

- 6.537 On the busiest cycle route in Leeds, with over 500 cyclists daily at the peak, (one third of all cycle commuting journeys in Leeds), the Promoters seem satisfied with a road layout where cyclists cannot safely overtake one another. 1.5m is not generally sufficient for a busy cycle lane on a main road. The Promoters seem to have put the safety of cyclists second to '*operational delays to street users*'¹⁴⁹⁶. NGT should at least include the recommended widths for cycling, which are 2m for an on-road cycle path on a main road and 4.5m for a shared NGT and cycle or NGT, bus, taxi and cycle lane, with a 1.5m cycle path marked within it to help bus and NGT drivers to pass safely, given the articulated nature of NGT vehicles. This would allow upgrade to separated cycle paths at a later date or at detailed design.
- 6.538 At the junction of St Anne's Road and Shaw Lane with Otley Road, the NGT plans include a change to the layout that increases the danger to cyclists. The junction would include an additional pedestrian crossing island and left turn filter lane for general traffic. This would make negotiating the junction slower and more inconvenient for pedestrians, and would introduce a significant danger for cyclists in a very large radius on the left turn into Shaw Lane from Otley Road (inbound)¹⁴⁹⁷. The danger from left-turning large vehicles at junctions like this is well known and is responsible for more cyclist fatalities

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¹⁴⁹⁵ Document G-04-74 LTN2/08 paragraph 7.4.2

¹⁴⁹⁶ Document REB-1 OBJ1470: Rebuttal Argument 3 paragraph 2.7: '*As set out in my Proof the design does follow the guidance within LTN2/08. I consider the widths in the design to be adequate and note that wider bus/cycle lanes would impact on third parties with additional land take or through operational delays to street users*'

¹⁴⁹⁷ Document REB-1 OBJ1470 Rebuttal Argument 4 paragraph 2.10: '*Cyclists have the choice between using this lane or using the bus/NGT/cycle gate to move safely into the ahead only lane*'

than any other situation. The safety of cyclists and pedestrians should take priority over considerations of junction capacity for general traffic at this location.

- 6.539 All turning movements would be banned at Hyde Park Corner and diverted to other roads. From 2005 to 2012 there were fifteen reported accidents causing injury to cyclists and pedestrians at this junction, with five pedestrians and one cyclist seriously injured. The change would potentially affect a very large number of people cycling from the student residential areas around Headingley towards the universities, as it would block a desire line for cyclists wishing to use Moorland Road and existing cycle facilities on Woodhouse Moor, which carry over 250 cyclists per day in peak morning hours. The proposed banning of cycle turns would potentially lead to conflict between cyclists and pedestrians and some of the intended movements would be indirect and inconvenient. Management of private vehicle traffic would be prioritised over cycle and pedestrian safety at this location, including the omission of a pedestrian crossing on the fourth side of the junction where there are frequent near-misses.
- 6.540 Current provision for walking and cycling at City Square, which is a key location in the heart of the City, is inadequate and the proposals for NGT do very little to improve this. Little consideration is given to the considerable demand for cycling and walking capacity between the railway station and locations to the northern and eastern sides of the Square. General traffic on the loop road is prioritised, leading to a bottleneck of pedestrians and cyclists at the toucan crossing of Bishopgate Street and an area blighted by through traffic. There have been nine pedestrian casualties at this location since 2005. Remodelling of parts of the Square during implementation of the NGT project would provide an opportunity to deliver safe and convenient cycle and pedestrian routes that would not be in conflict with each other. Creating a calmer environment with less reliance on multiple lanes of general traffic would benefit local businesses and services and create a pleasant space to those arriving by rail.

- 6.541 With regard to Bishopgate Street¹⁴⁹⁸, the pedestrian green light is so infrequent that the crossing is over crowded at busy times and impossible to use as a toucan crossing. On the approach from Bishopgate Street, the cycle lane up the left hand side of two traffic lanes splits into four 'multiple lanes', meaning that it is almost impossible to cross these lanes to join the infrastructure in the centre of City Square or to follow the loop road straight on towards King's Street. The only safe manoeuvre from this cycle lane is to turn left into the Queen's Hotel.
- 6.542 The Promoters could have implemented better provision for buses over much of this route without the need for the massively disruptive and costly NGT. Similarly, a high quality cycling scheme could have been introduced for a fraction of the budget and with much better chance of a positive return on investment. For either or both of these to be implemented to a high standard and be effective in changing people's transport choices, a reduction in private vehicle capacity would be a prerequisite. While this would be in line with local policies, it does not seem to have been regarded as a viable option by the Promoters.
- 6.543 The assumptions underpinning NGT treat all transport modes other than NGT as if they are equal, but analysis has shown that when a person chooses to cycle there is a clear gain to society and society suffers a net loss when people choose to drive by car¹⁴⁹⁹. It is not appropriate to preserve the right to drive short distances, when this leads to serious compromises in the quality of infrastructure for cycling and walking.

¹⁴⁹⁸ Document REB-1 OBJ1470 Rebuttal Argument 8 paragraph 2.24: '*Leeds City Council has already demonstrated its commitment to pedestrians and cyclists on Bishopgate Street by reducing the number of lanes from 3 to 2, adding a cycle lane and increasing the size of pedestrian refuges.*'

¹⁴⁹⁹ Document OBJ/1470 SOC: Statement of Case Appendix (ii) Report 'Value for Money: An Economic Assessment of Investment in Walking and Cycling Page 12 shows for Denmark that '*When a person chooses to cycle there is a clear gain to society of about 1.2 Danish Kroner per*

Drummond and Churchwood Residents' Association OBJ 1727 (DCRA)

The material points¹⁵⁰⁰ were:

- 6.544 The DCRA area consists of approximately 120 households located on five roads immediately adjacent to the A660. The only exit is directly onto the A660. The area is described in the Far Headingley, Weetwood and West Park Neighbourhood Design Statement¹⁵⁰¹. The DCRA is LCC accredited, has its own constitution, free membership, and holds regular meetings every two or three months which are open to all the residents. The DCRA has also consulted with local businesses and community organisations located in or near the area. DCRA is affiliated to both the NWLTF and the A660 Joint Council, and has actively participated in their deliberations.

Lack of Public Consultation and Public Opposition to the Scheme

- 6.545 The public meetings held by the Promoters on the A660 route were used only for dissemination of information on the NGT Scheme and not for consultation. The only option on offer has been the trolley vehicle despite the availability of other public transport improvements that could have been considered. Events held at both St Chad's Parish Centre and Lawnswood failed to answer questions on, or clarify, many issues, including why only a trolley vehicle scheme had ever been considered for the route.
- 6.546 Contrary to the NGT's publicity, there is massive local opposition to the Scheme. The only opinion survey quoted by NGT in support was carried out in 2009 for a quite different proposal, yet the results of that survey (77% in support) have been quoted as if they indicate support for the NGT Scheme. There has been no recent attempt by the Promoters to measure public attitudes to the Scheme. However the Yorkshire Evening Post poll in February 2014 indicated that just over 70% of more than 7,000 respondents opposed

km cycled. Conversely, society suffers a net loss of 0.7 Danish Kroner per km driven by car'

¹⁵⁰⁰ Documents OBJ/1727 SOC2: DCRA Statement of Case, and OBJ 1727 DCRA/115 Supplementary PoE, October 2014

¹⁵⁰¹ Document D-3-5

the Scheme¹⁵⁰². The DCRA actively participated in a questionnaire survey conducted by NWLTF in September and October 2013¹⁵⁰³, which had over a 50% response rate from the residents with 95% against and 3% in favour. A public meeting held by the NWLTF at St Chad's Parish Hall attracted over 100 people and there was universal hostility to the Scheme.

- 6.547 No recognisable representative business consultation has been carried out by the Promoters, particularly in Far Headingley and Weetwood which are some of the areas that would be most affected. The majority of local businesses who participated in a FSB questionnaire survey across Leeds¹⁵⁰⁴ did not think the NGT Scheme the right solution for the City's public transport needs. At the first of two FSB meetings in Far Headingley there was a unanimous vote by the businesses against the Scheme.
- 6.548 The statement from the Leeds Chamber of Commerce is notably non-specific in its comments about the Scheme. A document from the DfT¹⁵⁰⁵ suggests that it was surprised at the apparent support of the Leeds business community given that the direct impacts of the Scheme on business were negative by a considerable degree. The DfT speculate that this may be because the consultees were not representative or that the consultees were unaware that the Scheme would lead to delays.
- 6.549 At the information event held at St Chad's Parish Hall, only a small section of the plans of the Scheme were available and they were presented in a way that was largely incomprehensible to the residents. The NGT visual aids were thought to be largely engineering plans of the area and the plans on display seemed different from those available on the website and were also subject to change over time. Few of the written comments and suggestions have been directly responded to except in most general terms.

¹⁵⁰² Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 1: Yorkshire Evening Post 21 February 2014

¹⁵⁰³ Document OBJ/1719 SOC: NWLTF Statement of Case Appendix I

¹⁵⁰⁴ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 2: FSB Survey of members between 23 August and 16 October 2013

¹⁵⁰⁵ Document OBJ 1719 SOC: NWLTF Statement of Case Appendix H

- 6.550 The notices alerting the public to the TWA Order were not prominent. The complexity and layout of the documentation, with over 8,000 pages, has deterred many individuals and organisations from reading it and has made it unrealistic to expect the public to respond informatively within the available 42 day consultation period.
- 6.551 NGT published material has often been misleading in terms of the many claims made for the Scheme eg the impacts on congestion, production of greenhouse gases, the number and value of trees to be felled and lopped back, the delivery of improved and more integrated public transport, and the overall visual impact of the Scheme itself. The initials 'NGT' and its brand image mean little to local people.
- 6.552 As a result of the very flawed consultation process, DCRA has had to compensate for this and spend a considerable amount of time and resource trying both to understand and to communicate more widely what the impact of the proposed Scheme would be on the people living and working in the area.

Impact on Public Transport and on Other Road Users and Pedestrians

- 6.553 Running two parallel bus routes down the same road with separate bus stops would effectively fragment and make more complex local public transport provision. Journeys by ordinary buses (and cars) would be slower, NGT stops less frequent, and it is expected that there would be a reduction of bus services from any given stop. The NGT would average a bus every six minutes and it is expected that competition would result in a reduced service for other buses (probably from one every three minutes to one every six minutes). Journey times measured in terms of walking, waiting and bus travelling times, rather than just the latter, means that travelling time by the NGT could be longer than at present.
- 6.554 A number of minor adjustments to existing bus services could be made, including improved ticketing and boarding procedures, readjusted bus lanes, minor route changes such as at Blackman Lane, improved junctions and adjusted traffic signal cycles to improve journey times at relatively little cost.

- 6.555 The claim that the Scheme would bring a 'rapid transit network' to Leeds is highly questionable in that the speed of the trolley vehicle is hardly fast and extending the network more widely across the City would be expensive and unlikely to happen soon. The proposed Scheme is for a single route trolley vehicle service which would have no direct connectivity to the City's main bus and coach station.
- 6.556 It is accepted by the Promoters that the Scheme would increase congestion, especially in Headingley. There is significant cross traffic at most of the junctions, as the A660 functions very much as a local road. The blocking of access for traffic to turn right at certain key locations (eg St Anne's Road) would have an adverse impact on the ability of local traffic to move with ease around the area and result in increased rat running. The proposed NGT priority would hold up other traffic and would adversely affect the travelling time of many general travellers and local residents trying to go about their daily business and harm local businesses. Private vehicles moving goods to and from their premises as well as clients and customers would also be delayed.
- 6.557 One possible consequence of competition with the existing bus provider is a reduction in services due to decreased passenger demand for ordinary buses. Outer City bus routes could become uneconomic and result in them being reduced eg Cookridge. A trolley vehicle turning point would be built at Headingley. Depending on levels of demand, services could well be reduced northwards from Alma Road and this could significantly affect the level of public transport provision in the area and beyond.
- 6.558 Separate stops for NGT and buses could result in a danger due to passengers trying to run between stops, including across side road junctions such as at the entrance to St Chad's Church. The NGT stop at Churchwood Avenue northbound would result in the existing bus stop being moved to a less convenient location, about 220m further up the road. Also, the bus would be delayed to give the NGT priority at the Churchwood Avenue junction. This junction is very busy, as it is a major bus stop for students and staff going to

the Leeds Metropolitan University Beckett Park Campus. Therefore, there should be only one stop.

- 6.559 Between Drummond Road and Churchwood Avenue there is a narrowing of the road and it is proposed to lose the existing shadow lanes and pockets which currently help traffic cross the road to exit the A660. The NGT inbound lane would significantly impact on the ability of residents and visitors to enter and leave the area by car without causing backup and congestion as they would have to wait in the remaining A660 southbound traffic lane for oncoming northbound traffic to pass. In addition, with the ending of the northbound NGT lane at the bottom of Drummond Road, general convergence of all traffic at that pinch point would occur which would slow traffic flow, especially at busy times of the day.
- 6.560 Setting the traffic signal cycle to give priority to the NGT at the junction of Churchwood Avenue/Glen Road would disadvantage residents and students, staff and visitors travelling to the Leeds Metropolitan University Beckett Park Campus who are trying to join or cross the road. Consequently there could well be queues of traffic backing up along Churchwood Avenue and in Glen Road.
- 6.561 The partial blocking of some side roads and the changes to junctions along the A660, including at Weetwood Lane/St Chad's Road, West Park and Lawnswood roundabouts, and Hyde Park could all result in increased congestion, rat running and delays for people trying to join and cross the A660 against the traffic flow.
- 6.562 The Bodington Park and Ride site would only function well with an express service which could not be provided because of the inflexibility and technical limitations of the trolley vehicles. The success of the park and ride schemes would affect the strength of the NGT business case. The existing express No X84 bus from Ilkley currently takes almost the same journey time on the same route to the City Centre as the predicted time of the NGT, which would make it a preferred option to park and ride for those travelling from further

out into the City. Also, increased congestion at Lawnswood Ring Road junction would deter people from accessing and using Bodington Park and Ride.

6.563 The A660 is a busy and popular cycling route and the Promoters expect a modal shift from cyclists (as well as pedestrians) to the NGT. This means the Scheme is not aligned with Active Travel Strategies. It would be detrimental to cycling for the following reasons:

- a) The proposal would open up NGT dedicated lanes for cycle use, but some of the lanes would not conform to the expected 4.5m width to allow for the safe passing of cyclists by buses.
- b) Stretches of the route would have a minimum cycle lane width of 1.5m and sometimes less, when 2m is recommended.
- c) There would be several junctions that would present dangers or difficulties to cyclists eg Shaw Lane/St Anne's Road¹⁵⁰⁶, and the blocking of Hyde Park junction would mean the large numbers of cyclists (including many students) would be unable to make their way straight down the A660 to the University¹⁵⁰⁷.
- d) The proposals would remove advisory cycle lanes at Drummond Road¹⁵⁰⁸.
- e) The northbound lane prior to Churchwood Avenue and alongside the current pedestrian crossing would be reduced to a lane width of 2.5m alongside a narrow cycle lane, which would not be safe because of the likely competition between different modes of transport¹⁵⁰⁹.

6.564 The proposed Scheme has been assessed under the Equality Act 2010¹⁵¹⁰, but locally there are concerns about its impact on children, young, older and disabled people, including whether the much wider roads would be safe to cross; the effect of narrowed pavements, particularly for those walking in groups; the increased pedestrian hazards on the pavements; and the introduction of quiet, long, articulated vehicles.

¹⁵⁰⁶ Document A-11 Drawing No 312694/TD/016

¹⁵⁰⁷ Document A-11 Drawing No 312694/TD/021

¹⁵⁰⁸ Document A-11 Drawing No 312694/TD/013

¹⁵⁰⁹ Document A-11 Drawing No 312694/TD/013

¹⁵¹⁰ Document A-08h-2

- 6.565 There has been a steady decline in private vehicles using the A660 over the last few years. The area has an unusually high number of children and young people who live and/or attend educational institutions along the route¹⁵¹¹. The proposed Scheme would affect 17 primary and 3 secondary schools, 2 colleges, 2 universities with 3 large campuses, and a huge catchment area. It follows that the 'school run' is a pronounced feature of the A660 in the morning and mid-afternoon with the resulting cars contributing to the busy nature of the road at these times. However, these parents with their young children are unlikely candidates for modal shift from private car to the NGT. Young people are also particularly dependent on the active modes of walking and cycling along with public transport because they are largely no or low income and too young to drive or own a car. They are also more likely to move around in groups. All local schools try and promote active modes of travel among their pupils.
- 6.566 Statistics for accidents 2008 to 2014 from Clarendon Road to Otley Old Road show relatively few occurred during that period. 16% of the total number involved the under 20s and 39% were aged 20 to 29. Over half of all accidents of all ages were pedestrians or cyclists¹⁵¹². Near to Drummond and Churchwood, pavements would be narrowed to 2m width, which would not conform to official guidance on pavement width, and the road would be widened with some stretches becoming 6 lanes wide, including the central reservation. Separate bus stops and gantries would cause street clutter which could force passing pedestrians off the pavements and into the carriageway.
- 6.567 Lawnswood School, with about 1,300 pupils, would be adversely affected by the Scheme, which would harm the safety of its pupils, and the disruption and noise during the construction period could well affect pupil attendance and future recruitment and negatively influence the school's performance

¹⁵¹¹ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 3: A map of the schools, colleges and universities; and Appendix 4: the Leeds Census 2011 for Headingley and Hyde Park: shows high densities of young people living and studying along the A660

¹⁵¹² Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 5: All Accidents on A660 Clarendon Road to Otley Old Road

indicators¹⁵¹³. Kindercare, a local day nursery school, with about 130 pupils, currently uses the 2.9m wide footway for extra wide buggies carrying six children and regularly walks large groups of children along the road.

Disruption and traffic hold-ups during the construction period would not only result in an extended day for the children, but could also affect the nursery's recruitment (and financial health) as their pupils travel from different areas across the City.

6.568 Young people (aged 16 to 29) form a very significant proportion of the population in Woodhouse and Hyde Park (64%), Headingley (78%), and Weetwood (32%)¹⁵¹⁴. Many students have more recently moved to be nearer the universities and are living in purpose built apartments close to the City Centre. With the closure of Bodington Hall there are no longer any residences beyond the Ring Road. Also there is a decline of 57% in student street accommodation in the Beckett Park/Far Headingley/Weetwood area¹⁵¹⁵. Most student residences are now very largely clustered within a twenty minute walk of the two universities¹⁵¹⁶. Any significant modal shift of students to the NGT would be unlikely because they live close to the universities and colleges and their public transport requirements have dropped considerably over the last few years.

6.569 There are a significant number of older people living further out along the A660. The over 60s group comprises 18% of the population in Weetwood and 30% in Adel and Wharfedale, including Cookridge¹⁵¹⁷. Lower levels of mobility and higher levels of disability means this group are much less likely to walk or cycle and has a high propensity to use public transport. Since the introduction of concessionary fares, nationally their use of public transport has increased by 79%. Longer distances between stops, longer waiting times, the increased likelihood of having to stand, and the possible curtailment of outer city bus

¹⁵¹³ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 6

¹⁵¹⁴ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 7

¹⁵¹⁵ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 8

¹⁵¹⁶ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 9: Map

¹⁵¹⁷ Document OBJ/1727 SOC3: DCRA Statement of Case Appendix 10

provision would disproportionately and adversely affect the accessibility and ease of use of public transport by this group.

- 6.570 The closure of Weetwood Lane junction would increase local traffic congestion and noise and pollution in the area around St Chad's Road. It would encourage rat running through the residential area in which there are two residential developments for older people in Orchard Court and St Chad's Court flats. A much wider road to cross, narrower pavements, and separate bus stops would be negative aspects of the Scheme which would disproportionately affect the older population.
- 6.571 The disabled would be affected in different ways but factors such as complex non-integrated bus schemes and time-tabling, a cluttered pedestrian environment, the long, articulated character and quietness of the trolley vehicle with an increased need to wait and stand, would all pose problems to some disabled individuals. The mitigation mechanisms proposed would only marginally reduce these factors.

Impact on Businesses and the Community

- 6.572 One of the consequences of widening the road is that of community severance leading to social and economic exclusion. It would not only be the long construction period that would disrupt local people's ability to access local shops, restaurants, schools, health centres, churches and other social and community facilities, but the new permanent and wider road would create a major physical barrier dividing the people living in the communities of Headingley, Weetwood, West Park, Woodhouse and Hyde Park, Tinshill and Cookridge. Older people and young families are particularly dependent on being able to easily access their local community facilities.
- 6.573 The proposed development (compounded by some of the land frontage being used as a construction site) could cause both perceived and actual access problems to members of the congregation of St Chad's Church and act as a deterrent to them visiting the Church. There are similar concerns about the impact on St Chad's Parish Centre, which is in very close proximity and uses

the same gateway entrance and performs an important role as a popular community facility and raises funding for the Church.

- 6.574 There would be adverse economic impacts on the local businesses, especially those located directly along or just off Otley Road, including Cottage Road Cinema. The proposed parking restrictions would exacerbate problems due to the existing limited parking facilities. The area is resident only parking and the proposed Scheme would result in a reduction of about 20 permanent spaces in front of local businesses along the Otley Road in Far Headingley. The narrower pavements and less attractive environment would be likely to reduce overall footfall affecting the business environment in the area. A protracted length of disruption through the construction period could well put their future at risk.
- 6.575 The design of the road would impact on local businesses in other ways eg the loss of the shadow lane outside the garage on the road between St Chad's Church entrance and Drummond Road would mean that inbound traffic turning right into the garage and outbound traffic turning right out of it could well find it difficult to access and exit the business causing congestion and deterring customers.

Impact on the Landscape and Heritage Environment

- 6.576 The Scheme would have a dramatic impact on the landscape and heritage environment of parts of Leeds. Over 3,000 properties would be in some way affected, including 62 listed buildings and also 7 CAs. There is an over reliance on the residents getting used to their transformed environments so that impact can then be said to have been reduced over 15 years. The cumulative impact on each CA to the overall affected route as a designated heritage impact has not been considered.
- 6.577 The Promoters' Landscape Assessment is based on guidance provided by GVLIA2¹⁵¹⁸, using a methodology dating back to 2002 which is now out of

¹⁵¹⁸ Document G-4-2

date. GVLIA3¹⁵¹⁹ was published in April 2013 and involves a new emphasis on sustainable green infrastructure and on the cumulative impact of effects. It also separates assessment of scheme impacts, first on landscape which has value as a resource and second, on landscape which has value as a visual effect (perceptual, cultural and aesthetic). This builds on the Treasury and Defra Green Book, published in Feb 2012, of which its new Environmental Capital Approach and Ecological Systems Assessment methods are now incorporated into DfT TAG Unit 3A EIA guidance, May 2014¹⁵²⁰. It includes guidance on landscape assessment for road schemes.

- 6.578 The landscape assessment work understates cumulative impact. This is because, for road schemes, there is a need to assess the cumulative impact of adjoining and individually defined character areas after they have been assessed separately¹⁵²¹ and there has been no overall systematic assessment of the cumulative effect of the various character areas and how this impacts on an assessment of the landscape character of the whole route or how the route should be designated.
- 6.579 The assessment's visual sensitivity for pedestrians is set as 'medium' all along the route. This is despite the A660 being highly popular with pedestrians, and the NGT route going through well used parks and green spaces (eg Woodhouse Moor and Belle Isle Circus) and interfacing with well used pedestrian ways (eg Monument Moor is the start of the Meanwood Valley Trail which is a designated spur of the Dales Way). The more appropriate methodology would have been to vary the baseline visual sensitivity to reflect the true features of each character area. The methodology that has been used serves to reduce adverse impact and results in an understatement of levels of significance to the landscape of the Scheme for many different areas of the route.

¹⁵¹⁹ Document G-4-22

¹⁵²⁰ Document OBJ 1727 DCRA/107

¹⁵²¹ Document APP-10-2: Mr Walker PoE page 77 paragraph 10.8 concludes that 9 of the character areas out of 29 are subject to 'significant adverse impact' even after mitigation, 20 out of 29 will be subject to change of character and some will only have less level of adverse impact 'because of mitigation'

- 6.580 In terms of balancing adverse and beneficial effects, WebTAG guidance states the principle is that compensatory effects have to be genuine and any balancing should err on the side of caution and be restricted to 'slight' or only exceptionally to 'moderate' assessments. This is not the approach consistently adopted in the ES assessments. Actions (eg tree planting) which have been described by the Promoters' experts as 'mitigation' may not be site-specific and can give a false impression of a restituted local landscape when that is not what is being proposed (eg a substantial number of replacement trees are on the park and ride sites). Optional improvements have also been included as evidence of possible mitigation even though design plans have not been produced or costs included in the Scheme.
- 6.581 The methodology of the Urban Design and Access Statement Volume 1 includes design objectives that are incompatible¹⁵²², such as requiring a high level of distinctive branding of NGT to encourage use versus the '*need to integrate with the local character of the area*' and '*maintain the existing townscape*'. No priorities are assigned to these design objectives and this allows the Promoters to use what could be described as 'unfair selectivity of design principle' eg a landscape design assessment based on a highly branded bus stop located in front of the Three Horseshoes pub in Far Headingley, located in a prominent position in a CA.
- 6.582 The Archaeo-Environment report¹⁵²³ looks in detail at the Promoters' evaluation of the Scheme's potential impact on two already appraised CAs. The two case studies are Far Headingley and Headingley Hill, Hyde Park and Woodhouse Moor. The Far Headingley CA Appraisal and Management Plan 2008¹⁵²⁴ and the Neighbourhood Design Statement¹⁵²⁵ describe how the trees and green areas bring a distinctive ambience to the area. The Management Plan stresses the importance of '*ensuring traffic management impacts as little as possible on this special character of the area*'. The consequence of

¹⁵²² Document 8-08k Table 1-01 Page 11

¹⁵²³ Document H-1

¹⁵²⁴ Document D-5-2

¹⁵²⁵ Documents D-3-5 and D-3-6

significant road widening to a 6 lane highway plus considerable tree destruction and grass verge loss should be classed as 'severe'.

- 6.583 The ES Historic Environment Technical Appendix H refers to the following features being important in the CA: the spire of St Chad's Church as the principal landmark, the Church's own setting as a Grade II listed building with the green open spaces and cricket pitch, the contrast between two distinctive settlement patterns, the mature trees, and the war memorial with its yew hedging and twin silver birches. The Archaeo-Environment report¹⁵²⁶ concludes that the landscape setting of the CA itself along Otley Road with mature trees and green verges plus the St Chad's Church spire, which can be seen from some distance away, would be subject to substantial harm and irreversible change of character.
- 6.584 The total number of trees that would be lost is in excess of 453 plus 22 tree groups where trees have yet to be counted individually. There would be the loss of 21 trees alone in the Far Headingley CA of which 13 have been described as 'significant' in the CA Area Appraisal¹⁵²⁷. The Scheme would completely fail to impact '*as little as possible on the special character of the area*'. The CA Appraisal says '*trees are an important part of the distinctive character of the area. Tree lined roads are a defining feature*'.
- 6.585 A tree valuation report carried out for DCRA¹⁵²⁸ on the 21 trees that would be lost found that the trees in front of St Chad's Church approximate to the value of over £0.5 million. As the trees are similar in age and type along the rest of the A660 route, the value of capital asset loss to the City for all the trees on the route is estimated to be over £14 million. An unknown number would be subject to considerable lopping back. The cost of replacement trees is approximately £700,000 which represents less than 5% of the existing value of tree cover. Although there are plans to replace the trees on a 3 to 1 basis

¹⁵²⁶ Document H-1

¹⁵²⁷ Document D-5-2

¹⁵²⁸ Document H-2

with some larger replacement trees being planted, these new trees would take decades to have significant visual impact.

- 6.586 The costs of the successful maintenance of the newly planted trees would be considerable and could adversely impact on the budget of LCC Parks Department and their ability to properly maintain other of the City's parks, gardens and green verges. Maintenance costs are unquantified and excluded from the overall project costs. As many as 1 in 4 trees are calculated to fail to survive such planting so there would be very significant additional tree replacement and maintenance costs needed.
- 6.587 The loss of such a large quantity of trees would have a negative impact on the air quality and bio-diversity and wildlife in the area. It would affect the speed and levels of water run-off and drainage and not help mitigate the consequences of climate change.
- 6.588 The Archaeo-Environment report¹⁵²⁹ makes an important methodological point about the potential impact of the Scheme on the below ground archaeological heritage of Leeds. It reports that no standard NPPF procedures to understand significance have taken place. The ES acknowledges no fieldwork has happened and that the impacts on the heritage assets are unknown¹⁵³⁰. No predetermination evaluation has taken place on any archaeological site, despite the sites being referred to as 'significant' by WYAAS.
- 6.589 The proposed use of the Grampian condition to cover future mitigation of the archaeological impact in the form of recording of buildings and everything from a geophysical survey to full scale excavation for below ground deposits, is neither enforceable nor reasonable. A condition has been suggested¹⁵³¹ requiring a programme of archaeological work, including a 'Written Scheme of

¹⁵²⁹ Document H-1

¹⁵³⁰ Document A-08c-7 ES Historic Environment paragraph 2.29: '*The current understanding of the extent and survival of archaeological remains within the study area is limited due to lack of data and fieldwork. The exact nature, extent and significance of potential archaeological remains is difficult to accurately predict from desk based studies alone and this generates a degree of uncertainty in predicting impacts and effects upon such resources*'

¹⁵³¹ Document OBJ/1727-501

Investigation', to be approved and complied with for the demolition and development and a procedure for dealing with unexpected discoveries.

Business Case and Value for Money

- 6.590 The Scheme has its origins in the Supertram proposal. Rather than revisit what the public transport needs are for Leeds in the 21st century, the NGT has simply reworked the model based on a section of the original route replacing a tram with a trolley vehicle. The investment of £250 million is poor value for money. The predicted BCR is below the average for DfT funded schemes. Any ideas for extending this stretch into a larger network across Leeds must be tempered by the improbability of any future further significant investment for a public transport system like NGT in Leeds.
- 6.591 The commercial viability of the trolley vehicle system relies upon the accuracy of the predicted level of demand for the service. In terms of the required 'modal shift', NGT estimate that 71% of the NGT patronage would be transferred from existing bus services. Only £25 million is being spent on the vehicles, which makes the Scheme a road building infrastructure scheme rather than one whose primary aim is to improve public transport. An estimated 6.6% of patronage is predicted to transfer from 'active modes', yet new transport schemes should now be planned to increase these activities. The transformation of a busy popular pedestrian and cycling route into a wide multi-lane highway would be very likely to further reduce the number of walkers and cyclists.
- 6.592 The very changed demographic of north west Leeds since the baseline data used for the report makes predicted numbers of passenger journeys look optimistic. Two thirds of the predicted shift from car to NGT is expected to be by people using the Park and Ride despite its questionable attractiveness due to the lack of an express bus service.
- 6.593 All large infrastructure schemes are prone to budget over-run and some extra costs would fall on LCC. An estimated £77 million is already earmarked to be

'locally sourced'. NGT is likely to affect the overall transport budget for both the City and wider West Yorkshire for many years.

- 6.594 Loss of property value would have an economic impact of its own. According to some local estate agents, the possibility of the Scheme is already having an adverse impact on house prices and causing blight to properties situated directly on the route.
- 6.595 Other cheaper and less intrusive alternatives should be considered, including improving bus boarding procedures, introduction of 'oyster card' type systems, the commissioning of more modern and flexible electric buses, improvements in traffic management such as remodelled bus lanes and modern digitised traffic signalling systems, and the introduction of a Bus Quality Contract for the route.

Weetwood Residents' Association OBJ 1354 (WRA)

The material points¹⁵³² were:

- 6.596 WRA has been in formal and accredited existence since February 1995. It represents an area¹⁵³³ that comprises more than 600 households. Its purpose, as defined by its Objects, is to maintain and improve, so far as is possible and by all reasonable means, the ambience, amenity and security of its defined area on behalf of its members. WRA is fully and formally affiliated with the NWLTF.
- 6.597 The north west sector of Leeds, with its relatively impermeable lateral boundaries, is characterised as a mature residential area, well serviced by schools, shops, small businesses and leisure facilities, having little deprivation and no need of regeneration¹⁵³⁴. For all these services and the many residential enclaves along the road from Hyde Park outwards which have no other transit access, the A660 is seen to serve the sector as a local distributor

¹⁵³² Documents OBJ/1354 SOC1, SOC2 and SOC3: Statement of Case and Appendices; OBJ/1354 PoE; WRA/101; WRA/107; WRA/109; WRA/111 and WRA/112

¹⁵³³ Documents D-3-5 and D-3-6 describe the area

¹⁵³⁴ Document OBJ/1354 SOC2: Statement of Case Appendix A

road. The out-of-area traffic that necessarily uses the road is a very minor proportion of the total and this proportion is unlikely to increase significantly. The NGT plans generally disadvantage local traffic.

6.598 The following aspects of the NGT proposals run contrary to the aims of the Manual for Streets¹⁵³⁵:

- the impact on the safety of pedestrians, particularly school age children, of narrowing of pavements and increase of impediments on them caused by the duplication of stops and OLE;
- the impact on the safety of cyclists of lack of segregation or narrowness of cycle lanes in respect of the nature of the trolley vehicles;
- the segregation of boarding points for the two public transport systems, requiring duplication of street furniture and prior choice, and involving in most cases the relocation or removal of the bus stops from positions that had evolved to be most useful to passengers to positions inconvenient to those travellers who need to continue to use bus services;
- the net reduction and displacement of short-term parking spaces, changes which would have a negative impact on amenity and small businesses.

6.599 The NGT line would run behind the Arndale Centre and other large buildings where there are no potential passengers and alighting passengers would be out of the centre. Buses would continue to service the A660 frontages where there are always many potential passengers. All public transport should run where it is accessible to passengers. There are clear problems in allowing for all other vehicles, but the possibility of creating a largely pedestrian zone at the heart of Headingley should have been more actively pursued.

6.600 At Weetwood Lane, the only justification for the proposal for the closure of this junction is the requirement to provide space for a large NGT stop. The junction currently works well and safely for both inbound and outbound traffic, both at peak flow and at other times, though in the past WRA has argued for some minor improvements. The newly created pedestrian area would become

¹⁵³⁵ Document E-4-15

an overspill for the adjacent public house, which is not desired by residents. Vehicle conflicts would arise on the closed end. There would be a loss of significant numbers of unrestricted and off-peak parking spaces, threatening the viability of local shops, restaurants and the Cinema, and potentially leaving the community significantly worse off. Relocation of the No 28 bus stops further north on Weetwood Lane would place them too near the crossing and entrances to the primary school, raising safety concerns.

- 6.601 The Promoters' documents state that there would be a loss of 12 unrestricted parking spaces in Far Headingley, but the TROs indicate that the actual loss of permanent spaces would be closer to 20 and that over 30 off-peak spaces would be lost from Otley Road. The loss of these spaces would be a considerable threat to the viability of the local shops, restaurants and Cottage Road Cinema, which held its Centenary in 2012 and is one of the oldest continually operating cinemas in the country. If these businesses were to close, either as a consequence of the reduced parking, the increased congestion or the years of construction related disruption, the community would be significantly worse off.
- 6.602 The detailed plans for the end of Weetwood Lane suggest a lack of attention to detail, for example, it is proposed to relocate the No 28 bus stops further north on Weetwood Lane, taking out about 6 parking spaces, whereas, if buses are to be diverted via St Chad's Road, it would be better to have southbound No 28 buses stop with all the other buses on Otley Road, while the northbound stop would be better placed on St Chad's Road.
- 6.603 The control of traffic at the Glen Road/Churchwood Avenue junction is the key to design requirements for the Thornbury Avenue and St Chad's Road junctions. The junction is more dangerous than the Weetwood Lane junction and its signalisation would be welcomed in principle, particularly if settings of pedestrian crossings at St Chad's Road and Thornbury Avenue were phased to allow a 'Green Wave'. The need to maintain capacity on the main road may lead to very low priority being given to the side road traffic and hence long delays for this local traffic. The operation of the junction could be improved

by, for example, the removal of cycle advance stop boxes on the side roads and by allowing a right turn into Glen Road.

6.604 At the A660/St Anne's Road/Shaw Lane/Alma Road junction, St Anne's Road would be closed to some traffic. This is unacceptable because:

- It would close one of only 2 routes serving the extensive Beckett Park/St Chad's residential area and one of the entrances to the Beckett Park Campus of Leeds Metropolitan University, and is a principal route of access to the Beckett Park itself;
- It would make access to the shops and businesses on St Anne's Parade much more difficult and hazardous; and
- It would effectively cut off a recently created bypass to Headingley centre for westbound traffic via Headingley Mount.

6.605 The installation of traffic signals at Lawnswood roundabout could increase the capacity of this important junction, but the incorporation of a dedicated central lane for NGT vehicles would reduce the capacity and lead to significant loss of trees. It would also create a safety hazard outside Lawnswood School where children would be faced with using either NGT or bus going in the same direction but on opposite sides of the carriageway. This could lead to children running across to the other stop if that vehicle is seen coming first. The extension of the NGT route across the Ring Road is designed to serve the Bodington Park and Ride site but its success would be greater if it were serviced by express buses rather than by trolley vehicles. The impact upon east-west traffic at the roundabout seems not to have been considered.

6.606 The following proposed relocation or removal of bus stops would cause problems. These include the loss of the bus stops outbound and inbound at Ancaster Road, which serve a significant residential area; the displacement of the outbound West Park stop; and the moving of the outbound Churchwood Avenue stop which serves large residential areas on each side of A660. Bus and NGT stops should be combined on the site of the existing bus stop in a number of these instances.

- 6.607 Pavement widths along the A660, mainly north of Weetwood Lane, would mainly be about 2m, which would be uncomfortably narrow with the close proximity of fast moving traffic and the wind and spray it produces. The effective width of the pavements would be narrowed by the frequent poles necessary for street lights and to carry the OLE. NGT and bus stops would occupy the full width of the pavements and, at the residential frontages, there is the need to place refuse bins.
- 6.608 The provision of a park and ride at Bodington, with the considerable loss of green space (mitigated by 'green' open block paving), could have the beneficial effect of reducing car movements on the A660 to and from the City from this point by up to 10% during peak flow periods. Replacement of University of Leeds' playing fields is planned to be on the other side of Otley Road, but the land chosen had previously been earmarked for a much needed extension to Lawnswood Cemetery. Also, there would be a capacity problem, as at standard loading, 800 cars would provide about 1,000 passengers who would fill 8 of the 10 trolley vehicles scheduled to depart from the park and ride site during the 2 hour peak flow times. To maximise its chances of success, the Park and Ride should be served by express buses (giving riders a fast and dedicated service at peak times and relying on the existing No X84 at off-peak times).
- 6.609 The Promoters' Business Case is unsound for the following reasons:
- It is critically dependent upon the estimates of patronage, which rely on client capture from buses that are affected by perceptions of quality and door-to-door journey time advantage and the competitive response of the bus operators.
 - It would not stand up as a commercial proposition, as the majority of the capital employed does not result in valuable and disposable assets. The return on total capital employed, which is very uncertain, is unacceptably low and would not attract commercial investment. The costs of lease contract termination would be punitive.

- It is predicated on the tolerance of Leeds' and also of West Yorkshire's Council tax payers in supporting the on-going cost of prudential borrowing to cover capital expenditure and supporting possible non-commercial operation.

West Park Residents' Association OBJ 1720 (WPRA)

The material points¹⁵³⁶ were:

- 6.610 WPRA represents the community adjacent to and on the route of the NGT from Otley Old Road, through Lawnswood and down to Central Park. It is affiliated to the NWLTF.
- 6.611 Despite the claim that NGT is 'plan-led', there is no adequate, up-to-date and thorough review of Leeds' transport needs, nor any thorough review of the means by which these could be addressed in relation to the various transport modes and different radial routes. Overall, for the A660 and for Leeds as a whole, the NGT proposals lack any analytical basis on which this or any other transport scheme could be judged effectively.
- 6.612 The Scheme would be inappropriate to the character and role of the A660 in serving the local needs of residents and providing access to customer parking for local businesses and the safety needs of school children and other pedestrians. It would fail to maintain or improve access to public transport services for local residents and commuters¹⁵³⁷ and the design process has been limited to only considering through traffic on the A660 road.
- 6.613 The impact of the relocation of bus stops¹⁵³⁸ would be that they would be reduced in number and moved away from main local population/user points. This would require users to walk further to their stops and, in many cases,

¹⁵³⁶ Documents OBJ/1720 SOC, OBJ/1720 PoE and OBJ/1720-103

¹⁵³⁷ Document C-4-2

¹⁵³⁸ Examples are: Document A-11 Drawing No 312694/TD/012: The outbound bus stop outside the West Park shops has been moved to beyond the mini-roundabout (about 100m) away from main local population/user centre and requiring bus users to cross 3 junctions; the inbound stop opposite the West Park shops has been removed; and a bus stop has been relocated away from passenger usage points at Ancaster Road and Churchwood Avenue with greater inconvenience/walking distance for passengers requiring passengers to cross a junction

cross junctions away from a pedestrian crossing facility, disadvantaging the elderly or disabled residents and those with young children and creating a safety issue. Furthermore, due to the two separate public transport systems, users would be faced with confusion.

- 6.614 The NGT would impact on local businesses in West Park, the general ambience of West Park and the prosperity of Leeds. The proposals would establish a traffic clearway across the shop frontages, discouraging parking for passing trade and customers in general. The Scheme would harm the businesses because customer parking would be diminished by the removal of parking space. Inadequate or non-existent consultation has been had with businesses and any consultation has failed to understand local issues.
- 6.615 The northern route would affect 17 primary schools, 3 secondary, 2 colleges, and 2 universities with 3 large campuses. Students and school children would be most affected by pavement widths, given that they are more likely to move around in groups. Many pupils of Lawnswood School use the footpaths leading from Headingley to Lawnswood and the public transport stops opposite the school entrance on the A660. The proposals would reduce the existing pavement widths to only 2m for much of the West Park section of the A660¹⁵³⁹. The plans do not reflect sufficient design and attention being given to the safety of schoolchildren¹⁵⁴⁰.
- 6.616 The Lawnswood roundabout design does not appear to take account of current plans announced by LCC for East Leeds Orbital Road and capacity improvement of roundabouts to the West. The resultant additional traffic flow around the Outer Ring Road would be likely to overload the capacity of the roundabout and result in increased traffic queues. The southern inbound exit has been re-designed with a severely shortened 'merging lane'. For the outbound evening peak period, the proposed carriageway reduction, which would remove one lane of general traffic, would be likely to result in significant

¹⁵³⁹ Document G-4-16 Manual of Streets section 6.3.22 gives recommended footway widths

¹⁵⁴⁰ Document C-1-13 Annexes 9 to 11 the NGT runtime analysis shows that the NGT will be running at 48kph along the stretch of the A660 near Lawnswood School

queuing. In addition to increased pollution, this would encourage rat-running on the narrow Spen Road residential road.

- 6.617 With regard to public transport, West Park and other communities served by the A660 enjoy a frequent bus service. The NGT plans do not offer evidence of any improvement to the existing service. Bus stops would be less accessible or removed. Two sets of stops in a non-integrated transport system would introduce confusion. The bus frequency is expected to be halved, and the very survival of outer services would be in doubt, which would not be compensated for by the NGT provision.
- 6.618 Overall there is little firm evidence to support the proposition that bus users would move to the NGT on the scale argued in the Business Case. Projected travel times by NGT would not be significantly better than bus and bus services would have greater access to priority lanes, sharing them with the NGT so that any bus boarding delays could affect the trolley vehicles, especially given the absence of lay-bys on the inbound A660 route. Time savings from having onboard conductors and a more efficient ticketing system could be applied to buses and do not depend on having a trolley vehicle system. Improved onboard information and quicker boarding would be small compensation for the fact that most passengers on the NGT would have to stand.
- 6.619 The northern section of the proposed route would run exclusively through or adjoin CAs. An integral part of the character of these areas derives from relatively narrow roads, wide footways, green verges, and extensive borders of mature trees all along the A660. Many trees and verges would be lost and trees would need to be cut back to allow for electric cable clearance. The damage to CA character would be compounded by increased street clutter and the overhead cabling and roadside gantries required by the NGT, together with the attachment of OLE to buildings.
- 6.620 An in-depth analysis undertaken by NWLTF of the documentation produced in support of NGT has shown many errors or unwarranted assumptions being made which are fundamental to the Business Case. The Promoters'

description of 'value judgments'¹⁵⁴¹ does not reduce the level of uncertainties that they introduce to the Scheme outcomes regarding patronage, congestion, emissions and financial viability. The combination of these deficiencies in assumptions in the analysis that have exaggerated the benefits of the Scheme, and flaws in the ES and in the assessment of impacts on local communities, have underestimated the harm that it would do, which means that the Promoters' overall assessment of the planning balance cannot be accepted.

- 6.621 Central and local Government officials, political representatives and the general public are unaware that the Business Case and financial viability of the NGT Scheme rests on unwarranted assumptions, in particular about peoples' perceptions of the attractiveness of the proposed system to potential users.
- 6.622 There has been no meaningful and genuine consultation or engagement in the Scheme development with transport users, local residents and businesses. Six events have been held around the proposed northern route, at which it was clear that support for the Scheme was closer to 10% rather than the publicised 77%, a statistic supported by a local opinion survey carried out by community associations. At these events the NGT team was unable to answer most of the points being raised. Discussions and responses were limited to the details of the plans (DF6), with no information concerning the rationale for the Scheme or the basis underlying the plans being presented, or details of tree loss and other landscape methods. The whole process has only involved giving information and not consultation or meaningful discussion, especially against any background of local understanding.
- 6.623 The NGT campaign has been founded on dubious statistics and misquoted public support. The information available to the public for the 2009 survey only gave sparse generalised details of the Scheme. The maps and brief details for the north and south routes were given alongside a map and details

¹⁵⁴¹ Applicants' witnesses in cross examination

for an east route to St James' hospital and the City Centre loop route. Neither of the last two routes are part of the current proposals.

- 6.624 Community associations in north west Leeds recently combined to distribute a new questionnaire, worded to replicate the 2009 survey, to gauge the reaction of residents to the Scheme now being proposed. Local residents' associations distributed 3,450 questionnaires eliciting 893 returns which showed that 95% of residents opposed the Scheme with only 3% supporting it.
- 6.625 The Promoters' witnesses have been unable to respond to cross examination at the Inquiry in a manner that demonstrates a full and comprehensive knowledge of the proposals and its underlying detail. As a result, WPRA has no confidence that the Scheme has had the scrutiny and attention to detail necessary to ensure that it offers value for money to justify major public funding and the associated call upon local Government finances.

Chris Sheard, Meanwood Valley Partnership (MVP) OBJ 510

The material points¹⁵⁴² were:

- 6.626 Chris Sheard is chairman of the Meanwood Valley Partnership, which he has indicated was set up in about 2005/6 to protect the heritage of the Meanwood Valley area and it represents the views of residents of that area, having about 70 members.
- 6.627 At the heart of the area is the Meanwood Valley Trail. The NGT Scheme seems to ignore the impact it would have upon the Meanwood Valley and its environs. It appears linear and exclusive and there are no obvious stated plans and sources of funding available to extend the network further. The proposal to include park and ride sites ignores the fact that it would not replace car journeys but merely displace them to other locations with the attendant congestion that would bring.
- 6.628 The people who would benefit from the NGT are already catered for by public transport. Those living more than 5 minutes walk away are unlikely to change

from using private transport, so congestion would not be alleviated. The increased problems caused by the construction of the system would mean traffic would divert to other routes, increasing congestion there.

- 6.629 The RAC Foundation reporting on the 2011 census and National Travel Survey¹⁵⁴³ confirms it will take big measures to encourage/force people from their cars. The Scheme would add further congestion by occupying road space and imposing on all other road users. It would not be an integrated transport solution for Leeds and would take no account of all the other major routes into Leeds, such as Meanwood Road. Car users along the A660 corridor would divert and rat-run into other areas, creating traffic and social disruption during construction and after completion eg the closure of Weetwood Lane would push traffic onto the Moor Road/Monk Bridge Road routes, which in turn could lead to justification for further traffic calming measures to those areas affected.
- 6.630 The environmental harm includes the removal of mature trees from north Leeds, an area known for its outstanding natural and urban beauty. The OLE fixings to buildings or poles and the construction of substations would also have an environmental impact. In addition, there would be the unnecessary destroying of other people's property.
- 6.631 The Scheme fails on all its stated objectives, except perhaps to those who would use the system during the peak periods. It would become a commuter bypass for some at peak times to the detriment of all other road users at all other times. It would use electricity which has to be generated.
- 6.632 With regard to funding, the LCC contribution would result in either loss of services or increase in Council tax, which would be made worse if the projections of use would be incorrect leading to a year-on-year shortfall. The SofS for Transport should vary the application of these moneys into a proposal which is more suited to the A660 corridor and to Leeds in general.

¹⁵⁴² Documents OBJ/510 SOC and OBJ/510-100 and oral evidence at the Inquiry

¹⁵⁴³ Document OBJ/510 SOC Appendix 4: BBC Transport Correspondent article, dated 2

- 6.633 The Scheme has used similar models to those relating to the Edinburgh tram scheme, which was started in 2007 with a scheduled finish date in 2011, but was still not open in 2014, though the line was complete in 2013. Only half the intended line has been completed, and the full route will never be complete due to a huge overspend on the original cost of £375 million resulting in £228 million of interest payments on a 30 year loan¹⁵⁴⁴.
- 6.634 In the list of Urban Areas in the United Kingdom derived from the 2011 census, West Yorkshire built-up area comes fourth with a population of 2.4 million at a density of 3,645 people per sq km. The local airport does not have any fixed links to either Bradford or Leeds. The money for NGT should be set aside and used for identifying and supporting schemes which will provide real, immediate and long term benefit for Leeds and West Yorkshire. There is support for the FWY alternative scheme using a 'Quality Bus System'.

Councillor Anderson OBJ 527

The material points¹⁵⁴⁵ were:

- 6.635 Councillor Anderson represents Adel and Wharfedale Ward. The North West Area Committee, which includes the 3 councillors from this ward and 3 councillors from each of 3 other wards, voted in a majority opinion not to support the NGT.
- 6.636 LCC leadership has not tried hard enough to secure the funding for a different scheme by working within the Combined Authority and with the Councils in other authorities. Leeds is the only major city in Europe without a modern public transport system. All of the City should benefit from a truly integrated and interconnected system, with better integrated ticketing and paying for tickets before you get on the bus. This is more important than journey time saved on NGT.

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¹⁵⁴⁴ Document OBJ/510 SOC Appendix 6

¹⁵⁴⁵ Document OBJ/527-100 and oral evidence at the Inquiry

- 6.637 There are no examples of comparable economies to Leeds benefiting from trolley bus systems. There are alternative strategies and technologies available. The Promoters do not appear to have asked the market what they can do, particularly when NGT is not likely to be operating in the immediate future. A system is needed that can respond to improved technologies, access all parts of the City and not leave any adverse legacy or scarring on the landscape. Highway and transport improvements without NGT would improve bus journey times. The introduction of more express bus services from outside the Inner Ring Road would speed up the service times and would probably increase passenger numbers.
- 6.638 A Park and Ride outside the Leeds City boundaries is needed to entice the thousands of travellers who live outside the Leeds Metropolitan boundaries to use public transport to get in and out of the City and lead to a reduction in car traffic.
- 6.639 The NGT Scheme would not be convenient to use. The Promoters anticipate that there would be a significant reduction in bus services on the northern part of the route. The topography of the north part of the City is an issue, as people would be reluctant to walk up hills to NGT stops. Overall, the excessive walking distances to stops in the north and the distances between the bus stops and the NGT stops would not result in an integrated system. People would need to go by car to use NGT from Holt Park terminus and Bodington Park and Ride, which is not sustainable and not attractive for car users, due to having to park, wait for the NGT and potentially stand on the trolley vehicle.
- 6.640 The cost of a journey is prohibitive on some journeys on public transport, but NGT would not be any more financially accessible for residents. NGT would only make journeys quicker because it would stop at fewer stops. However, it would add time to peoples' journeys because they would have to walk from an NGT stop to a bus stop, then to their car, which could even be parked in residential side streets because of the lack of integration of NGT.
- 6.641 The Promoters have not explained to the residents of Leeds or set out how the predicted increase in employment would be achieved. They cannot say where

or how or what types of industries these jobs would be in or the level of skill or wage. There are major companies who have been silent about the Scheme. The FSB, particularly in the north of the City, does not support NGT. The NGT proposal would not meet the needs of businesses eg the new Leeds Trinity Centre included a car park that was not in the original design.

6.642 There does not appear to be any evidence to justify the Holt Park leg, including its viability, the impact on the Holt Park Regeneration programme, in particular the proposed Asda redevelopment, and the conflicts in terms of land usage, pedestrian needs and potential parking in side streets. Highfield Doctors' Surgery would become an island and moving the bus stop outside Ireland Wood Post Office would increase walking distances for the elderly and those with young families to the newly opened Doctors' Surgery. Speed humps on Holtdale Approach would need to be removed, which were put in to reduce the possibility of accidents when dropping off children to Ralph Thoresby High School. There would be likely to be severe conflict with pedestrians at Asda, Kids Academy, Holt Park Active, Ralph Thoresby High School and with school traffic at this school, Ireland Wood, and Cookridge Primary.

6.643 There are also the following concerns:

- a) There is insufficient information to show how the loss of bus services would be compensated for by possibly using 'hopper buses', or that the movement of students out of the A660 corridor has been taken into account, or that fare dodging would not be an issue due to the layout of the vehicles.
- b) Some of the land that NGT wishes to use has more beneficial spatial uses eg the needed extension to the cemetery in the north of the City.
- c) There would be a loss of mature trees along the proposed route, and any new trees planted would take many years to replace the streetscene that is currently there.
- d) The proposals at the junction of Otley Road/Otley Old Road and the junction covered by the Weetwood police station would cause queuing due

to the traffic signals; would result in buses needing to cross a dual carriageway to get to the bus stop outside the police station; would cause a stop start effect on traffic on the A660 between Adel and the Ring Road; would delay traffic on the A660 to let the NGT across the dual carriageway into Bodington; and would result in queuing on Lawnswood roundabout due to their exit being congested.

- e) There is nothing to show where the increased width would come from at the Church Lane/Otley Road junction in Adel to allow for the predicted increase in traffic coming out of the Church Lane junction.
- f) The No 28 bus service would have to be re-routed due to the plan to close the exit from Adel to Weetwood Lane and then onto the A660.
- g) Problems could result from traffic queuing around the Shaw Lane junction and at the Blackman Lane/Blenheim Walk in terms of trying to fit 3 lanes where there are 2 at the moment.
- h) There are sections in the City where there would be potential pedestrian and traffic conflicts eg outside the museum where young children congregate and wait, and disability groups have concerns about 'shared spaces'.

Councillor Bentley OBJ 1520

The material points¹⁵⁴⁶ were:

- 6.644 Councillor Bentley is one of three Liberal Democrat councillors representing Weetwood ward, which includes Holt Park, the Bodington site, Otley Old Road and the A660 through Lawnswood, Weetwood, West Park and Far Headingley to the junction with Shaw Lane. Approximately 5 km of the proposed route goes through Weetwood ward. The 3 Weetwood councillors voted against the approval of the TWA Order when it came before Council in July and November 2013.
- 6.645 The objections that are summarised have been raised by the constituents through conversations on the doorstep, at ward surgeries, on the telephone,

¹⁵⁴⁶ Documents OBJ 1520 Letter of Objection and OBJ/1520-100

at NGT drop in events, correspondence and replies to surveys¹⁵⁴⁷. Support for the Scheme has been negligible.

Consultation

6.646 The consultation that took place did not include whether a new approach should be taken, as the Scheme is now bus based rather than light rail. No results have been provided by the Promoters from the questionnaires as to the level of acceptance of, or satisfaction with, the Scheme. There has been general opposition to the Scheme at the 'drop-in' sessions and in the correspondence received from, and doorstep conversations and meetings with, residents and their representatives. The consultation with local businesses has been very poor. Little consideration has been shown to the particular impact the route would have on small businesses, particularly retail, both in the construction and operation of the system. No consultation was carried out with Lawnswood High School until very late in the process, despite it having over 1,200 pupils and being located at a significant junction directly on the NGT route. Also, the grounds of the school were designated on the plans as a materials storage depot without any discussions with the governors or staff of the school.

The Technology

6.647 The Promoters' claim that alternative technologies other than the OLE are not yet available is disputed but, even if it were true, suitable technology would be available by the time the system would be ready to be implemented, especially if development of that technology was an integral feature of the Scheme. This might mean that the system has to start with a hybrid technology and then move on as technologies progress but not constrained as the proposed system would be by the OLE. The use of OLE represents a significant waste of money and the environmental impact of erecting the gantries, poles and wires could easily be avoided.

¹⁵⁴⁷ Surveys: 376 responses with 343 (91%) either disagreeing or strongly disagreeing with the Scheme; and 840 responses with 773 (92%) either disagreeing or strongly disagreeing

6.648 Adopting an alternative technology would:

- Allow a flexible approach to vehicle purchase meaning that generic vehicles could be purchased rather than bespoke ones for this system with the consequent advantages on purchase and maintenance costs.
- Allow priority services to miss out certain stops at particular times of day, eg an 'express' service for commuters using the Park and Ride.
- Avoid the environmental impact involved in erecting poles, gantries and wires, including the loss and cutting back of mature trees, fixing wires to buildings, and a detrimental visual impact and harm to amenity in the CAs.

Disadvantages

6.649 The NGT Scheme would lead to an increase in congestion and an increase in the production of greenhouse gases and pollution. Leeds in general, and Headingley in particular, already has some of the poorest air quality levels in the country.

6.650 The Scheme is a completely stand-alone project and does not attempt to be integrated with the existing public transport network. There would be fewer bus stops than on the existing bus routes and they would not be co-located. Passengers would have to walk further to get to an NGT stop and, once there, would not have the flexibility of catching an alternative bus. Travellers needing to change from a bus to a trolley vehicle would have to walk some distance. Much of the claimed reduced journey times on the NGT would be a result of fewer stops on the route. This saving in time would be negated by passengers having to walk further to reach an NGT stop.

6.651 The impact on the frequency and viability of existing bus services could be particularly damaging on the northern spur of the route from Otley Road to Holt Park. This route is currently served by buses which travel through 3 substantial social housing estates, which are in areas of deprivation. The NGT would only travel along the main road (Otley Old Road). The bus routes are

with the Scheme

an essential communications link to get residents to work, school, shops and social events and these would be put at risk.

- 6.652 Several years' construction and disruption along the route could have dire consequences for many of the local businesses. Once finished, there could well be additional parking restrictions and fewer opportunities for passing trade to stop. It would be disastrous to impose such a burden on these businesses just as the economy is beginning to improve.
- 6.653 With regard to the Promoters' claim concerning the economic regeneration, the additional jobs are a factor of a theoretical economic model. More evidence needs to be provided of the potential economic regeneration impact.
- 6.654 The development of a park and ride site is one of the few aspects of the Scheme that would be welcomed by local residents and councillors. The park and ride scheme at Bodington could be developed whether or not the NGT Scheme goes ahead. It would operate most effectively if at peak times it would be served by a non-stopping express bus directly into the University and commercial areas of the City. A fixed wire trolley vehicle would make this difficult.
- 6.655 The proposed installation of traffic signals at Lawnswood roundabout and a cutting through the middle would have a serious effect on east/west traffic and the potential to cause significant congestion. It would also have a serious environmental impact due to the loss of a large number of mature broad-leaved trees.
- 6.656 The closure of the junction of Weetwood Lane and Otley Road received widespread objection from residents and business owners when previously proposed prior to the NGT Scheme. There are some improvements that could be made to the junction so that best and safe use is made of the Weetwood Lane/Otley Road junction and St Chad's Road/Otley Road junction. The result of closing the Weetwood Lane junction would be to push more traffic onto Moor Road and Cottage Road, already suffering from rat-running and congestion and cause bottlenecks at the St Chads Road/Otley Road junction,

especially if this has to be controlled by signals. The pedestrianisation of the junction outside the Three Horseshoes pub would result in the small outdoor drinking area of the pub spilling over onto it to the detriment of pedestrians, shoppers etc.

Cost

- 6.657 The Scheme is perceived as poor value for money as it would provide little benefit to public transport users across the whole of Leeds. The same or less money could be invested in modern new technology buses, automated ticketing systems and specific traffic priority measures to develop a flexible improved bus service for the benefit of all public transport users.
- 6.658 More effort should be made by the Promoters to engage with the Government on looking at more effective ways of spending the funding. The Government and Promoters should re-examine the proposals and come forward with a more acceptable scheme.

John Reed OBJ 591

The material points¹⁵⁴⁸ were:

- 6.659 Mr Reed is a local resident who lives close to the proposed route of the NGT.
- 6.660 The NGT would not improve the transport offer and would irreparably damage the environment along Headingley Lane and Otley Road.
- 6.661 The trolley vehicle proposal does not derive from or support approved city wide transport policy. Following the withdrawal of the Supertram, the SofS encouraged the Promoters to pursue a '*showcase bus system that could lead the way for other cities*', indicating that funding would be available for '*the right proposals*'. No reference is made to a trolley vehicle and no DfT source documentary evidence is submitted.
- 6.662 There is no national policy to promote trolley buses. If the Supertram scheme was not proven value for money, it does not follow that a cheaper, different

trolley bus scheme will be a worthwhile facility. The proposal should also have technical merit and public support. The case for a trolley bus must be investigated on its own merits.

- 6.663 City wide transport policy¹⁵⁴⁹ lists various modes including 'tram trains', and NGT, but there is no specific mention of a trolley bus. There is no comprehensive strategy framework for the trolley bus project and the trolley bus is not part of an integrated transport strategy developed by this or other local authorities.
- 6.664 The original claim made in leaflets that NGT would reduce congestion is no longer made but is still perpetuated by publicity images showing NGT vehicles without showing traffic nearby. Congestion is technically difficult to define.
- 6.665 The challenge of redesigning the transport and land use system of Leeds and Headingley is not new. Colin Buchanan as part of a national study 'Traffic in Towns' selected Headingley as a typical congested centre on a radial route, where '*major environmental conflict arises*', and led a team to analyse and investigate alternatives in the early 1960s. The design principles applied demonstrate that partial solutions, like a trolley bus, would only tinker with part of the perceived problem, and probably make matters worse. The team also noted the strong cross city movement along Shaw Lane and North Lane which means that a 'radial only' solution is rendered impotent.
- 6.666 Trolley bus overhead wires cannot be presented as an attractive feature of the townscape and they also constrain flexibility of operation. The proposed Headingley bypass (offline route) cuts through the Victorian fabric of Wood Lane, Shire Oak Road and the Headingley CA. This would involve the removal, and lopping of mature trees and stone walls. It would also involve the construction of new vehicular turning areas and pedestrian crossing facilities that would not be sympathetic to the predominantly stone theme.

¹⁵⁴⁸ Documents OBJ/591 SOC, OBJ/591 PoE, OBJ/591-104, OBJ/591-105 and OBJ/591-106

¹⁵⁴⁹ Document G-4-95

- 6.667 The NGT proposals for Wood Lane would result in, from a point outside No 10, all stone walls and the property at No 6 being demolished, and the mature trees removed. There is no clear commitment to replace the stone walls to an equivalent specification and it is impossible to replace large mature trees such as the beech outside No 6. NGT stops are proposed across the line of Wood Lane. These would introduce a new hazard to the safe passage of pedestrians and cyclists, in particular the view to the right for them heading west would be obscured by the bus shelter and people waiting. The view to the right for people heading east may be obstructed by an extension proposed for Nandos restaurant¹⁵⁵⁰. Access by large articulated lorries to the service area for the Arndale Centre and a primary school on Wood Lane would further increase the safety risk. Should elaborate systems of railings, crossings and warning signs be erected this would seriously detract from the character of the CA.
- 6.668 The NGT route would result in widened carriageway to accommodate the extra traffic. It is proposed to realign the southern stone wall in the vicinity of Rose Court. This would result in the wall being rebuilt across the front access and garden, which would further degrade the CA setting, and in particular of a listed building. The existing boundary forms an effective shield from most of the traffic noise but is in generally poor condition. The two stone piers are listed.
- 6.669 The Headingley Lane and Otley Road route out of Leeds, bounded by stone walls and mature trees, would be transformed into a traffic clearway, dominated by highways architecture, including a trolley vehicle 'wirescape'. The boundaries and setting of CAs along the route would be adversely affected. Sections between the pinch points along the A660 would be widened and used effectively as 'stacking areas' for traffic not afforded priority. This increased volume of standing traffic would emit high levels of pollution into the residential areas nearby. The mitigating effect on the levels of airborne pollution would be reduced by removal and lopping of trees.

¹⁵⁵⁰ Document OBJ/591 SOC Appendix 7: St Michaels Court Planning application

- 6.670 The NGT proposal fails to preserve the character and appearance of the CAs along the route. National legislation and LCC policy to protect trees¹⁵⁵¹ would be contravened by the NGT proposal. It would take many more than the 10 years quoted for surviving trees to replace mature beeches or oak trees and would be almost impossible to plant mature trees. LCC has a poor record of replacing and looking after trees near the A660 eg many of the new 'highway' trees planted to the north of the carriageway through Woodhouse Moor did not survive and the remainder are now threatened by the NGT.
- 6.671 The proposed removal of trees along the section of Otley Road between Weetwood Lane and Lawnswood roundabout, and the effect of the proposed bypass on the trees from Alma Road to Orville Gardens, near North Grange Road would be harmful. These trees are attractive in themselves, particularly as an avenue seen from near to far distance along Otley Road. They also hide traffic and some less attractive buildings and street furniture, which with their removal, would become more dominant features. The NGT Scheme would dramatically reduce the stock of mature trees and dependent wildlife diversity in the area.
- 6.672 The Inspector at the Merseyside Rapid Transit Inquiry¹⁵⁵² concluded that the objectives of that scheme might be met more cost effectively by more modest measures, such as by way of high quality buses and priority measures. The SofS did not dispute that view. This approach is also the best option in Leeds.
- 6.673 There may be some scope to investigate the operation of more flexible dual mode vehicles along the NGT route and other radial and feeder routes. Some vehicles may benefit from being 'guided' for part of their route. The new technologies are being actively tested in parts of the UK and abroad. In particular, improved battery technology and hydrogen power are worthy of new technology status.

¹⁵⁵¹ Document D-2-9: UDP Review policies GP5, N23 and LD1

¹⁵⁵² Documents OBJ 923 FWY/100 and FWY/101

- 6.674 The Headingley bypass is unacceptable, as it would result in the removal of trees, demolition of heritage features, severance of pedestrian and access routes, and environmental damage. Another proposal to re-route general traffic along this line would require a significant increase in the land take, and engineering works, over and above current proposals.
- 6.675 With regard to planning conditions¹⁵⁵³, those regarding the more stringent standard of public realm works and maintenance of paving, walls and trees that would be applied to the CAs should also be applied to areas outside the CAs. A condition is suggested to safeguard the stone resources from walls and pavements in the area for re-use in the area. Also, a condition is suggested to protect trees and ensure that suitable sites are found for replacement trees.
- 6.676 In terms of alternatives, the best improvements in journey times on all types of buses are to be gained from integration and smart card technology.

Ken Torode OBJ 798

The material points¹⁵⁵⁴ were:

- 6.677 Ken Torode is a local resident and objects primarily to potential discrimination against the elderly, less mobile and disabled public transport users.
- 6.678 Although the trolley vehicle design is yet to be finalised, it seems likely that the seating to standing ratio would be of the order of 33% (compared with over 75% on conventional buses) resulting in the virtual exclusion of the disadvantaged from this form of transport. The reduction in frequency of feeder bus routes into the A660 (eg Nos 1, 6, and 97) would further isolate those unable to walk to NGT stops.
- 6.679 The fewer NGT stops than bus stops would have a further discriminating effect, as would the separation of bus and NGT stops. With the exception of sites where NGT stops would be separated from normal traffic, there seems to

¹⁵⁵³ Document OBJ/591-106

¹⁵⁵⁴ Documents OBJ 798 Letter of Objection, OBJ/798 SOC, OBJ/798 PoE and OBJ/798-100
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be no reason to prevent buses sharing the same stops as trolley vehicles, which would avoid passengers having to choose which service to use.

Environmental Impact

6.680 The northern section of the route passes through 6 CAs and many of the applications relating to listed buildings appear to be in conflict with local design statements and would damage the structural environment¹⁵⁵⁵. The considerable felling and lopping of trees would also leave areas environmentally damaged. The implementation of the Scheme over the 3 year period would cause further environmental problems for those living on or near the A660, as traffic would be diverted causing massive congestion on alternative routes (such as Spen Lane) which are already congested.

The Promoters' Case

- 6.681 Reducing journey times from Bodington to Leeds at peak times by 11 minutes is dependent on more widely spaced NGT stops (ie less of them); priority routing where feasible; and smart card ticketing. A significant proportion of this time saving would arise from reduced stopping time as a result of smart card ticketing, which the Promoters' anticipate will be put in place by existing bus companies before NGT comes into operation in 2020. Therefore, a considerable time saving will already have been achieved without NGT.
- 6.682 With regard to the impact on pollution, the introduction of hybrid diesel/electric buses on a large scale would have an earlier and much greater impact than the NGT.
- 6.683 An integrated transport scheme for Leeds and West Yorkshire as a whole is needed, but the Scheme would not make a significant contribution to solving this need. The inflexibility of a single route trolley system cannot be easily adjusted to the requirements of demographic change and the possible need for new routes and route adjustments. Any damage to cables as a result of storm or other reasons would result in major transport disruption.

¹⁵⁵⁵ Documents A-09a-1 to A-09c-62 and A-10-1 to A-10-17

6.684 The procurement of the trolley vehicles is likely to be high in cost as there are no British manufacturers and the Scheme requires a relatively small purpose built fleet. Maintenance of the vehicles, infrastructure and spare parts are also anticipated to be costly.

Conclusions

6.685 The Scheme is discriminatory, environmentally damaging, has a suspect business case and does not work in co-operation with other transport providers to provide a viable and value for money solution.

Carole Carey-Campbell OBJ 823

The material points¹⁵⁵⁶ were:

- 6.686 Carole Carey-Campbell is the editor of North Leeds Life, a community magazine, of which about 40,000 copies a month are printed and having an estimated readership, together with the website, of over 120,000 a month. The office is on Otley Road, West Park, in an area that would be directly affected by the NGT.
- 6.687 The West Park area has in recent years been transformed into a vibrant parade with two restaurants, a busy café, a takeaway, 4 hairdressers, a beautician, two estate agents, a running shop, a fashion boutique, an undertaker, and a Laundromat that services a wide area. In addition there is a physiotherapy practice with Olympic athletes as clients, a sought after chiropodist and a number of other independent therapists. Most of these businesses have established clienteles. It is a busy parade.
- 6.688 The businesses rely on people being able to access them easily. Parking has been reduced by commuters and cars from the University campus parking on neighbouring streets. NGT would further reduce this parking.
- 6.689 The Scheme is trying to impose infrastructure without regard to the existing community fabric and social needs. It has not focused on how it would affect

¹⁵⁵⁶ Documents OBJ 823 Letter of Objection and OBJ/823-100

the community. It would destroy and disrupt the arrangements of everyday life for businesses all along the route. Between the Ring Road and Headingley there are thousands of residents and probably a couple of hundred businesses, which employ hundreds of people. If NGT goes ahead, a number of the local businesses would not survive the construction phase, and thereafter there would be reduced access, which is vital for the survival and success of these local businesses.

- 6.690 All the businesses that have been contacted at the West Park parade and at the Far Headingley/Cottage Road parade are concerned for their future. The loss of parking and passing trade are the main concerns, but equally important is the loss of character and ambiance.
- 6.691 No real consultation was carried out, as the presentations did not have any representatives who were able to supply answers and the plans were not the most up-to-date. No figures were to hand or decisions had not yet been made at that time. A meeting that was requested was held at the North Leeds Life office and attended by many of the other businesses, and another meeting was organised by the FSB but NGT representatives at these meetings were unable to answer a number of the questions put to them.

Emma Stewart OBJ 1818

The material points¹⁵⁵⁷ were:

- 6.692 As part of the 'Disability Hub' for the Scheme, Emma Stewart was consulted in September 2012.
- 6.693 The proposed system would not provide ease of access to entertainment, parks and green space, learning and health resources or link to other services. As such, it would not represent best value for Leeds, and may in fact reduce choice and sustainability in some areas.
- 6.694 There seems little or no attention paid to the effect of construction on shops, businesses and people's lives, and no mention of extra buses, trains, access

bus or other forms of assistance during construction, such as a community asset transfer scheme. The reliance upon a CoCP that has not been detailed during construction is not sufficient to justify it, which has a potentially devastating effect on landscape and public funds.

- 6.695 As there would be separate stops for buses and NGT, not all people would be able, or want, to walk or cycle. Also, there would be no guarantee of being able to use concessionary cards on NGT.
- 6.696 There could be legal challenges to the proposed shared space and simplified streetscape being fit for purpose in principle, particularly under Health and Safety and Duty of Care of a local authority. Details of kerbing and delineation to assist people with disabilities, including the blind¹⁵⁵⁸, have been left for later design. These details should be finalised to ensure the protection of pedestrians, and in particular people with disabilities, from potential injury and death.
- 6.697 In built-up areas, such as the City Centre, the Promoters have assumed that the levels of footfall would make no difference to the access and inclusion required. No barriers are proposed to separate trolley vehicles from pedestrians in the shared areas, such as outside the City Museum, putting the public at risk. The footfall measured during 9 hours outside the museum on a Saturday in 2014 has been counted as 13,236 adults, 1,953 children under 10, 315 people with disabilities and 243 pushchairs¹⁵⁵⁹.
- 6.698 The Scheme through Whitfield estate leaves no room for human error. Repairs and maintenance work would create disruption to the residents. The use of the proposed shared space in this area would need to ensure that demarcations, kerbs etc would be retained or replaced.

¹⁵⁵⁷ Documents OBJ/1818-100, OBJ/1818-101 and OBJ/1818-102

¹⁵⁵⁸ Documents appended to Document OBJ/1818-100: Access for Blind People in Towns SS1401 Overview, Urban Design and Planning Themed Issue Proceedings of the Institution of Civil Engineers, and 'shared space' article

¹⁵⁵⁹ Survey undertaken by Emma Stewart

- 6.699 Trolley vehicles running near to Victoria House, which is an end of life/residential home, would cause great health and safety risks. Also, as they cannot be re-routed or changed easily, the effect of weather changes, a fire or a bomb scare should have been modelled.
- 6.700 Leeds needs a system that links to other transport modes and amenities without vast infrastructure improvements. A trolley vehicle system is incapable of this.
- 6.701 People would be unlikely to have a quality experience when most would have to stand and walk further to access the NGT. It would be very hazardous for both those on the trolley vehicle and those sharing space with the trolley vehicles when they have a physical impairment.
- 6.702 It is clear that most people in Leeds and surrounding areas, whilst acknowledging the need for change and greater public transport that is inclusive and cheap, do not want the Scheme.

Eileen Pattison OBJ 692

The material points¹⁵⁶⁰ were:

- 6.703 Eileen Pattison is the Chair of Middleton Park Ward Labour Party and lives near to Belle Isle Circus at the southern end of the proposed route.
- 6.704 Middleton Park Ward Labour Party and Leeds Central Constituency Labour Party, which cover the southern half of the proposed route of NGT from Stourton to Hyde Park, passed the following resolution at the January 2014 meeting: '*This Labour Party is totally opposed to the proposed NGT Trolleybus Scheme*'. The Scheme would do nothing to alleviate the very real problems within the Ward, which is one of the most deprived in the City.
- 6.705 No other City in the UK operates a trolleybus system. Other Councils have rejected it. Despite the fact that the NGT would only serve a very small percentage of the people within the Ward, LCC is still intent on imposing the

¹⁵⁶⁰ Document OBJ/692 SOC

Scheme upon those people and have called a 3 line whip on the issue to force it through.

- 6.706 Consultation with local residents has been poor. Neighbouring residents have not received the leaflets or information packs that the Promoters have suggested were delivered in the area.
- 6.707 It is wrong to imagine that NGT would solve the congestion. The Promoters have admitted that the Scheme is likely to cause more congestion. They expect it to generate £1.3 million extra fuel duty, which must be cars sitting, not moving.
- 6.708 There is no evidence to prove that the Park and Ride (which is why the Scheme was adopted) would be used.
- 6.709 The Scheme would introduce 20 trolley vehicles on a single route costing £250 million and LCC has to find £76.5 million. There are financial implications for LCC, which is struggling to cope with the cutbacks. In 2012 the Council was £20 million short of the £76.5 million but, despite cuts to community centres and libraries, it committed a further £19.2 million from the Capital fund.
- 6.710 Belle Isle Circus is the largest roundabout in Leeds and provides a pleasant outlook for the flats surrounding it, with mature trees and pathways, seats and flowerbeds. NGT would cut through Belle Isle Circus in both directions and 2 sets of traffic signals would be built at the entrances to the Circus. Fourteen mature trees would be cut down. The proposal would harm the environment of that area.

Geoff Fawcett, Adel and Wharfedale Branch Labour Party OBJ 1605

The material points¹⁵⁶¹ were:

- 6.711 Geoff Fawcett is Chair of the Adel and Wharfedale Branch Labour Party, which has a membership of about 100 and decided at its meeting on 9 July 2013 to oppose the NGT Scheme¹⁵⁶².

¹⁵⁶¹ Document OBJ/1605 SOC

- 6.712 The Cookridge and Adel areas of Leeds would be very much affected by the proposals as the Nos 1, 6, 19, 28 and 84 bus services could be reduced as a result of the NGT, resulting in poorer public transport to Cookridge, Adel and Weetwood. The trolley technology is out of date and inflexible, as it would be difficult to get around obstructions and there would be a lack of integration with other services. Students have moved away from the area that the NGT would serve. There would be fewer stops with longer walks to stops.
- 6.713 There would be damage to the environment due to the removal of trees. It would change the ambience of the Weetwood and Headingley areas.

Richmond House School OBJ 1733

The material points¹⁵⁶³ were:

- 6.714 Catherine Shuttleworth, as Chair of the Governors of Richmond House School, has objected on behalf of the School, which is located on Otley Road, with playing fields and a car park accessed from Glen Road. The School is run by a charitable foundation as an independent preparatory school for children from 3 to 11 years of age, currently with over 200 pupils and employing 45 staff. It has been on the site since 1935 and also serves the community by providing open space which is used for sporting activities.
- 6.715 The main concerns are about the impact of the construction on the School learning environment due to noise and dirt. The resulting delays to traffic could compromise the School and deter prospective parents from registering. These factors could affect the long term viability of the School.
- 6.716 The proposed changes to the junctions on Otley Road, including the closure of Weetwood Lane, would result in the Glen Road junction being the only 2 way access between Otley Road and Weetwood Lane. This would lead to an increase in the existing rat-running, leading to further health and safety issues for the children. The back-up of traffic at peak times could lead to problems

¹⁵⁶² Document OBJ/1605-100: Adel and Wharfedale Labour Party Branch Meeting Minutes 9 July 2013

entering and exiting the car park, which was constructed to assist in alleviating local traffic and parking issues. Increased traffic could also lead to congestion due to parked cars and the potential for accidents.

- 6.717 The pavements on Otley Road would be narrowed and crossings would be installed, which would compromise the safety of children accessing the School and local amenities, such as St Chad's. It would also result in the carriageway being closer to the front playground area of the School, affecting the children through noise and air pollution.
- 6.718 The proposed trolley vehicle system would not provide a truly integrated transport system and would therefore not resolve the issue of congestion on the A660.

Professor John Griffiths OBJ 728

The material points¹⁵⁶⁴ were:

- 6.719 John Griffiths has emeritus status as Professor of Combustion Chemistry at the University of Leeds. He has been a resident in north Leeds for over 45 years and has lived in the district of Headingley for 40 of those years.

Matter 1: Aims, objectives and need for the proposed Trolley Vehicle System

- 6.720 The Promoters have not provided any clear and specific justification that there is any need for a trolley vehicle link between north and south Leeds. There has never been a formal, declared objective to reduce congestion¹⁵⁶⁵, despite this having been used repeatedly as an argument in consultation exercises. There are limited traffic congestion issues on the A660 throughout most of the day, other than during the morning and evening commuting periods. The conditions on the A660 are little different from those on most other arterial routes into or out of Leeds City Centre. There is no justification to single out this particular road for special treatment, and certainly not at substantial cost

¹⁵⁶³ Document OBJ/1733 SOC

¹⁵⁶⁴ Documents OBJ 728 Objection 25 October 2013, OBJ/728 SOC, OBJ/728 PoE, OBJ/728-100, OBJ/728-101, OBJ/728-102, OBJ/728-103 and OBJ/728-104

to every Leeds resident when less than 5% of the City population might be beneficiaries of the proposed north line¹⁵⁶⁶.

- 6.721 One of the aims is stated as '*Support and facilitate targeted regeneration initiatives and economic growth in the more deprived areas of Leeds*'¹⁵⁶⁷. With respect to the north line of the proposed NGT route, this is not the case¹⁵⁶⁸. The locations north of Woodhouse and Hyde Park and along nearly 50% of the entire route (Headingley, Weetwood, West Park, Lawnswood and Holt Park) are amongst the most affluent areas of Leeds conurbation. A greater claim for '*targeted regeneration initiatives*' is in the extensive deprived areas of the inner city and other districts east, south and west of the Centre. The unemployment in areas along the proposed north line varies between 3% and 8%, the highest of these being in Headingley. By contrast, there are areas remote from the proposed north and south lines in which the unemployment ranges from 10% (Killingbeck and Seacroft) to 16% (Gipton and Harehills).
- 6.722 Not a single location for future land use change in the Statement of Case¹⁵⁶⁹ is associated with the north line. The NGT system would blight the flexible development of transportation throughout Leeds City, and the wider conurbation, for decades to come, without any commensurate return for many truly deprived areas of the City.
- 6.723 Much of what is claimed amongst the aims and objectives could be achieved by much more modest means through collaboration with the bus service providers¹⁵⁷⁰. Time-saving and smartcard ticketing can be as much part of bus services as of the NGT Scheme. The implementation of these facilities on existing bus services would yield much of the time-saving claimed to be central to the need for NGT.

¹⁵⁶⁵ Document A-01-2 section 3.2

¹⁵⁶⁶ Document OBJ/728-100 section 2.1

¹⁵⁶⁷ Documents A-01-2 section 3.2.4 and A-08e-4 section 1.10 (3)

¹⁵⁶⁸ Documents APP SOC Figure 3.2 and OBJ/728-100 section 1

¹⁵⁶⁹ Document APP SOC Figure 3.3: 'Areas for Future Land-use Change'

¹⁵⁷⁰ Documents APP SOC section 2.4, and OBJ/728-100 section 4

Matter 2: Justification for the particular proposals, including anticipated transportation, regeneration, environmental and socio economic benefits of the Scheme

- 6.724 The public transport needs of more than 15,000 residents in areas of north Leeds which connect to the A660 have been disregarded by the Scheme. Moreover, the size and shape of the north Leeds area is in a state of flux, as a result of planning applications for large scale residential development. Connectivity would not be enhanced and could be reduced for an ever increasing number of commuters¹⁵⁷¹, with considerable residential expansion expected in Adel, Bramhope, Cookridge and Moseley Wood. The Lower Level Super Output Area (LSOA) profiles for LCC show that, currently, there are about 7,500 residents of Adel and Bramhope who would not be able to access NGT, yet the A660 is their direct route into Leeds City Centre, and another 8,500 residents of Cookridge, Tinsill and Moseley Wood would have no possible option to use NGT¹⁵⁷². The residents of key housing developments at Abbey Road, Kirkstall Forge would be located more than 3 km away from St Chad's NGT stop.
- 6.725 The NGT would contribute no infrastructure to support residential expansion. It would exacerbate City Centre congestion and increase traffic problems at commuting times on the A660 corridor¹⁵⁷³.
- 6.726 There is no incentive for residents who live more than 500m from an NGT stop to transfer from use of a more convenient bus service¹⁵⁷⁴. The dynamics of behaviour in the urban environment can enable a discontinuous and significant response, such as a change in transportation from bus to trolley vehicle in large numbers as a result of a relatively small, smooth change in one or more

¹⁵⁷¹ Document OBJ/728-100 sections 2.1 and 2.4

¹⁵⁷² Document OBJ/728-100 section 2.4 Table 2.2 and section 2.1

¹⁵⁷³ Document OBJ/728-100 section 2.4

¹⁵⁷⁴ Document C-2 section 7.16: 'NGT will provide a step-change in the quality of public transport in the corridors that it serves. This enhanced quality will make NGT attractive to existing public transport users and to non-users'

parameters¹⁵⁷⁵. However, the existence of NGT itself is not a 'parameter', but is an additional feature which would describe the urban environment. While a faster journey time might be regarded to be one such influential parameter, the additional walking distance relative to that for a more convenient bus service such as the Nos 1, 6, 28 or 56 (especially in inclement weather) and the prospect of standing in a vehicle with only 33% seating capacity would be likely to counter any benefit from time saving.

Matter 3: The main alternative options considered by the Promoters and the reasons for choosing the proposed Scheme

- 6.727 The way in which alternative options have been considered does not meet appropriate national or international standards as far as greenhouse gas emissions are concerned. Emissions from electricity generation¹⁵⁷⁶ should not be disregarded. They contribute to a major global problem.
- 6.728 The Low Carbon Vehicle Partnership has defined a low carbon emission bus as follows: *'A Low Carbon Bus produces at least 30% fewer Greenhouse Gas Emissions than the average Euro 3 equivalent diesel bus of the same total passenger capacity. The emissions will be expressed in grams of carbon dioxide equivalent measured over a standard test, and will cover 'well-to-wheel' performance, thereby taking into account both the production of the fuel and its consumption on board'. 'Tank to wheel' assessment has been adopted by the Promoters.*
- 6.729 The 'well to wheel' emissions of alternative options, particularly with regard to the development of hybrid buses, and emerging fuel technologies, make them attractive alternatives¹⁵⁷⁷. The calculations have been based on official Government statistics combined with information provided by the

¹⁵⁷⁵ Documents OBJ/728 SOC section 3 page 8 and OBJ/728-100 section 3.1

¹⁵⁷⁶ Documents OBJ/728 SOC section 4.1 and OBJ/728 SOC Doc_5 and Doc_7: Emissions from fossil-fuel fired power stations

¹⁵⁷⁷ Documents OBJ/728 SOC section 4.2, and OBJ/728-101 section 3.1

Promoters¹⁵⁷⁸, with an additional input of 1.5 million km travelled in one year, derived from an estimate of 50,000 journeys per year in either direction¹⁵⁷⁹.

- 6.730 The traction source emissions from a trolley vehicle, powered by predominantly fossil-fuel generated electricity in the UK, would create greenhouse gas emissions of 2,300 g/km¹⁵⁸⁰, which far exceeds even the Euro3 specification diesel-powered bus (1,382 g/km), and is a factor of 2.4 times worse than the hybrid buses that are in operation in Leeds today (952 g/km). The latest 'New Bus for London' hybrids have greenhouse gas emissions of 690 g/km, which is a factor of 3.3 lower than those predicted for a Leeds trolley vehicle¹⁵⁸¹.
- 6.731 The TRAIN power simulation modelling¹⁵⁸² figures '*may change depending on the supplier of the trolleybuses and/or changes to the scheme*' and '*are considered to be typical but conservative for this system.*' The original figure for traction consumption of 7,325 MWh/year¹⁵⁸³ is stated as being '*typical but conservative*', but it has been revised down to 5,398 MWh/year. There seems to be no accessible information about the TRAIN modelling software in the public domain, so there is no scope for critical analysis.
- 6.732 'Well to wheel' emissions are based on the traction consumption figures, not the 'total energy demand'. The '*total traction and non-traction energy demand for the NGT Scheme is estimated at around 9,000 MWh per year*'¹⁵⁸⁴. This would increase the overall emissions potential to more than 2,800 g/km. The NGT system would remain substantially reliant on fossil-fuel generated

¹⁵⁷⁸ Document A-08h-5 paragraphs 3.4 and 3.5

¹⁵⁷⁹ Based on the information given in Document A-08h-5 paragraph 3.4 and confirmed by the potential trolley vehicle timetable in Document A-08c-2, 2.26 after Table 2.4 that gives 1.45 million km

¹⁵⁸⁰ Document OBJ/728-101: From information in Document A-08h-5 paragraph 3.5: maximum projected consumption of electricity (ie energy consumed at the substations) by the NGT scheme for traction including bus auxiliary loads is estimated to be 7,325 MWh/year, and consistent with Document A-08b paragraph 7.26 Table 7.2, which states that there will be 3,546 tCO₂e/year generated by the traction

¹⁵⁸¹ Document OBJ/728-101 section 3.1

¹⁵⁸² Document A-08c-2 paragraph 2.26

¹⁵⁸³ Document A-08h-5 section 3.5

¹⁵⁸⁴ Document A-08h-5, Executive summary and section 3.6

electricity, which means that for many decades to come NGT would not meet the performance of an existing Euro 3 rated diesel bus and would never approach the performance of the NBFL. Also, improvements in performance through technology and fuel developments are continuing and, even within the timescale of building the NGT system, there would be no willingness to fund any extension of the NGT fixed line technology to other parts of the City.

- 6.733 With regard to the relative passenger capacity of vehicles, given that the kerb weight is approximately 2/3 of its gross weight, an empty trolley vehicle would still consume substantial amounts of electricity regardless of whether it is empty or full.
- 6.734 The current hybrid bus market and the subsequent development of bus transportation and fuels technology is such that the case for operation of flexible and clean buses for mass transportation will be even more compelling than it is now. Consequently, Leeds would be left with an outmoded and isolated system bisecting the City, with no flexibility and nowhere else to go. The City would not be able to capitalise on new and versatile technologies, which are already in use, at market maturity or under development. It would be seriously handicapped for further development of public transportation. The cost to be borne locally would cripple other essential services across all aspects of social and community need.
- 6.735 There appear to be only 4 new trolley vehicle systems developed since 2000, two of which constitute atypical circumstances¹⁵⁸⁵. Of the 5,000 trolleybuses said to have been bought since the year 2000, virtually all must be replacement vehicles for use on established systems and it is likely that not one of them will have been constructed to a right hand drive specification. This is a relatively small contribution to public transportation as, since 2000, possibly 10,000 double-decker buses will have been put into service in the UK alone, and many more, smaller, single-decker buses as well as articulated vehicles also will have entered service. 'Wrightbus' expects to produce 1,200

¹⁵⁸⁵ Document OBJ/728-100 section 5

to 1,400 vehicles in 2013/14, and 'Optare' built 389 single-decker vehicles in 2012/13.

Matter 5: The likely impact on the public, businesses and the environment of constructing and operating the system

6.736 A trolleybus would make as much impact on submicron particulates in the environment (defined as PM₁₀ and PM_{2.5}) as any other bus or heavy goods vehicle, as a result of brake and tyre wear and from road surface erosion¹⁵⁸⁶, which constitute more than 10% of the total of these particulates in the UK environment¹⁵⁸⁷. The particulates would become airborne and would contribute to respiratory damage.

6.737 The coherent green corridor, about 1 km long, through central Headingley is not public space but is the only element of 'green' continuity in Headingley, which is an already impoverished area¹⁵⁸⁸. It can also be construed as 'the lungs of Headingley' with respect to the absorption of greenhouse gases¹⁵⁸⁹. Once the NGT has been driven through this corridor, there can never be a complete recovery. The 'pocket park', which is offered in return for loss of the 'green corridor', would be bounded by the A660 and the NGT route and would be no substitute for the loss. The majority of the mature trees within this corridor that create the skyline and backdrop to central Headingley stand within the 20m wide strip required for NGT.

Matter 7: The likely impact on motorists, including (a) the effects of the proposed trolley vehicle system on other public transport services, highway capacity, traffic flow, vehicle parking, pedestrian and cyclist movement and road safety

¹⁵⁸⁶ Document OBJ/728 SOC section 4.1 Tables 4.1 and 4.2

¹⁵⁸⁷ Document OBJ/728 SOC Doc_5: the 8th Informative Inventory Report from the UK National Atmospheric Emissions Inventory Programme- 'In this, the 2013 report, emissions for 2010 are based on actual emissions rather than projections.'

¹⁵⁸⁸ Document D-3-3: The Headingley and Hyde Park Neighbourhood Design Statement, September 2010 paragraph 9.3.1- 'The area is densely built up and lies within an area defined as a 'priority area for improving green space provision, so any green space is at a premium.'

¹⁵⁸⁹ Document OBJ/728 SOC Appendix 5: list of the majority of the trees and their approximate ages

- 6.738 The benefits of conventional buses, as perceived by the Passenger Transport Executive Group of which Metro is a part, have been disregarded and the NGT would adversely affect existing bus services.
- 6.739 A survey taken of vehicle movements¹⁵⁹⁰ on the A660 and associated routes at key points (West Park roundabout, Spen Road junction, Weetwood Lane and Glen Road junction), from Weetwood Lane and at Shaw Lane and North Lane during July and October 2013, confirms the belief that the majority of vehicles using the A660 through Headingley come from beyond the Ring Road. Substantial numbers of vehicles have entered the A660 system prior to 0745 hours and for 30 minutes or more after 0900 hours. Between these times, over 1,600 vehicles joined the A660 inner corridor from the Ring Road at West Park and via Weetwood Lane, a further 150 vehicles joined the A660 corridor at Spen Road, many coming from the Ring Road at Spen Lane, and overall about 2,500 vehicles entered the A660 inner corridor, by far the majority of which had come via the Ring Road at Lawnswood and at Long Causeway. Typically, of the number of vehicles heading towards the City Centre via Headingley Hill a high proportion have also left the system, going east at Moor Road and Shaw Lane or west via North Lane.
- 6.740 In the commuting period, about 800 vph joined the A660 corridor from the Ring Road at Lawnswood. Even during the mid-morning period, over 700 vph travelled southbound from the Ring Road. During the evening, over 400 vph were counted at the West Park roundabout. In summary, the survey gives sufficient evidence to confirm that, of the cars using Woodhouse Lane, it is inconceivable that there are *'70% from ...Headingley Area'*.
- 6.741 There would be 9 sets of prioritised traffic lights from Lawnswood to Woodhouse Moor, which would substantially increase congestion (and greenhouse gas emissions) when other vehicles would be held up. With 10 tph in each direction other traffic would be held up for 2 intervals of 30 seconds in every period of 6 minutes. Buses serving the population via the

¹⁵⁹⁰ Document OBJ/728 SOC section 2.2 and Appendices 1 to 3: vehicle numbers include motorcycles and heavy goods vehicles, but not public service buses or cyclists

A660 from all corners of the north Leeds conurbation would be caught up in the ensuing delays.

- 6.742 The proposal to divert southbound traffic at the Weetwood Lane junction under new traffic light control at St Chad's Road would seriously affect the smooth pattern of traffic flow that has been observed and totally disrupt the movement of traffic that filters eastbound, on Moor Road. The model fails to take into account the volume of traffic and its movement on Weetwood Lane¹⁵⁹¹ at that intersection. Such failings must seriously undermine the validity of any part of the case built on computer modelling. Traffic control at St Chad's Road would seriously impede the movement of vehicles trying to access Moor Road, with vehicles backing up into Weetwood Lane thereby stopping access to Moor Road.
- 6.743 The proposed Bodington Park and Ride site would make negligible impact on traffic entering Leeds from the north, except at the earliest part of the commuting period on each working day¹⁵⁹². It is proposed to accommodate only up to 850 cars, which might attract up to 1,100 passengers to NGT at that car park on a normal work day. Should car commuters choose to break their journey at the Ring Road, the proposed Bodington Park and Ride could be full soon after 0800 hours, so the remainder could only continue their journey to within the Ring Road perimeter via the A660.
- 6.744 On the evening return journey, the commuters from Bodington Park and Ride would have to join the queue for NGT with other, local commuters. They would have a stop/start return journey en-route, as passengers would be discharged and others picked up, probably having to stand for much of their journey back to the Park and Ride. This would be unlikely to be conducive to commuting into Leeds by NGT, especially in bad weather. Commuters travelling out to the Stourton Park and Ride site would suffer the same disadvantages.

¹⁵⁹¹ Document OBJ/728 SOC Appendix 3: During morning peak 15 minute periods about 190 vehicles counted using Weetwood Lane from the north to approach its intersection with Moor Road

Matter 8: The likely impacts of the Scheme on ecological interests

6.745 There would be major implications on ecological interests¹⁵⁹³. The continuous 1 km belt of trees constitutes an entire ecological system, from Headingley Hill and through central Headingley to Alma Road, and it supports insects, moths, butterflies, bats, birds and many mammals for feeding, surviving and breeding. The habitat for species important to the local environment must be preserved. The loss of the habitat for moths by destruction of the meadow behind St Columba's Church would break the food chain for bats and thereby destroy their habitat. This destruction would happen as soon as construction begins, and cannot be mitigated. The locality could never again be a natural urban environment when an arterial route runs through it.

Matter 15: Any other relevant matters which may be raised at the Inquiry

6.746 There has been unsatisfactory and inappropriate consultation and failures in planning¹⁵⁹⁴.

Professor Todd OBJ 171

The material points¹⁵⁹⁵ were:

6.747 Professor Todd is a resident of the Headingley area.

6.748 Although NGT is promoted as a 'regeneration scheme', the planned route goes nowhere near some of the most deprived areas of the City which might benefit from it, particularly to the east and west in part of the Aire Valley. Comparing the business submissions for the Supertram¹⁵⁹⁶ and the NGT¹⁵⁹⁷, the NGT misses many of the regeneration areas. In Autumn 2004 the business submission for the Supertram maintained that *'the levels of unemployment in*

¹⁵⁹² Document OBJ/728 SOC section 2.1

¹⁵⁹³ Document OBJ/728-100 Appendix 1 pages 4 to 5: Wood Lane Neighbourhood Residents' Association

¹⁵⁹⁴ Document OBJ/728 SOC section 8

¹⁵⁹⁵ Documents OBJ 171 Objection, 30 September 2013, OBJ/171 SOC and Documents 001 to 282, OBJ/171 PoE and Appendices 01 to 49, OBJ/171-100 and OBJ/171-101

¹⁵⁹⁶ Document OBJ/171 SOC Document 257: House of Commons Transport Committee, Integrated Transport (2004) II, Ev 222

the selected RAs of Leeds will be reduced by around 7% in 2016'. In 2012, the business submission for NGT suggests that 'the people employed from the jobs created as a result of NGT live in both North and South Leeds'. North Leeds does not qualify as a large-scale regeneration area, having only one relatively small pocket of serious deprivation that is nowhere near the A660¹⁵⁹⁸.

Congestion

- 6.749 Traffic on the A660 has declined since the beginning of 2000¹⁵⁹⁹. This may be due to demographic changes linked to the growth of City Centre student flats, the closing of two halls of residence, the move away from the area of the senior part of the Leeds Girls' High School, and to the development of the on-line information economy in an area dominated by two universities.
- 6.750 Traffic congestion is evidence of social and economic vitality. Empty streets and roads are signs of failure. By making the moving of vehicular traffic the only goal, cities lose out on the economic potential created by the crowds of people that bring life to a city¹⁶⁰⁰. While there is little congestion around poor areas such as Gipton, Headingley has its share, in part because it is itself a lively place with its pubs, its cafés and restaurants and its variety of small shops, as well as the Arndale centre. The A660 is far from being simply a radial corridor and NGT is not a necessary condition for the future success of the Leeds economy.
- 6.751 In the context of the UDM, people adapt to congestion and there is a distinction to be made between congestion caused by commuters and that due to local traffic moving within the City itself. Simply estimating the cost of congestion using the value of travel time delay does not capture the broader

¹⁵⁹⁷ Document C-2

¹⁵⁹⁸ Document APP SOC Figure 3.2: Index of Multiple Deprivation, Leeds

¹⁵⁹⁹ Document OBJ/171 SOC Document 049: A660-AADF (2000 to 2012)

¹⁶⁰⁰ Document OBJ/171 PoE Appendix Document 02: Lateral thinking on congestion: Brian D Taylor 'Rethinking traffic congestion' pages 8 to 16, John Norquist 'Is traffic always bad?' etc

range of economic outcomes caused by transportation investment or traffic congestion¹⁶⁰¹.

- 6.752 The picture of congestion given by the Promoters seems incomplete and inaccurate when compared to that given in TomTom reports, using GPS satellite technology and mobile phones¹⁶⁰². Having looked at the TomTom system over a number of weeks, the conclusion that can be reached is that, apart from seeing congestion occurring almost everywhere, even with traffic at a standstill on the dual carriageway of the Inner Ring Road, by far the most regularly and heavily congested road in Leeds is the A643 (Elland Road to the M621).
- 6.753 TomTom reports demonstrate that after the end of the morning rush hour and the morning school run, and for most of the day, traffic flows freely. This must be recognised, as speed cameras have been placed on Headingley Lane, not only down towards Hyde Park Corner, but also just before the beginning of the bottleneck at Brainbrigge Road. Congestion caused by the school run is shown to be important, as confirmed by TomTom reports during the February half-term, when throughout the whole of the morning rush hour for Friday 21 February there were no problems on the A660, while traffic was generally lighter everywhere.
- 6.754 With regard to the afternoon, TomTom reports show that the main difficulties come with the school run and the evening rush hour, and the tail-back down Headingley Lane, caused by the bottleneck between Brainbrigge Road and North Lane, but it is an intermittent problem. If that is solved, it may well draw in more traffic from the more permanently congested parallel route along Burley Road.
- 6.755 TomTom reports show the importance of lateral traffic coming from side roads on the A660. The effect of blocking off side roads could be disastrous. If the

¹⁶⁰¹ Document OBJ/171 PoE Appendix Document 02: Lateral thinking on congestion: Matthias Sweet 'Does traffic congestion slow the economy' pages 391 to 404; Brian Taylor, 'Rethinking traffic congestion' pages 8 to 16

¹⁶⁰² Document OBJ/171-100 Appendix: TomTom reports February 2014

junction at Weetwood Lane is blocked off as planned, it would further encourage the rat-running that TomTom reports show, with traffic making for Meanwood Road via Moor Road and Monkbridge Road.

6.756 The 2008 Leeds Monitoring Report Corridor 1 simply includes the A660, with the traffic flow figures for Woodhouse Lane, and those for Moorland Road and Woodsley Road, which are the other side of Woodhouse Moor and towards Burley Road and Kirkstall. There is no way of telling whether or not traffic on these roads joined the A660 at the junction with Clarendon Road. It would have been more useful to give traffic flow figures for the Otley Road and Headingley Lane.

6.757 Most of the side roads on the north side of Headingley Lane are cul-de-sacs, with no other access, and in Cumberland Road the hall of residence, Devonshire Hall, and the student flats generate a great deal of traffic from student cars, taxis and maintenance and delivery vans. In addition, there are frequent functions, which draw in further traffic. All these vehicles would be turning on and off the shared lane, or trying to cross it.

6.758 The beginning of the proposed bypass on Headingley Hill would be a cause of holdups, with the NGT causing other traffic to wait as it turns on and off Headingley Lane. Moreover, as this is further out than Buckingham Road, among the cars held up would be those on the school run.

The Urban Dynamic Model

6.759 In determining the future success or not of a particular town, there are other factors, such as the quality or price of housing, education, or crime rates, or the general attractiveness of an area that are just as important as transport. The Sunday Times Best Places to Live in Britain includes Skipton at No 1, Harrogate at No 46 and Otley at No 53¹⁶⁰³. Inhabitants of Otley do not mention transport, so the Headingley bottleneck is not seen as a problem worth mentioning, but stress the cheapness of the terrace houses, active festivals, pubs and the quality of the school as reasons to live there. Thus, if

as the Promoters maintain, NGT were to encourage the creation of new jobs, the majority of these would be likely to go to people living in the Dales and North Yorkshire and not to those living near the proposed route whose quality of life would be adversely affected.

- 6.760 Unemployment figures in the Dales and North Yorkshire are far lower than in Leeds¹⁶⁰⁴, where the lowest (at 2.4%) is that for the area to be served by the northern part of the NGT route. This is well under half the level of the rates for the most deprived parts of the City. Figures for Skipton (at 1.4%) and Harrogate (at 1.6%) are even lower.

Parking

- 6.761 The proposed park and ride sites at Bodington and Stourton would be unlikely to be successful as there are over 18,800 parking spaces available in the City Centre of town. As the cost of City Centre parking rises, and with the spread of double yellow lines, notably around Woodhouse Street and Woodhouse Moor, and with the introduction of residents' only parking schemes, notably in the top half of Cliff Road and Beckett Park, there has been a knock-on effect and an increase in uncontrolled park and ride in other streets throughout the area. It is cheaper for these commuting motorists to park there than it would be at Bodington. Most do not appear to be deterred by the Headingley bottleneck.

Previous Proposals

- 6.762 When the West Yorkshire Transport Authority carried out a general survey in 1977, it came to the conclusion that there was no real need to widen Headingley Lane. It envisaged the following traffic management¹⁶⁰⁵:
- a) tidal flow working with bus lanes on Headingley Lane;
 - b) controlled use of secondary routes such as Victoria Road and Cardigan Road in the peak periods; and

¹⁶⁰³ Document OBJ/171 PoE and Appendix 10

¹⁶⁰⁴ Document OBJ/171 PoE and Appendix 09

¹⁶⁰⁵ Document OBJ/171 PoE and Appendix 26: West Yorkshire Transportation Studies

- c) metering of traffic into Headingley Lane outbound at Hyde Park Corner, with bus lanes provided on Woodhouse Lane up to the junction.

None of this seems to have been tried out.

- 6.763 The West Yorkshire Transport Authority rejected the idea of a tram. The Supertram would have been less damaging on Headingley than NGT. It intended only to acquire some 25 sq m from the Leeds Girls' High School, solely for wall realignment. NGT has called for over 2,000 sq m from the trustees of the school.

Character and Appearance of Headingley

- 6.764 The whole of Headingley has suffered from planning blight, ever since the first bypass scheme was mooted in June 1937. The NGT Scheme would not only result in harm to buildings and walls but would result in the loss of open space. The congregation of St Columba's Church and others value the present calm outlook across parkland with some mature trees, without the distraction of passing trolley vehicles in the middle of a sermon. The new 'pocket park', in an urban area where there is currently a deficit of such open space would be placed at a location where it would seem an ideal refuge for drunks, who would not take their rubbish home.

Technology

- 6.765 The recent report drawn up for Wellington by Price Waterhouse Cooper¹⁶⁰⁶ shows the disadvantages of trolleybuses as follows: *'Trolleys require significant investment in overhead network infrastructure. Overhead wiring networks mean that bus routes are limited to existing infrastructure and are difficult to revise (in the absence of investment in network extensions or changes); any extension to the network requires significant capital investment; the power supply system can become overloaded if too many trolleys are drawing electricity from the network at the same time, stalling the*

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¹⁶⁰⁶ Document OBJ 923 FWY/102: Price Waterhouse Cooper, *Evaluating the impact of different bus fleet evaluations* (Greater Wellington Regional Council, April 2014) page 2

movement of the trolleys; overhead wiring limits the ability to introduce taller vehicles (eg double deckers); overhead wiring contributes to visual pollution; overhead wiring poses potential risks to pedestrians if the lines become damaged or fall; trolleys have limited ability to pass other trolley buses that are running off the same line; and the low noise output of trolleys can result in crashes with pedestrians.'

- 6.766 The main examples of trolley bus use are in Eastern European countries, Asia and Northern America. Trolley bus use is falling internationally.
- 6.767 The Scheme is expensive for what is proposed and the local funding required has no real guarantee against future inflation, or the possible shortfall should the running of the Scheme turn out to be a financial failure. In 2012-13 the trams in both Nottingham and Sheffield were run at a loss. The figures for 2013-14 show that this is still the case and, by looking at the figures published annually since 2009, it is clear to see that outside London only Blackpool, with its old tram system, and Manchester, run entirely on old railway lines or exclusively otherwise in regeneration areas, have consistently been financially successful.
- 6.768 The Promoters have not considered the use of buses using alternative forms of green energy, such as electric batteries or hydrogen fuel cells, but the situation is no longer as in 2008. London is investing in both systems and Paris intends to be using nothing but electric buses in 10 years time. Birmingham Mobility Action Plan (BMAP)¹⁶⁰⁷ states: '*Although various technologies can be considered BMAP believes that some form of wireless induction charging and the use of electric vehicles would be a highly innovative target for future*'. In the meantime, it recommends that Sprint and CityLink services should be operated initially using low emission technology, such as hybrid diesel electric power or CNG fuel, with a view to moving to inductive battery powered vehicles at the earliest practical point.
- 6.769 The Scheme is unpopular in Leeds.

¹⁶⁰⁷ Document OBJ/171 SOC Document 172: Birmingham Mobility Action Plan

John Crawley OBJ 863

The material points¹⁶⁰⁸ were:

- 6.770 John Crawley is a resident of Burton Crescent. He is mainly concerned about the effect of the NGT Scheme on Grove Road/Moor Road and Burton Crescent. The traffic count, dated 2 April 2014, does not appear to accurately reflect the use of Burton Crescent, particularly during 'peak times', and the sequence of Shaw Lane/Otley Road and then Shaw Lane/Burton Crescent junction. This is where vehicles turn right into Burton Crescent to avoid the junction with Shaw Lane. These roads are extensively used, particularly by commuters during the early morning and evening rush hours seeking access to and from the A660 Otley Road. Burton Crescent provides a rat-run cutting out the junction of Shaw Lane/Grove Lane. The NGT proposals would not alter this traffic flow.
- 6.771 The restriction that would be introduced to prevent traffic travelling from the south turning right into Burton Crescent would provide little, if any, improvement to the physical position on Burton Crescent where vehicles presently park throughout the day on both sides of the road. The road system to the west of Otley Road, comprising the residential estate of St Anne's Road/St Chad's Drive, has an extensive 'residents only' parking system in place, which pushes parking onto Burton Crescent. There is a continuing deterioration to the already poor quality road surface over Burton Crescent, together with significant scuffing to the junction with Otley Road, indicating a significant use of Burton Crescent.
- 6.772 Burton Crescent and the surrounding roads on the east side of Otley Road (Cottage Road, Moor Road, Shaw Lane/Grove Road) serve the existing intense and historic residential development in the immediate area, the density of which could be increased by the comprehensive authorised residential redevelopment scheme at Tetley Hall.
- 6.773 Cottage Road to the north of Burton Crescent has an established TRO in place over the western section. The historic nature of the residential development in

the area renders re-aligning/widening to the existing road network impractical. Double parking significantly restricts the free flow of traffic over the entire length of Burton Crescent from its junction with Otley Road to its junction with Moor Road. This problem is intensified by commercial and utility vehicles, particularly heavy goods vehicles such as refuse wagons. Burton Crescent should have a Residents' Parking Scheme with TROs as part of the Scheme to allow the free flow of traffic.

Janet Matthews OBJ 365

The material points¹⁶⁰⁹ were:

- 6.774 Janet Matthews is a resident of Leeds and a qualified accountant. Her concerns include the resulting deterioration in the environment because of the overhead wires, loss of trees and narrowing of pavements; a reduced public transport offering, as bus operators would be likely to withdraw some services that would no longer be economic to run; the priority that would be given to the NGT, which would make congestion worse for other road users who would then be likely to use side roads such as Spen Lane, Weetwood Lane, Monkbridge Road and Meanwood Road; the measures used to provide predicted improvements in journey times that could equally well be applied to buses but with less environmental impact; and, by the time that the NGT would be operating, electric buses would be available.
- 6.775 Other concerns are related to value for money and financial management of the Scheme. In this regard, the Business Case Review appraisal sensitivity testing¹⁶¹⁰ does not provide BCR values for a combination of increased costs together with a reduction in NGT revenue. A 15% reduction in revenue combined with a 15% increase in operating costs would result in an annual loss of £2.7 million. Also, there are no clear plans on how to deal with any

¹⁶⁰⁸ Documents OBJ/863 SOC and OBJ/863-100 and oral evidence to the Inquiry

¹⁶⁰⁹ Documents OBJ/365 SOC, OBJ/365 PoE and OBJ/365-100 and oral evidence given at the Inquiry

¹⁶¹⁰ Document C-1 Table 17.10: Appraisal sensitivity tests that include separate calculations for increased capital, operating and renewals costs of 15% and a 15% reduction in NGT revenue

overspend on the capital costs of construction¹⁶¹¹. Should the capital costs exceed budget, the Promoters would have to find additional funds through Council Tax or change the specification of the Scheme.

- 6.776 The operating revenue is a function of demand and fares, both of which have been estimated on an optimistic basis. The predictions of how many car drivers would switch to the NGT¹⁶¹² have no other UK trolley vehicle systems to use as a comparison¹⁶¹³. If operators reduced bus fares, the impact on NGT would be to reduce revenue either as NGT fares would be reduced to compete or not as many passengers would use NGT with its comparatively higher fares¹⁶¹⁴.
- 6.777 The NGT operating costs are uncertain¹⁶¹⁵, due to factors such as possible increased energy costs, leasing costs and high maintenance costs for the uncommon trolley vehicles. This would impact upon the projected revenue surplus of the Scheme.
- 6.778 The forecast annual operating surplus of £3 million is based on an NGT risk adjusted operating revenue of £20.6 million and an operating expenditure of £17.6 million¹⁶¹⁶. The Promoters' Risk Register¹⁶¹⁷ identifies the greatest risks as being regarding the inflation assumptions, the management of urban design issues, and utility diversions. The greatest identified strategic risk is that the existing bus operators would undermine the commercial case through competitive tactics. Although these risks have been identified on the Register

resulting in a BCR of 2.01 and 2.24 respectively

¹⁶¹¹ Document C-1 Table 20.1

¹⁶¹² Document C-1 Table 12.14: shows revenue of £16.02 million for 2016 assuming demand of 11.79 million journeys

¹⁶¹³ Document OBJ/923 SOC Table 31 page 48: estimates the number of journeys at 5.9 million

¹⁶¹⁴ Document C-1 paragraph 12.34: states that '*The resulting average yield per NGT passenger is £1.92 in the AM peak, £1.18 in the inter-peak and £1.54 in the PM peak using projected year 2016 fares in 2010 prices. These values reflect the proportion of concessionary travellers in each time period and are considered to be credible in comparison to existing bus fares over similar distances.*'

¹⁶¹⁵ Document C-1 Table 21.1: shows total operating costs of £17.6 million

¹⁶¹⁶ Document APP SOC Table 11.3

¹⁶¹⁷ Document OBJ/365 PoE Attachment: NGT Project Risk Register

there is no reference to the action that would be taken if there would be an overspend or a problem resulting from that risk. If revenue falls short of the contracted costs of operation, the Promoters would need to make up the shortfall from their own resources¹⁶¹⁸.

- 6.779 The Scheme would not be effective and would not provide value for money as it would fail to meet many of its objectives. It would be on a single route that would not provide an integrated transport system. It would not serve areas of multiple deprivation¹⁶¹⁹ or areas of land use change¹⁶²⁰. It would cut through CAs, increase congestion and reduce air quality and would reduce the extent of cycling and walking on the route by about 7%. The objectives could be met more effectively by other means.

Ian Simpson OBJ 1798

The material points¹⁶²¹ were:

- 6.780 Ian Simpson is a resident of Headingley, and a retired teacher at the University, where he covered cost-benefit analysis in his lectures.
- 6.781 There are alternatives to trolley vehicles that are available and have been used elsewhere, including hybrid and hydrogen powered buses. The Leeds Civic Trust Newsletter August 2013 stated under '*Why the Trust Backs the Leeds Trolleybus Scheme*' that '*we continue to hope that in the longer term the trolley bus can be replaced by battery powered vehicles to allow removal of poles and wires*'. The longer term could be relatively short as better alternatives become available but by then the trees would have been felled, wires, poles and substations installed and the trolley vehicles acquired for what could turn out to be an already obsolete scheme.
- 6.782 The Business Case Review gives the main benefits from journey time savings and reliability¹⁶²². The Statement of Case¹⁶²³ shows a time saving for NGT

¹⁶¹⁸ Document APP SOC paragraph 11.6

¹⁶¹⁹ Document APP SOC Figure 3.2

¹⁶²⁰ Document APP SOC Figure 3.3

¹⁶²¹ Documents OBJ/1798 SOC, OBJ/1798 PoE, OBJ/1798-100 and OBJ/1798-101

over bus of 11 minutes from Bodington to Leeds but only 6 minutes in the other direction, with time savings less for shorter journeys. Park and Ride users would need time to park and walk to the bus stop. The NGT stop at the rear of the Arndale Centre would be inconvenient for shoppers.

- 6.783 The BCR calculations depend upon forecasts of usage derived from models. These models are dependent upon initial assumptions and valuations of the monetary benefit of the time savings, which require assumptions to be made as to the rate of increase over the 60 year project life as GDP rises¹⁶²⁴. There could be a trade-off between time savings and comfort related to the chances of being seated.
- 6.784 The benefits related to reliability may be overstated for NGT, as it is more important where users only have access to a single bus route and in Headingley users have the benefit of several bus services. Also, the trolley vehicles would be unlikely to operate without delays from such things as accidents or disruption to power supplies.
- 6.785 The off road section at Headingley would increase congestion due to the need to halt oncoming traffic to allow the NGT to join or leave the A660. Traffic emissions are expected to increase as a result. The damage to the environment would be significant, due to the loss of trees.
- 6.786 The NGT route only covers about half of the route of the No X84 bus. It is likely to make the existing network unviable with about 70% of its passengers anticipated to be existing bus users. The need is for an integrated scheme covering the full length. The No X84 could form the basis for meeting such future passenger transport needs¹⁶²⁵, by turning before Otley with very limited

¹⁶²² Document C-1 Table 17.4 footnote states: '*There may also be other significant costs and benefits, some of which cannot be presented in a monetised form. Where this is the case the analysis presented above does not provide a good measure of value for money and should not be used as the sole basis for decisions*'

¹⁶²³ Document APP SOC Table 6.1

¹⁶²⁴ Document E-3-8: WebTAG 3.5.6

¹⁶²⁵ Document OBJ/1798-100: An Improved 84 Bus Service as an Alternative to NGT

stops south of the Ring Road for picking up or setting down depending on direction, and restricted guided bus lanes could be constructed over time.

- 6.787 The Leeds bus station has excellent waiting facilities and provides interchange for buses to Harrogate, Ripon, Wetherby, York, Scarborough and Wakefield among other destinations as well as being the starting point for some low fare buses. The coach station is adjacent and is much easier for elderly people to use than the rail station. It is close to Kirkgate market, the West Yorkshire Playhouse, the Job Centre, the College of Music, Leeds Minster and the Department of Health headquarters building. It will adjoin the Victoria Gate shops, including John Lewis when they are constructed. The nearest NGT stops would be Trinity and Brewery Wharf which would be a significant walking distance away from the bus station.
- 6.788 The NGT route would cross Shire Oak Road, the main part of which is a dead end with only pedestrian access to the lower part. It is well populated with 130 residents in the two care homes, accommodation for 206 students in Mary Morris student residence, and Haleys Hotel. There are also 125 private residents on the electoral roll. It suffers from on-street parking problems, and it is hazardous in icy conditions due to its steep gradient. With trolley vehicles and cyclists using the route, there would be a case for barriers on the crossing in the interests of the safety of pedestrians, particularly the elderly, partially sighted and other people with disabilities. Whether or not there would be barriers, the crossing would be a major impediment to motor traffic, including ambulances and taxis as well as supply vehicles, and a potential hazard to those standing on the trolley vehicle in case of an emergency stop and to fast moving cyclists.
- 6.789 An alternative proposal is to use environmentally friendly buses in a Bus Partnership with an extension and improvement of bus lanes and, where appropriate, the construction of park and ride facilities.

Alan Haigh OBJ 168

The material points¹⁶²⁶ were:

- 6.790 Alan Haigh is a resident of Morley and is opposing the Scheme as it is the wrong solution for Leeds and offers poor value for money.
- 6.791 The time savings claimed are not achievable, as the 2013 bus timetable for services between Leeds and Holt Park gives 31 minutes¹⁶²⁷ and the NGT is expected to take 26 minutes. The NGT is forecast to attract 2,600 passengers per day to park and ride, but this has no factual or practical basis. The Bodington Park and Ride with 850 spaces would be unattractive to users that would have a 19 minute journey time on the NGT with 10 stops before the City Centre. The Stourton Park and Ride with 1,500 spaces has very little population nearby and the use of the M1 motorway would be unattractive as it gets very congested. The existing park and ride site at King Lane with 157 spaces is not well used¹⁶²⁸. The northern leg of the route, which would be through a densely populated area, would be out of balance with the southern leg, which would be through areas of low population.
- 6.792 The energy use of the proposal would have the disadvantage of needing overhead wires and would not be green, as it would transfer emissions to the power station. The trolley vehicles would run on rubber tyres which absorb large amounts of energy, whereas rail uses a narrow band wheel to rail contact which, even allowing for heavier vehicles, would give at least a 50% reduction in energy use.
- 6.793 The Promoters have not carried out any public consultation on the amount of standing, which on some peak time services could result in about 100 passengers having to stand. Their patronage figures would not be achievable with the type of vehicles proposed¹⁶²⁹. They have given little consideration to

¹⁶²⁶ Documents OBJ 168 Objection 27 September 2013, OBJ/168 SOC, OBJ/168 PoE, OBJ/168-100 and OBJ/168-101

¹⁶²⁷ Document OBJ/168 SOC Table on page 4

¹⁶²⁸ LCC Official Report on Park and Ride

¹⁶²⁹ Document OBJ/168 PoE Appendix 4: Bus Loadings

safety concerns with so many standing passengers. An accident involving a trolley vehicle with 100 passengers standing would be very serious.

- 6.794 Major changes could be made to replace the trolley vehicles with hybrid or conventional buses with normal seating and limited standing, introduce bus priority measures and provide an integrated service using common bus stops. The Bodington and Stourton Park and Ride sites should be scaled back and additional smaller sites in local areas provided, with no building on the Bodington playing fields. The bus services should be provided by a partnership agreement operating from existing depots, retaining the No 1 service and adding new Holt Park to Rothwell buses running at times in between to address the imbalance between the north and south parts of the route. This would have a much lower running cost than the NGT and the bus operator would take the revenue risk.

Michael Broadbent OBJ 573

The material points¹⁶³⁰ were:

- 6.795 Michael Broadbent has retired after 33 years' service in the West Yorkshire Police Service, the majority of which was in the role of traffic policing, including as an Inspector to act as the liaison officer with LCC Highways Department on traffic management issues, and continued in this role for 11 years as a civilian employee.
- 6.796 The proposed 24 hour bus lanes need the addition of a 'No Loading/No Waiting' restriction to secure uninterrupted passage of public transport, as nowhere in the proposed TRO is there any information as to exemptions or relaxations which would inform consultees of the breadth of the restrictions. The varying lengths of mandatory cycle lane provision down the route do not secure a prevention of waiting or unloading to those lanes. The extensive and complete restrictions on loading and no waiting down the entire northern route of the NGT would be unacceptable, particularly to businesses.

¹⁶³⁰ Documents OBJ/573 SOC1 and SOC2, OBJ/573 PoE and OBJ/573-100

- 6.797 The locations where bus stops would be in lay-bys include opposite St Mark's Avenue on Woodhouse Lane northbound, outside 188 Woodhouse Lane southbound¹⁶³¹ and outside Lawnswood School northbound¹⁶³². At these nearby pedestrian crossings would generate standing traffic thereby preventing the buses from merging into the lane. Bus lay-bys outside 50A Headingley Lane southbound¹⁶³³ and 38 Headingley Lane southbound¹⁶³⁴ would be located where buses would be impeded by heavy traffic flow as they attempt to merge into that flow.
- 6.798 The northbound cycle lane over Bridge End is shown stopping adjacent to Windsor House, requiring cyclists to negotiate a route of some 20m across to the next length of cycle lane at the centre of the road prior to continuing into Lower Briggate¹⁶³⁵, resulting in cyclists being in conflict with other traffic either seeking the same path or turning left. This configuration raises concerns for the safety of cyclists.
- 6.799 The uncontrolled pedestrian crossing across Cookridge Street near to the Headrow¹⁶³⁶ should be signal controlled to provide discipline and safety for all users.
- 6.800 The proposal to change the existing vehicle movements at the junction of Great George Street and to allow traffic to turn right into Cookridge Street¹⁶³⁷ would detract from road safety. It would be safer to only maintain the straight ahead movement along Great George Street to the east. The enforcement of 'access only' orders, which are to be applied along Cookridge Street, Rossington Street and St Anne's Street, would be difficult and the provision of motor cycle parking on Cookridge Street would be in conflict with them. There would be potential conflict between vehicles leaving the loading bays on

¹⁶³¹ Document A-11 Drawing No 312694/TD/024

¹⁶³² Document A-11 Drawing No 312694/TD/011

¹⁶³³ Document A-11 Drawing No 312694/TD/020

¹⁶³⁴ Document A-11 Drawing No 312694/TD/021

¹⁶³⁵ Document A-11 Drawing No 312694/TD/030

¹⁶³⁶ Document A-11 Drawing No 312694/TD/028

¹⁶³⁷ Document A-11 Drawing No 312694/TD/027

Portland Gate and Portland Crescent and the contra flow cycle lane which would pass through these streets.

- 6.801 The loss of on-street parking for business, and more importantly disabled users, on the eastern side of Woodhouse Lane¹⁶³⁸ at Blenheim Terrace would be a concern, as there is no provision for the disabled from Blenheim Walk through to Blackman Lane.
- 6.802 The limited short term parking along the eastern side of Woodhouse Lane¹⁶³⁹ which services varying shops and businesses at this location is unsatisfactory. Although the Promoters have suggested that it would be a pedestrian dominated environment, buses, trolley vehicles, business users and University campus users would also be allowed to use this space.
- 6.803 The bus and cycle lane widths (3.65m maximum) next to the Leeds University Engineering Faculty on Woodhouse Lane¹⁶⁴⁰ would potentially be dangerous, even though they would be over about a 120m length.
- 6.804 On Cliff Road¹⁶⁴¹, the 6.8m width¹⁶⁴² would not be wide enough for a disabled parking bay and the safe passage of two way traffic flow, particularly as it would be completely different in its flow volume due to the alterations at Hyde Park Corner. The 20m disabled bay should be provided to avoid the potential for conflict and allow for ease of traffic flow.
- 6.805 The proposed removal of the inbound bus stop at Woodhouse Lane prior to Cliff Road would not reflect need or demand, as the nearest inbound bus stop would be about 250m north across Hyde Park Corner outside 38 Headingley Lane. The removal of the outbound bus stop on Headingley Lane near to Cumberland Road¹⁶⁴³ would result in a 550m gap between bus stops.

¹⁶³⁸ Document A-11 Drawing No 312694/TD/025

¹⁶³⁹ Document A-11 Drawing No 312694/TD/024

¹⁶⁴⁰ Document A-11 Drawing No 312694/TD/023

¹⁶⁴¹ Document A-11 Drawing No 312694/TD/022

¹⁶⁴² Measured by Mr Broadbent

¹⁶⁴³ Document A-11 Drawing No 312694/TD/020

- 6.806 The uncontrolled crossing points for pedestrians across the NGT lanes and then onto unsegregated shared paths at Alma Road¹⁶⁴⁴ could result in a potential conflict between pedestrians and cyclists. The proposed relaxation of the current 'No Entry' restriction to the service road from Otley Road, specifically for cyclists, would be unsafe, as it is too narrow to allow for parked cars, vehicles and cyclists.
- 6.807 The existing footways on both sides of Otley Road from St Chad's Church to St Anne's Road¹⁶⁴⁵ would be reduced to 2m width over the whole length with the exception of some 50m on the eastern side of the road adjacent to Victoria Terrace. This is inappropriate and outside the standards one would expect for the type of road¹⁶⁴⁶, with heavy footfalls at peak times during school term. The presence of wheelie bins would also reduce the pedestrian space. The KinderCare Childrens' Day Nursery would be affected by the reduction in the footway to between 2.5m and 3m outside the premises.
- 6.808 The proposed alternative access to St Anne's Road via St Chad's Drive¹⁶⁴⁷ would be an added intrusion into a residential area and could be used as an alternative route via the Beckett Park estate and Headingley Mount.
- 6.809 There is great local concern about the closure of Weetwood Lane¹⁶⁴⁸ in order to provide an opportunity for an NGT stop. The recorded injury statistics¹⁶⁴⁹ for the specific junction of Otley Road and Weetwood Lane would not support any change to the existing arrangements. The 4 parking bays outside 72 to 80 Otley Road and the loading bay could result in conflict between traders and potential customers. Outside the morning peak, over 20 vehicles make use of the parking facility on the inbound carriageway of Otley Road from Park Terrace to Burton Crescent, mainly by customers to the business premises.

¹⁶⁴⁴ Document A-11 Drawing No 312694/TD/016

¹⁶⁴⁵ Document A-11 Drawing No 312694/TD/015

¹⁶⁴⁶ Documents E-4-15 Manual for Streets and G-4-16 Manual for Streets 2

¹⁶⁴⁷ Document A-11 Drawing No 312694/TD/015

¹⁶⁴⁸ Document A-11 Drawing No 312694/TD/014

¹⁶⁴⁹ There have been 4 injury recorded collisions for the period 1 January 2008 to 29 January 2013 and all the collisions involved right turning vehicles from Otley Road into Weetwood Lane, 3 of the collisions involved pedal cyclists

The proposed parking restrictions would harm these businesses as the parking facility in this area is already very limited.

- 6.810 The provision of an unsegregated cycle shared path would be unsafe on the western corner of the Outer Ring Road/West Park/Otley Road¹⁶⁵⁰. The path, even though it would be widened, would offer limited vision around the corner.
- 6.811 The proposed bus and cycle lane on the inbound flow for Otley Old Road¹⁶⁵¹ would be likely to cause other vehicles to divert to either Spen Lane or Wynford Avenue to gain access to the Outer Ring Road. Traffic from Grange Road and other houses and businesses at the bottom of Otley Old Road which currently seek to turn right from Otley Old Road to join Otley Road, north or south, would have to divert to Wynford Avenue or New Adel Lane. This would also mean that traffic from Woodlands Court, Grangewood Court and Grangewood Gardens would be prevented from making a U-turn through the central reservation to travel south towards the Outer Ring Road, requiring all traffic from these properties and traffic from Lawnswood Gardens to complete a U-turn through a central island intersection beyond the Bodington Park and Ride facility. The residents within this area would be disadvantaged.
- 6.812 The proposals would result in a general reduction in the number of available bus stops with a consequential increase in distance between them. These include bus stops on Otley Old Road opposite New Adel Lane¹⁶⁵², which would be re-located to the north, resulting in the distance between the northbound stops being increased to 650m, and near to Tinshill Tower¹⁶⁵³, which would be removed leaving a distance of about 750m between the bus stop at Hospital Lane and Holtdale Approach. Also, at Churchwood Avenue¹⁶⁵⁴ the distance between the 2 outbound bus stops would be increased to over 500m and the footway widths northbound would be reduced to a minimum 2m, which would impact on the use by students at Lawnswood School.

¹⁶⁵⁰ Document A-11 Drawing No 312694/TD/010

¹⁶⁵¹ Document A-11 Drawing No 312694/TD/008

¹⁶⁵² Document A-11 Drawing No 312694/TD/006

¹⁶⁵³ Document A-11 Drawing No 312694/TD/003

¹⁶⁵⁴ Document A-11 Drawing No 312694/TD/013

- 6.813 The loss of the entry point at the western edge of the Holt Park Centre car park¹⁶⁵⁵ with the replacement being located on Holt Crescent would mean that properties adjacent to this road would suffer lack of amenity due to the increased traffic movements around the proposed roundabout.
- 6.814 The A660 from Otley Old Road to the City Centre would be reduced to one lane in either direction for general traffic throughout the 24 hour period. Any right turn moves at certain locations would stop the following general traffic. There are 10 locations southbound and 13 locations northbound where there would be no provision for right turn pockets to allow general traffic to pass stationary vehicles. This would inhibit traffic flow, increase pollution and affect accessibility along the corridor.
- 6.815 The proposed no loading and no waiting restrictions on Holtdale Approach at the entrance to the Highfield Surgery and adjoining pharmacy acts against disabled parking for attendees at those premises. The proposals include a new pedestrian crossing at this location but the provision for the specific group of disabled users could be provided for on a short stretch of the road to the south of the proposed crossing. The regulations do allow for a shortened length of zig zag marking on the exit side of such a facility. The only short term parking provided would be opposite Ralph Thorseby High School which is located in the existing lay-by at that point.
- 6.816 The proposed no waiting restrictions on the whole of Otley Old Road from Holtdale Approach to Iveson Drive would impact on the users of the playing fields. The no waiting at any time restriction is continued down the whole length of Otley Old Road.
- 6.817 The existing no waiting at any time on the northern side of St Anne's Road from Otley Road to Beckett Park Drive, is proposed to be converted to no loading and no waiting at any time. This is an important facility for the disabled to gain access to the parade of shops around St Anne's Road which is

¹⁶⁵⁵ Document A-11 Drawing No 312694/TD/001

usually full of parked vehicles. The proposal would remove this facility and serve no useful purpose.

- 6.818 The proposed restrictions along Otley Road would deflect parking into Burton Crescent which presently is not the subject of any formal parking restrictions. The Scheme offers no protection to that street for residential use apart from a very short stretch of no loading restriction into Burton Crescent from Otley Road.
- 6.819 The status of the Leeds Outer Ring Road should change in the future and become a more favoured route as problems with the radial routes crossing the Ring Road and inhibiting its flow are addressed. There would be no benefit to the residents of Cookridge, Tinsill, Holt Park and Otley Old Road as the only priority that would be given to the NGT would be at the junction of Otley Old Road with Otley Road. There would be visual harm to residents along Otley Old Road.

George Geapin OBJ 617

The material points¹⁶⁵⁶ were:

- 6.820 George Geapin is a resident of Temple Newsome, Leeds and has previously worked on electrical and mechanical contracts for about 50 years¹⁶⁵⁷.
- 6.821 The LCC debt is £1.6 billion with £5.25 million annual interest charges¹⁶⁵⁸. The £35 million that would be borrowed for the Scheme would be set against the revenue generated by NGT¹⁶⁵⁹. Out of the 11 million estimated passengers a year, only about 6 million would be fare paying, due to concessions, and the cost of travelling on the NGT is not known. As such, LCC cannot afford to pay for the Scheme.

¹⁶⁵⁶ Documents OBJ/617 SOC, OBJ/617 PoE, OBJ/617-111 and OBJ/617-112 and oral evidence given at the Inquiry

¹⁶⁵⁷ Document OBJ/617-112: Experience

¹⁶⁵⁸ Document OBJ/617-111 Appendix 1

¹⁶⁵⁹ Document OBJ/617-111 Appendix 1: LCC Letter 15 February 2014 Point 1

- 6.822 With regard to the cost of providing the electrical supply to the trolley vehicles, there are no detailed plans and the Promoters have indicated that details would not be available until the contract has been awarded. There has been no cost itemised for the removal of lighting columns. The cost estimate for the substations, at £720,000 each¹⁶⁶⁰, is insufficient to allow for the cost of laying feeder cables from National Grid stations, which could require about 44 km of cable¹⁶⁶¹. Therefore, it is not possible to evaluate the full cost of the contract at this stage, and the current estimate of £250 million is likely to be exceeded. In addition, nothing has been allowed for the cost of possible litigation.
- 6.823 The alternative to NGT is to use the money to finance battery or hybrid buses, which would be able to be parked anywhere, re charged with off peak electricity and all that would be required would be to replace the battery pack about every 7 years. Battery buses are made in Sherburn-in-Elmet in Leeds.

Matthew Hill OBJ 253

The material points¹⁶⁶² were:

- 6.824 Matthew Hill is a director of Leeds Environmental Design Associates, a chartered building services engineer and a registered energy consultant with the Energy Institute.
- 6.825 The trolley vehicle would have no environmental advantages over a well-planned hybrid bus route, including CO₂ emissions. Dr David Checkel, University of Alberta, has arrived at trolley electricity consumption values of 2.02 kWh/km, the Trolley Project EU report has come up with 1.9 kWh/km, which is about 1,020 g/km CO₂, and the Vancouver Trolleybus Advocacy report gives an average of about 2.7 kWh/km. The Applicants have revised their trolley vehicle emission figures to 2.5 kWh/km¹⁶⁶³, which is relatively high.

¹⁶⁶⁰ Document C-2-19 and OBJ/617-111 Appendix 3: Design Freeze 6 Costs Summary for Best and Final Funding Bid Scheme

¹⁶⁶¹ Document OBJ/617-111 Appendix 2: The Cost of Supplying Power to the 10 Substations

¹⁶⁶² Documents OBJ 253 Objection Letter, 7 October 2013 and OBJ/253-100

¹⁶⁶³ Document REB1-OBJ0728 paragraph 2.12.2

The TfL has given results from the new Volvo hybrid bus over 15,000 km as 690 g/km CO₂, and the laden energy use of Nottingham's new electric buses is given as 1.2 kWh/km, equating to 601 g/km CO₂. This indicates that carbon emissions from electric and modern hybrid buses are lower than the available figures for trolleybuses.

Stephen Hammond OBJ 1595

The material points¹⁶⁶⁴ were:

- 6.826 Stephen Hammond is a resident of Headingley.
- 6.827 The Scheme would inconvenience pedestrians to a degree significantly beyond anything that would be considered for any other mode of transport. Given the support of national and local policies to giving priority to walking, pedestrians should be treated, as a minimum, equally to other modes of transport.
- 6.828 At the moment, to cross the south side of the Shaw Lane junction requires the use of 4 signalised crossings. The NGT design proposes to increase that to 6. This would act as a deterrent to parents and children walking from St Anne's Road to school on Alma Road.
- 6.829 Facilitating pedestrians to cross the road more directly improves pedestrian safety. This has been applied to Blenheim Walk, following recommendations from a coroner, but not to the designs for the NGT.
- 6.830 At Hyde Park, the only turning manoeuvre that would be allowed at the junction would be the left turn from Hyde Park Road which, if prevented, would enable a pedestrian crossing on the Headingley Lane side of the junction to be installed and hence improve safety. This indicates that the Scheme clearly values the time of a left turning driver more highly than the time of a pedestrian who has to cross via the other 3 legs of the junction. 7 pedestrian injuries have been recorded at the junction in the last 5 years.

¹⁶⁶⁴ Documents OBJ 1595 Objection Letter and OBJ/1595-100

6.831 The issue of pedestrian facilities should be addressed to prevent pedestrians from being marginalised.

Stuart Archbold OBJ 1756

The material points¹⁶⁶⁵ were:

- 6.832 Stuart Archbold is a local resident and has been a President, Vice President and a Director of the Leeds Chamber of Commerce throughout the period of development of the Supertram and NGT. He has also been Chairman of the Leeds Initiative Integrated Transport Committee, responsible for co-ordinating all City stakeholders, Deputy President of British Chambers of Commerce and a Director of the Freight Transport Association. In these roles he was involved with UK transport policy at Ministerial level.
- 6.833 In November 2005 the decision to build Supertram was overturned and the National Audit Office launched an investigation into the £40 million spent on it up to that date. As leader of the delegation sent to the House of Commons in 2006 in an attempt to reverse the situation, Stuart Archbold was told the business case did not stand up, and a modern bus system would get Government support.
- 6.834 Consultants were instructed to investigate the feasibility of replacing Supertram with a trolley bus on the recommendation of Stanley King, who is a trolleybus enthusiast and grandson of a Bradford trolleybus driver and was then chairman of Metro/WYPTE and a Bradford Councillor. The brief was not to recommend the best modern bus system to replace Supertram, but only to consider a trolleybus. Alternative bus systems were not discussed by the Leeds Integrated Transport Committee, of which Stuart Archbold chaired at the time.
- 6.835 In October 2009 Stuart Archbold formally handed the NGT bid to Hilary Benn MP who then conveyed it to the DfT. However, in 2013, having been asked by local objectors to consider their arguments, he listened to professional

¹⁶⁶⁵ Documents OBJ/1756 SOC, OBJ/1756-100 and OBJ/1756-101

engineers, university traffic planners, local residents, bus operators and transport consultants and decided against supporting the NGT Scheme, writing to councillors regarding this U-turn.

- 6.836 Metro were committed to proving its initial Supertram business case did stand up, and now in the form of its replacement, a trolley vehicle system. It has refused to consider any alternative modern bus system until recently when it has been too late. It has convinced councillors that the Government acceptance of the Scheme was predicated on a trolley vehicle system only. Therefore, no alternative could be considered without losing the £173 million grant.
- 6.837 Metro launched a consultation exercise into NGT. However this was in effect a publicly funded roadshow promoting the merits of the trolley vehicle. The transport consultants¹⁶⁶⁶ whom Stuart Archbold has spoken to state that it is not an appropriate system for Leeds, but have been silent for fear of losing future contracts with Metro, or its successor. Leeds councillors have effectively had a whip placed upon them to publicly support the trolley vehicle despite many privately disagreeing with the bid and their constituents' requests that it be withdrawn. Mr Mulholland MP is now objecting to the Scheme after a survey of his constituents. Hilary Benn MP has not committed to the Scheme and George Mooty MP is against it.
- 6.838 The Business Case is silent on ticket prices, without which a business case could be said to be without foundation. The damage to small business along the route during construction would be very serious and has not been properly considered. The sacrifice of mature trees and the damage to the local environment is completely unacceptable to residents and small businesses. The Headingley bypass in particular would have a serious impact on mature trees.

¹⁶⁶⁶ Professor John Miles, Cambridge University

- 6.839 The proposal would be a single line and the supply of parts for the trolley vehicles would be a problem. Public transport is not the primary solution to traffic problems on the A660 and, according to the experts, NGT would not result in any overall improvement in congestion. The route is too narrow to cope with the total traffic along it, and radical highway planning is needed over and above the issue of how public transport should use the limited capacity that now prevails.
- 6.840 NGT should be postponed subject to a review of the means of traction; a full study of the highway options needed to relieve the A660 corridor of traffic, including a possible Corridor Loop one way system; the effects of Regional Rail improvements on traffic flows are known; and improvements to the Ring Road are factored in, which should reduce from the A660 traffic crossing the City north to south and the motorway system.
- 6.841 The technical, economic, environmental and demographic evidence clearly shows the Scheme is not appropriate.

Eur. Eng. Malcolm Bell OBJ 1810

The material points¹⁶⁶⁷ were:

- 6.842 Malcolm Bell is a local resident.
- 6.843 The use of articulated vehicles and maximising standing room could result in serious harm to users in the event of an accident or accident avoidance. The vehicles would draw energy from an overhead supply from unreliable remote generators. They would be in public ownership and compete directly, but with an advantage, against the established private sector operators. The system would be fully underwritten by LCC and so would be unfairly subsidised relative to the private operators of buses.
- 6.844 The level of standing makes the use of pushchairs, wheel chairs and access difficult or impossible and conductors would find it difficult to stop fraud, given that there are planned to be 3 doors. Whilst electronic tickets would speed

entry, loading large numbers of people into a crowded bus would be a slow process. Several smaller vehicles at more frequent intervals with spare internal space would be much more practical and efficient.

- 6.845 With regard to safety, the trolley vehicles could be running at up to 40 mph with as many as 100 people standing and totally unrestrained. Emergency stopping could be very dangerous to those on board. The physical conditions would be poor, despite having very good air-conditioning, and possibly a health risk in hot conditions. Standing should be limited to a very few, to offer safe protection in these circumstances. To compete with cars, a spacious seat should be guaranteed, together with offering seat belts and/or an airbag in the back of the seat in front. The Promoters appear not to understand where the users would come from.
- 6.846 The higher acceleration of the trolley vehicles would knock the standing passengers over and would be likely to be limited¹⁶⁶⁸ to something that would probably be similar to that of diesels and hybrids. Long, articulated buses on narrow roads would be a hazard to other road users, notably cyclists, and have been eliminated from the roads in London for these reasons. The Promoters have claimed that the trolley vehicles would alert cyclists when turning¹⁶⁶⁹, but that would put the onus on the cyclists to keep clear. Even 4.2m wide lanes would be far from adequate for articulated buses on tighter bends like those in the middle of the City.
- 6.847 There is no data provided to support the suggestion that trolley vehicles would be 20% more fuel efficient than diesel buses in the total 'well to wheel' equation, and diesel buses are rapidly being replaced by first generation hybrids. Similarly, diesel is a fuel likely to be replaced in the near future with liquefied gas, especially when fracking releases new and more secure supplies of natural gas. The fuel cost efficiency benefit claim lacks any numerical

¹⁶⁶⁷ Documents OBJ/1810 SOC, OBJ/1810 PoE and OBJ/1810-104

¹⁶⁶⁸ Mr Chadwick confirmed in cross examination that the acceleration and braking would be limited to 1.1m/sec (about 0.12 g)

¹⁶⁶⁹ Document REB-1 OBJ1810 Argument 4 paragraph 2.4.1 last point

validation and is wrong. In the railway industry it is unlikely that many more major 'electrification' projects will be undertaken for reasons of transmission losses and source generation costs, which also applies to trolleybuses.

- 6.848 The trolley vehicle system would require standby generators to provide an emergency supply. The short range independent energy sources (batteries) would not keep the system running beyond the battery capacity. Without such a standby supply, the system cannot be considered fit for purpose. There are no suppliers who manufacture right hand drive, left hand entry, 3 entrance trolley vehicles for UK use, and there are no Government regulations permitting their use or for licensing drivers. The vehicles would not be able to be 'cascaded' into less prime routes as with buses, which could be replaced 3 or 4 times in the same period. The vehicles would have to be scrapped after their 12 year replacement period, as there would be no other use for them, which could mean that they would be run beyond that period.
- 6.849 The cost of the trolley vehicles is estimated to be £675,000¹⁶⁷⁰, if a supplier and contract operator can be found who would build them. This compares with a hybrid double decker bus at around £270,000. The time that it would take to contract for and have the trolley vehicles delivered could be over 4 years, not allowing for the time taken for approvals regulations to be established. Buses are more cost effective and trolley vehicles are disproportionately expensive.
- 6.850 With regard to 'Park and Ride', the travel time savings would be lost due to the time taken queuing to enter and exit the car park, parking, obtaining a ticket, waiting for a trolley vehicle and walking to the destination.
- 6.851 The northern two thirds of the NGT route follows a narrow corridor of the areas of highest employment and least deprivation¹⁶⁷¹ and does not go through any areas of high land allocation for housing and employment

¹⁶⁷⁰ Estimate by Don Townsley who works with bus builders and rail suppliers

¹⁶⁷¹ Document C-1 paragraph 3.4 and Maps 3.5 and 3.6

development¹⁶⁷². The routing, derived from the Supertram, which in turn was based on the original Edwardian tram routes, was largely based on the location of the student population. Since that time several of the outer big halls have been closed and demolished and many of the student lettings have changed.

- 6.852 The operating costing for the system¹⁶⁷³ is unsupported by source data and does not appear to include the leasing costs of £6.2 million per year, which are ignored on the basis that it would be sub-contracted. The proposed system would use vehicles that are expected to cost around double that of a top of the range bus, have zero residual value, require an additional capital installation cost of £133 million and require a two man crew to run them. As such, they would not be able to compete with vehicles that can be cascaded, do not need such a route capital cost, have a significant resale value and require only a single man crew.
- 6.853 Car parking in the City is reported at 22,000 spaces¹⁶⁷⁴. If it were reduced by using the temporary car parks for office development, it would increase the need to travel into the City Centre and lead to increased congestion. A reduction in parking would discourage leisure shopping and damage the retail sector. No banks, insurance companies or accountants are declared as supporters of the NGT Scheme despite being major employers of the commuting community. The City Centre needs more car access, free or very low cost parking and a business orientated support for the retailers. The NGT would be inconvenient and unattractive to use by shoppers.
- 6.854 The route makes no connection between any significant points of public utility at any point on the journey although the Promoters make great play of connectivity. The A660 route was chosen as it is the prime earning bus route and so the Scheme would cause most damage to the private operators. It has

¹⁶⁷² Document C-1 Map 3.15

¹⁶⁷³ Document C-1 section 11-31 Table 11.2

¹⁶⁷⁴ Document C-1 section 3.70

not been subject to any further basic analysis to update it in terms of route, changing demographic and city economy since the Supertram scheme.

- 6.855 There is no rigorous analysis of the causes of what problems there are on the route, let alone the City needs as a whole or why they may have arisen or what might be their source cause. Therefore, there has been no analysis of all logical key alternatives, particularly a major ring road upgrade and the introduction of better road management methods and technology plus the emergence of new bus technology and new car driving and conveying methods. There has been no analysis of the consequences of the system and its real effect on other users, the collateral effect on inhabitants on the route who are not directly commuters or the impact of single park and ride sites on the existing road network over the wider region, as the LTM incorrectly models the northern site.
- 6.856 There is no understanding of the impact that random interruptions in the traffic flow due to trolley vehicles being given priority would have on the platoons of vehicles passing through the normal signal sequences. The proposals also include 64 new pedestrian crossings¹⁶⁷⁵, which is one new crossing every 230m, in addition to those already in place. The impact of the resulting randomly stopping traffic, including the trolley vehicles, would significantly add to the journey time. It would also result in frequent bottleneck stops and would cause much worse conditions than the LTM predicts.
- 6.857 Regarding journey times, they should be based on 'door-to-door' times rather than on point-to-point times between alighting and exiting the vehicles. The vehicles would be substantially standing room only and would have no features that are exclusive to trolley vehicles and some of the features are already available in the latest buses being introduced. Vehicles with mainly standing room only are unattractive to many users.

¹⁶⁷⁵ Document REB-1 OBJ1810 Argument 4 paragraph 2.4.1 second point

- 6.858 Regarding noise, the Promoters do not appear to have assessed the noise of existing trolley systems or how much noise would be transmitted directly into the structure of buildings to which the OLE is fixed. Trolleys are much noisier in their overhead equipment than modern trams. They have 2 'shoes' that partially enclose the wire and tend to vibrate as they run, in comparison with modern trams that have a single wide sliding pantograph that is very stable, and trolley shoes follow the wires exactly having 'points' to steer them at junctions which make loud clattering noises, especially through complex turns.
- 6.859 The NGT Business Case Review¹⁶⁷⁶ states that there will be a second person on board to provide ticket sales, passenger security and information. This would be a substantial extra cost that the private sector has worked hard to resolve. However, trolley systems do need a second man to be able to refit the trolley poles in the event that they jump off the wires, jump the points at turnouts or if a trolley has to disconnect from the network to run briefly around an obstruction or similar event. Modern poles could come off the rails, especially in icy conditions, and where automatic reconnection is used special guides are needed to locate poles back to the wires.
- 6.860 In the Business Case, more than 50% of the BCR, stated as being 2.90:1, rests on the positive quality benefits of the Scheme and less than half on the 'Trading Account'. It is impossible to do a model trading account because that has to wait until the appointment of a contractor to run the NGT and set the ticket price, which is the foundation of the model.
- 6.861 If the Scheme was to be built and it did draw a major number of car drivers onto it, it would not lead to a reduction in traffic on the A660, as it would suck in more traffic. People would not change from the buses or from cars to the trolley vehicles because of crowding and the real journey time.
- 6.862 The Promoters have only looked at three alternatives, which are variations on the key theme of a trolley vehicle with privileged routes and signal control. The trolley vehicle proposal is not a 'rapid transport system'. All so-called

¹⁶⁷⁶ Document C-1 section 11-27

consultation has been seen as a means of selling propaganda and information and not about gathering insight and understanding of public concern.

6.863 There is no evidence that any analysis has been undertaken to determine why the roads are heavily loaded at peak times. The A660 corridor, Kirkstall Road and Meanwood Valley radials are all heavily used and must be seen in the same single context, as many drivers flip from one to the other according to their perception of traffic loading at any time. The Outer Ring Road is wholly inadequate for its purpose. Its flow is much worse than the radials. The consequence of this is that commuters drive down the radials, rather than use the orbital route.

6.864 A complete practical Transport Plan must be first established. Then a new set of solutions worked out in conjunction with the existing transport suppliers and respectful consultation with the public. These solutions may include the following suggestions:

- a) Upgrade the Outer Ring Road with flyovers and two lane dual carriageway;
- b) Convert the A660 (and other key radials) to 3 lanes with tidal flow without significantly changing the existing road boundaries and infrastructure;
- c) Abandon the present bus lanes and focus on increasing the overall total traffic flow;
- d) Install a computer controlled integrated traffic signal system to optimise all traffic flow with camera support that covers the whole City;
- e) Re-site labour intensive, office based non professional businesses out of the City Centre onto the Outer Ring Road to reduce the demand for City Centre focused commuting;
- f) Abandon the two proposed massive park and ride sites and instead establish a distributed, or serial, Park and Ride in a sequence of a possible six dedicated smaller parks;
- g) Plan and prepare for the real New Generation Technology;
- h) Encourage the conversion of buses to low energy systems and assist small bus companies to be able to enter the low energy programme instead of having to use second hand old buses to enter the market;

- i) Abandon the idea of using dedicated infrastructure electric trolley vehicles;
- j) Ensure that any new transport system would help the recovery of existing local communities, especially in the light of rapidly changing demographics resulting from the huge relocation of students from many of these areas;
- k) Reverse the policy to reduce City Centre car parking to support the retail business in the City and encourage more visitors and investment, working with the retailers, rather than the property developers, and responding to their demands;
- l) Revisit all the half-finished schemes already begun but abandoned and assess which should be completed (eg the Loop, the Inner Ring Road, the Outer Ring Road, guided bus routes, new rail stations) and re-establish all the old rail lines; and
- m) Look at all the points that should be connected, including the hospitals, the airport, the existing and the new mainline railway stations, the Arena, the Universities, the commercial centre, the retail centre, the theatres and the schools and join them up with bus links that are wheelchair accessible. In parallel, look at how the outlying communities could be integrated with light rail linking directly into the transport needs.

6.865 The only other option is an improved route with private operators running latest technology buses, by working closely with the private sector transport providers to encourage new propulsion technologies as they become available. Ultimately, this would be in accordance with the DfT instructions in association with the Atkins report¹⁶⁷⁷ in developing a bus system with the full involvement of the private sector suppliers. Headingley should be bypassed with through traffic round the outside and buses through the centre and a 300 vehicle car park.

6.866 The councillors have not provided evidence or attended the Inquiry and are, therefore, anxious not to be associated with the Scheme. It cannot make money, it is operationally too expensive (a model trading account has not been made available), it has been underestimated for the capital programme

¹⁶⁷⁷ Document G 4-55

and it would be delivered heavily over budget. Given the precedent of the Edinburgh tram, a prudent view of the over shoot might be £300 million and FWY would kill it with price cutting, feeder route cutting, an injunction or something else. It cannot be cancelled by the Promoters as the demands for compensation would be overwhelming. The only hope is that the Government will refuse the Scheme and help with the consequential costs.

Claire Randall OBJ 998

The material points, other than those regarding heritage matters¹⁶⁷⁸, were:

- 6.867 Claire Randall is a local resident and a member of NWLTF, but is not directly affected by the route of the NGT.
- 6.868 Traffic on the northern part of the route seems to have already peaked¹⁶⁷⁹. A saving of perhaps a quarter of an hour over the full length of the northern route journey cannot justify the works, tree loss and major changes to the area. All the seats could well be taken by Headingley and the prospect of standing would be unpopular with many passengers choosing to go to a regular, nearer, bus stop and use a service which could provide seating, even though it might take a few minutes longer. In such a case, trolley vehicles may rarely reach their supposed full capacity, but might only carry a little over the 40% seating provided, seriously threatening the financial viability of the NGT. It would also deter modal shift from the car.
- 6.869 The expected time saving would be gained at the expense of all other traffic which would be subject to 'traffic stacking' on places where there is sufficient road capacity. The Bodington Park and Ride could fill up rapidly in the morning, discouraging use by drivers throughout the day, even though the trolley vehicles could have free seats at those other times. There is nothing about 'feeder buses' to bring passengers to NGT stops¹⁶⁸⁰.

¹⁶⁷⁸ Documents OBJ/998 SOC, OBJ/998 PoE, OBJ/998-103, OBJ/998-104 and OBJ/998-105 and oral evidence given to the Inquiry

¹⁶⁷⁹ Document OBJ/998 PoE Doc 4: Table of Annual Average Traffic Flow on the A660 between the Inner and Outer Ring Roads for the period 2000-2012 on the DfT Website

¹⁶⁸⁰ Document OBJ/998 PoE Doc 8: 'Myth Park and Ride will encourage public transport use

- 6.870 The replacement trees would not reach the same point as many of those that they would replace within the lifetime of any resident of Headingley alive today. All the replacement trees of one age would give a less balanced environment than at present and would not have the same presence as the trees which have been established over a century and a half or more. Rainwater runoff is adversely affected by tree loss. It takes many years for the root structures of mature trees to develop and the container grown replacements would not stabilise themselves or the soil for a number of years. It would also not be satisfactory to make replacement plantings in different places from where they have been felled, as has been suggested.
- 6.871 Where there would be dense replanting, as on Headingley meadow and fields, the character would change dramatically, due to the loss of tall established trees and the loss of the perspective and depth of vision they provide where it is possible to see through to others in the middle distance. The loss of green space and trees would have an adverse effect on mental health, stress levels and general functioning of local residents¹⁶⁸¹.
- 6.872 Co-operation with FWY, the main bus operator, should have been initiated by the Promoters from the start to engage in such services as the 'feeder buses'. They have instead engaged in an attitude of hostile competition, expecting FWY's services to be reduced in response to NGT, rather than trying to work together.
- 6.873 LCC has encouraged car journeys to the City Centre with the inclusion of an increase of 375 car parking spaces at the Victoria Gate development. There is a clear contradiction between LCC officers allowing for hundreds more permanent car parking spaces in shopping centre developments while using the amount of car parking in Leeds as a reason to promote the trolley vehicle.

- 6.874 The councillors see the Scheme principally as a '*Highways scheme, more than of Public Transport*'¹⁶⁸². If 90% of the expenditure is to be on construction and only 10% on the actual system, then it seems that the Government grant would be entirely spent on the highways. If this money were actually to be spent on the transport system itself, much better value could be achieved.
- 6.875 The statement from Councillor Richard Lewis¹⁶⁸³ that the Scheme would be stopped if the local people did not want it seems to be hollow. The clear majority view of all those who expressed one at the consultation events and since has been against the LTVS. It would seem that awareness has changed since the Supertram Inquiry, with people being better informed by the internet.
- 6.876 A party whip was imposed by the Labour group and the growing opposition expressed by several polls which have been carried out is in part due to disillusionment with the consultations¹⁶⁸⁴ and the attitude of the Council Executive.
- 6.877 The comparative images of before and after NGT give false subliminal associations and are against the guidance that such images should be clear and representative.
- 6.878 Examples of the Promoters ignorance of the area of the Scheme are at Monument Moor. It is accessible to the disabled, it is the Leeds feeder for the Dales Way and is part of Woodhouse Moor. All of which the Applicants' witnesses appeared not to know¹⁶⁸⁵. An example of the failure to attend to detail is the Leeds Gay Pride March and street party, which is a major event and requires Lower Briggate to be closed off for at least half a day. This would cause operational difficulties that would have to be addressed.

¹⁶⁸² Document OBJ/998 PoE Doc3a: Cllr R Lewis Highways Scheme Quote 2013-06-05

¹⁶⁸³ Document OBJ/998 PoE: Doc 6 Cllr R Lewis 2013-06-05 Headingley Public Meeting Q&A

¹⁶⁸⁴ Mr Haskins in cross examination at the Inquiry agreed that the technical drawings DF6 which were shown at early consultations had been poorly presented

¹⁶⁸⁵ Document OBJ/998-103: Addendum

6.879 There would be serious matters of Human Rights with regard to the imposition of the Scheme, including the United Nations' declaration of Human Rights Articles 12 (interference with a person's privacy, family and home) and 17 (right to property)¹⁶⁸⁶. The communities of the A660 and elsewhere would be harmed for the proposed benefit of others who live further out from Leeds. This is fundamentally unfair. The harm that the Scheme would cause would strongly outweigh any proposed benefit, and that supposed benefit is questionable. The extreme environmental impacts cannot be mitigated and there are also ethical issues about the consultations, proposed use of property and the like, exaggeration of evidence, failure to comply with guidance, poor methodologies and other shortcomings.

Martin Fitzsimons OBJ 1154

The material points¹⁶⁸⁷ were:

- 6.880 Martin Fitzsimons is a local resident, living in the Belle Isle area of the route.
- 6.881 The estimated cost of the NGT of £250 million has not been altered even though in 2009, when it was first given, the anticipated start was 2013 and it is more likely to now be 2019. The costs are more likely to be £500 million.
- 6.882 The park and ride site at King Lane is only used by about 12% of those anticipated to use it. The site of the Stourton Park and Ride requires work to be carried out on it, including to possible mine shafts, before its use and this has not been costed. In 1985 it was declared not suitable for building on, but the Promoters intend to build storage and maintenance buildings for the trolley vehicles without any investigations to prove that this could be done.
- 6.883 Access to the Stourton Park and Ride site would be onto a narrow road, which would be environmentally harmful, cause congestion and be dangerous to pedestrians and motorists. The NGT route involves 2 bridges, which would result in disruption to traffic when work is carried out. Proposals to

¹⁶⁸⁶ Document OBJ/998 PoE Doc 12

¹⁶⁸⁷ Documents OBJ 1154 Objection letter dated 26 October 2013 and OBJ/1154 SOC

temporarily close parts of the roads in the Belle Isle area would have serious effects on residents.

6.884 It is unnecessary for the NGT route to go through Belle Isle Circus, causing the loss of greenery and trees and possible congestion. It would also cause safety problems on Whitfield housing estate due to its close proximity to houses and a school.

6.885 There has been no leafleting of the Belle Isle area of the route and no information has been given despite requests.

Brenda MacKintosh OBJ 341

The material points¹⁶⁸⁸ were:

6.886 Brenda MacKintosh is the caretaker at Headingley St Columba's Church and has been a resident of the Gate House Lodge for about 8 years. She is responsible for lettings and manages the day-to-day affairs at the Church.

6.887 The NGT Scheme would be at the rear of the Lodge, resulting in the loss of woodland to be replaced by smaller trees. It would effectively make the Church and Lodge a traffic island between the A660 road and the NGT track. The effect on the quality of life would be sufficient to make her move and find new employment.

6.888 The NGT would make the use of the Church unattractive, reducing its financial viability and the need to find a new caretaker would be disruptive. DF7 has moved the track further away from the Church than DF2, but this has been resisted by other objectors.

Carol Downing OBJ 655

The material points¹⁶⁸⁹ were:

6.889 Carol Downing has lived near Headingley and the A660 for a good many years.

¹⁶⁸⁸ Document OBJ/341-100 read by Claire Randall at the Inquiry

¹⁶⁸⁹ Document OBJ/655 SOC read by Claire Randall at the Inquiry

- 6.890 The proposal would cause damage to well preserved Victorian and Edwardian village suburbs. The stated policy of 'traffic stacking' on Woodhouse Moor and the prioritising of the NGT would create far worse traffic problems than at present, and it would be more difficult for emergency vehicles to negotiate the traffic. The traffic stacking would cause an increase in local CO₂ emissions and the trolley vehicles would create CO₂ at the power station.
- 6.891 The cable system would be inflexible and unsightly and any road works would cause serious problems for the trolley vehicles. The future abandonment of the NGT would leave massive road expansion, at environmental expense to the local communities and financial expense to the whole City. Only a small number of trolley vehicles would be used at a high cost and it would be expensive to expand the system. The proposal would represent a major long term commitment to the technology, even though there has been the introduction of electric rechargeable buses.
- 6.892 The Scheme would be inefficient, as it would not be integrated, with different stops for buses and the NGT. People would be unlikely to choose the NGT when there would be standing room only for the majority of passengers, for a claimed journey time shortening of only 13 minutes over the length of the northern section. Residents on the north corridor would be disadvantaged by the extra walk to new stops, the likelihood of reduced services on the Nos 1 and 6 bus routes and trolley vehicles being full when they reach them.
- 6.893 Local small businesses would lose passing trade due to the road works and their future would be brought into jeopardy. Also, during the construction period, there would be heavy vehicles travelling along the A660, which would create more severe problems with traffic, noise and dust than are at present.
- 6.894 Mature trees would be removed on the northern leg of the proposed route, many of which date from the Victorian period and have given the area its character. It would take many decades for replacement trees to achieve the quality of the existing vegetation. The trees also make a significant contribution to improving the local air quality.

Suzanna Dunn OBJ 1374

The material points¹⁶⁹⁰ were:

- 6.895 Suzanna Dunn is a resident, living near to Lawnswood School.
- 6.896 The effect of NGT on traffic and the resulting emissions accrued due to its prioritisation would be harmful. Disruption would be caused by the widening of Headingley Hill and other works. The Scheme is not well supported and would only address a very narrow area of Leeds.
- 6.897 Small businesses would be adversely affected, some by losing trade due to disruption and some, such as those at Hyde Park Corner, by having their premises destroyed. The Scheme would destroy a part of the City which is well loved for its character. Local public transport needs to be flexible, as is the case with rechargeable electric buses, or radical in terms of an underground which would have minimal environmental impact with maximum benefit and be a true public transport solution for hundreds of years to come.

Joanne Holland OBJ 1375

The material points¹⁶⁹¹ were:

- 6.898 Joanne Holland is a resident of Queenswood Drive, Headingley.
- 6.899 The traffic stacking measures would lead to increased rat-running on Queenswood Drive and worse traffic fumes. Bus service Nos 19 and 56, which are very good, would be affected by the proposed competing system that would have priority at traffic signals but the NGT stops would be too far away to be of any use to those bus users. NGT would also not be attractive to car drivers and could disadvantage local bus users should the seating be taken before Headingley.
- 6.900 The locating of the NGT stops at different places from existing bus stops is uncompetitive and passengers could not get on either service but

¹⁶⁹⁰ Document OBJ/1374 SOC read by Claire Randall at the Inquiry

¹⁶⁹¹ Document OBJ/1375 SOC read by Claire Randall at the Inquiry

would have to decide in advance which one to use. The long walks between bus and NGT stops would affect those with mobility issues, such as disabled or elderly people. It is also not clear whether elderly and disabled people would be entitled to use their national concessionary bus passes.

- 6.901 The proposal would destroy historic architectural heritage and result in the felling of mature woodland and trees dating from Victorian times. There would be several years of upheaval with heavy machinery and vehicles during its construction, causing traffic disruption which would harm the local community.
- 6.902 NGT could become obsolete and the electrical infrastructure would need to be removed, leaving the widened roads and Headingley bypass. The massive and disproportionate expenditure on road widening and related works demonstrates that the Scheme is inappropriate for that part of Leeds. Alternatives should be considered which would have less impact, be more flexible and cost the taxpayer less.

Adam Burrows OBJ 1380

The material points¹⁶⁹² were:

- 6.903 Adam Burrows is a resident of Alma Road, Headingley and suffers from medical problems that could be affected by the NGT proposals.
- 6.904 The Scheme would not be value for money, would lead to less frequent bus services and the journey time savings would be achieved at the expense of other vehicle users by means of the priority measures. It would cause more traffic congestion, and 'traffic stacking' is intended.
- 6.905 The safety of the off road sections, such as where the proposed bypass behind the Arndale Centre joins and crosses Alma Road, or where it rejoins Headingley Lane, or on Millennium Square, would result in a danger to pedestrians, particularly the elderly, hard of hearing and visually impaired, due to the silent vehicles.

¹⁶⁹² Document OBJ/1380 SOC read by Claire Randall at the Inquiry

- 6.906 Victorian buildings and walls would be partly or completely demolished, and the heritage and character of Headingley, Weetwood and Hyde Park would be destroyed. Headingley is already a heavily built up area with little green space and the loss of hundreds of trees and the road through Headingley meadows would be very harmful to the local environment. The proposed replacement planting would not reach comparable maturity within the lifetime of any local resident.
- 6.907 The disruption of knocking down walls, cutting down trees and heavy vehicle movements on Alma Road for the duration of the development would have a detrimental effect on the wellbeing of all of the residents of that road.

Grahaeme Lauder OBJ 555

The material points¹⁶⁹³ were:

- 6.908 Grahaeme Lauder is a local resident. His objection is mainly based on the following 3 areas: Stakeholder engagement, the forecast trolley vehicle journey time savings and the financial commitment, especially of LCC.
- 6.909 Stakeholder engagement reported in the 2012 Business Case¹⁶⁹⁴ is based on encouraging positive responses by asking 'what if' or hypothetical questions which produce results like '*81% of respondents would consider using NGT once it is operational*'. Yet hypothetical questions like this are unreliable. Responses may well be different depending on what respondents know, such as having to choose between NGT and bus stops, how far they would have to walk to an NGT bus stop, the likelihood of having to stand and the cost of the fare. Respondents did not know the cost of the Scheme, how long it would take to build, the strengths and weaknesses of alternatives, disruption during construction, and the effect on local finance and services.
- 6.910 The contribution from LCC and WYCA has increased in successive business cases. The Promoters have responded to the cut in Government funding by reducing the cost of the Scheme, including lowering the bus stop specification,

¹⁶⁹³ Documents OBJ/555 SOC and OBJ/555 PoE

reducing the size of Stourton Park and Ride from 2,200 spaces to 1,500 spaces and having 2 lanes, instead of 3, over Leeds Bridge. Given the scale of these cuts and the Promoters' inexperience, it is difficult to have confidence in their statement that '*these (changes) have been specified to maintain the outcomes and benefits of the scheme*'¹⁶⁹⁵. Any unanticipated costs, which could be substantial based on the Edinburgh Tram Project¹⁶⁹⁶, would have to be met through local funding.

- 6.911 The DfT would no longer be making a contribution to the development costs or to any overspends on the budget¹⁶⁹⁷. The 2012 Business Case includes no evidence about, or references to, the robustness of funding figures or the likelihood of these figures rising substantially. The independent cost review carried out by Turner and Townsend in 2009¹⁶⁹⁸ pointed out that there was little or no comparable data against which to compare the Leeds Scheme. Also, the Promoters do not state how they would fund any additional costs, which could be met by increases in fares, increases in Council Tax, cuts in services, or some combination of these.
- 6.912 Annual operating costs have been reduced by £4.2 million¹⁶⁹⁹ by assuming the removal of parallel competing bus routes from the north corridor. However, whether or not this happens depends on the reaction of the bus operators and the Promoters have given no evidence to support their assumptions on this or the consequent cost savings. Any revenue surplus is not known as it would be a function of the shape and form of the operating concession, which is yet to be defined¹⁷⁰⁰.
- 6.913 The benefits of the NGT Scheme depend on the accuracy of passenger demand forecasts. However forecast demand varies considerably according to how

¹⁶⁹⁴ Document C-2 paragraph 18.6 (1)

¹⁶⁹⁵ Document C-2 paragraph 5.4

¹⁶⁹⁶ Daily Telegraph, Scottish Editor, 20 June 2012

¹⁶⁹⁷ Document C-2-22 Appendix 23: Funding Report Appendix 1 paragraph 2.6

¹⁶⁹⁸ Document C-4 Appendix 18

¹⁶⁹⁹ Document C-2 Table 6.2

¹⁷⁰⁰ Document C-2 paragraph 12.10

much importance is attached to factors affecting demand¹⁷⁰¹. Some of the factors are subjective, such as passengers' response to superior NGT bus stop quality, but it has been assumed that passengers would attach great importance to such superior quality and therefore be attracted to the NGT.

- 6.914 The Promoters have not shown how they arrived at their forecasts, eg no details are given as to how the numbers transferring to NGT from bus, car and park and ride have been arrived at¹⁷⁰² when this is critical, given how demand forecasts for 2031 have already been revised downwards by the Promoters from 27 million to 15 million passengers¹⁷⁰³. Also, the BCR has changed from 2.62 (2009) to 5.61 (2011) to 3.86 (2012) to 2.96 (2014). This indicates that the figures may not be robust.
- 6.915 The objective to promote quality of life through a safe and healthy built and natural environment¹⁷⁰⁴ would not be met, as the NGT would lead to a reduction in cycling and active transport. Risks to cyclists would increase, as their safety would be compromised, particularly during the construction phase and by the removal of the cycle lane between Hyde Park Corner and Headingley. The NGT Scheme is a major missed opportunity to enhance cycling in north Leeds with all the benefits, direct and indirect, that this would bring.
- 6.916 Accessibility would be reduced as a result of the Scheme and economic growth in north Leeds would be reduced. Users of public transport would have to make a choice between NGT and bus because they would not share the same stops. By choosing the NGT it would be necessary to walk further to the stop¹⁷⁰⁵, it would be more likely that you would have to stand and it would be likely that you would have to wait longer.

¹⁷⁰¹ Document C-2 Appendix 34

¹⁷⁰² Document C-2 Tables 8.3 and 8.4

¹⁷⁰³ Document C-2 Table 1.2

¹⁷⁰⁴ Document A-01-2: Statement of Aims Objective 6

¹⁷⁰⁵ Document C-4 paragraph 6.15: Distance between NGT stops 500-600m; distance between conventional stops 300-400m

6.917 There would be a reduction in biodiversity due to a loss of mature trees and open space with inadequate mitigation. The overhead wires and gantries would destroy the character of the Headingley area, and the level of disruption would result in the loss of business and deter potential businesses from coming to, or staying in, the area. Also, house owners would find it more difficult to sell their properties and house prices would be depressed.

Susan Sleeman OBJ 997

The material points¹⁷⁰⁶ were:

6.918 Susan Sleeman has been a resident of Headingley for over 38 years. She objects to the Scheme on environmental and heritage grounds, the cost, health and safety, congestion, its effect on existing bus services, and the lack of public support and consultation and the consideration of alternatives.

6.919 Much of the route passes through CAs¹⁷⁰⁷. Of these, the Sunday Times once described Headingley as '*the best preserved Victorian suburb in the country*'. English Heritage has placed Headingley, Woodhouse Moor and Hyde Park on their 'at risk' register¹⁷⁰⁸. These areas, and also Weetwood and West Park, are all Victorian suburbs which would be adversely affected.

6.920 The costs would be excessive for 20 trolley vehicles to cover a single route of 9 miles, much of which would be for infrastructure works. There would be a cost to local businesses, which would lose custom during construction and some fear that they would go out of business. The consequent loss of jobs would outweigh any benefits from jobs created during construction. Running the large articulated vehicles outside peak times would not be cost effective. The assessment of the risks of exceeding the estimated costs should have been carried out by a completely independent organisation.

6.921 The unhealthy emissions from petrol and diesel engines while vehicles would have to wait for the NGT to have priority and the likely rat-running of cars

¹⁷⁰⁶ Documents OBJ/997 SOC and OBJ/997-101

¹⁷⁰⁷ Document OBJ/997 SOC Appendix 2: Leeds City Council's list of conservation areas

¹⁷⁰⁸ Document OBJ/997 SOC Appendix 1: English Heritage At Risk Register

through the smaller, residential streets of the suburbs to avoid the queues would add to the pollution.

- 6.922 Cyclists would be expected to share the NGT lane for all but a short section of the route and existing cycle lanes would be removed. It would not be possible to make the cycle lanes wide enough to be safe, even with a wider road, as the lanes would still have to accommodate cars and ordinary buses, plus wide trolley vehicles, with them having to possibly pull out into the main traffic lane to pass cyclists. Cyclists would have to move out into other traffic lanes to pass stationary trolley vehicles.
- 6.923 Pedestrians would be affected by pavements being narrowed and grass verges removed, including those outside Lawnswood School and Leeds College of Art. The NGT stop would be situated in the centre of the road outside Lawnswood School, which would be a safety risk to children accessing the NGT. School children attending Shire Oak Primary School on Wood Lane would have to cross the NGT and separate cycle lane to get to school. It would also be unsafe with manoeuvring lorries accessing the shops fronting the A660.
- 6.924 With regard to congestion, the northbound section of the route along Headingley Lane, between the top of Victoria Road and the point at which the NGT route would cross the road to move along the Headingley bypass, would require all traffic, including normal buses, cars, lorries, motorbikes, cycles and trolley vehicles, to use the same lane. This part of the route would therefore be very congested, the trolley vehicles would not be very rapid, and cyclists would not be very safe. Trolley vehicles would cross the highway onto the segregated section every 6 minutes, which would be likely to cause severe hold-ups to the northbound and southbound general traffic.
- 6.925 The Promoters have estimated an average speed of 12 mph for the trolley vehicles, which would hardly be 'rapid' transport. It would not be an 'integrated transport system' as it would serve a single route and would be segregated from buses, which would have to use different bus stops. The A660 route is already well supplied with frequent buses, at about every 3 minutes, which could be reduced due to the competition from the NGT.

- 6.926 Consultation has been poor, particularly with the Leeds College of Art. There has generally been a lack of public support for the Scheme. The Yorkshire Evening Post has printed many letters criticising it¹⁷⁰⁹. The public support claimed by the Promoters is as a result of a questionnaire completed in 2009, which referred to an earlier form of the proposals, had few details and included a rapid transit system between St James' Hospital in the east and the City Centre.
- 6.927 Alternatives, such as hybrid buses have not been properly considered. Leeds needs a good rapid transit system, but the entire City should be able to benefit from it by running modern, high quality, electric or hybrid buses at high frequency, giving them priority measures and introducing a City-wide ticketing system similar to the Oyster Card. Park and ride car parks around the perimeter of the City (with light pollution avoidance measures when near built up areas) would encourage car drivers to use buses, provided they are modern and some are non-stop into the City Centre.

Nigel Sleeman OBJ 1166

The material points¹⁷¹⁰ were:

- 6.928 Nigel Sleeman has been a resident of Headingley for over 37 years. He objects to the whole concept of the NGT Scheme. The population of Leeds at the 2011 census was measured at over 750,000 and a recent Yorkshire Evening Post poll recorded 72% against the Scheme.
- 6.929 A reduction in the number of vehicles using the A660¹⁷¹¹ puts the reason for the Scheme in doubt. The Scheme would be poor value for money, with the expense of excavating and moving underground services and installing new traffic lights, overhead wires and electricity substations. The final cost to Leeds is likely to be much more than the £77 million quoted, based on the

¹⁷⁰⁹ Document OBJ/997 SOC Appendix 6

¹⁷¹⁰ Documents OBJ/1166 SOC, OBJ/1166 PoE, OBJ/1166-103 and OBJ/1166-105

¹⁷¹¹ Document OBJ/1166-106 Document 1: Annual Average Daily Flow on A660

experience of the Edinburgh Tram¹⁷¹². The figures do not include the millions of pounds spent on consultants, plan design, promotional documents, preparing bids and the Order process¹⁷¹³.

- 6.930 The BCR is questionable for the following reasons. The Park and Ride as described would not be attractive to drivers. The job creation claim is excessive when compared with Sheffield Supertram with only 1,600¹⁷¹⁴. There would be a loss of revenue, and hence jobs, to current bus operators. A value needs to be put on the loss of around 400 trees¹⁷¹⁵ and the cost of extra congestion to car users and small businesses. House prices could be adversely affected¹⁷¹⁶ and there could be losses to small businesses due to restricted access and parking during construction and operation. The trolley vehicles would be costly to purchase from outside the UK. There would be a lack of proper provision for cyclists and therefore no benefits would accrue.
- 6.931 The A660, northern route, is particularly unsuitable for an inflexible, fixed-line, trolley vehicle system. The demolition and defacing of Victorian buildings, stone walls and pavements and the installation of overhead cables and increased street clutter, together with the increased greenhouse gasses and pollution would have a harmful environmental impact. The loss of trees would also have a harmful effect on air quality¹⁷¹⁷.
- 6.932 There would be a loss of much needed green space and 'green corridor' with trees, plants and wildlife badly affected. This would result in a loss to the character of area. An increase in rat-running would be an inevitable consequence leading to an increase in pollution and noise in built-up areas.
- 6.933 Any journey time saved would be wiped out by longer walking time and longer waiting. The park and ride sites would not be attractive to use, with no

¹⁷¹² Document OBJ/1166-106 Document 2

¹⁷¹³ Document OBJ/1166-106 Document 3

¹⁷¹⁴ Document OBJ/1166-106 Document 4

¹⁷¹⁵ Document OBJ/1166-106 Document 5: Could be several millions of pounds, and Document 15: Map of trees to be felled along Otley Road

¹⁷¹⁶ Document OBJ/1166-106 Document 7: Article written by Michael M Moore, Executive Partner at Moores Estate Agents, Leeds

'express' service, and nor would the trolley vehicles, due to the high level of standing and the stops being too far apart for those with mobility problems. It would result in two separate, competing bus services and the viability of the current bus services being harmed. It would not be an integrated or 'Rapid Transit' system.

- 6.934 The Scheme would not encourage cycling because it would not reduce the hazards on the busiest corridor in Leeds for cycling¹⁷¹⁸. It would introduce hazards to pedestrians where trolley vehicles would be close to them.
- 6.935 No serious consideration has been given to alternative vehicle types, such as the electric buses¹⁷¹⁹. The Promoters have presented a misleading and deceptive view of the Scheme in their promotional literature and in their 'consultation process'. The Scheme is different from that when the survey was carried out in 2009, as the southern route has changed and the Holt Park route has been confirmed. A survey carried out in north west Leeds in September and October 2013 returned a result of 95% of people opposed to the Scheme¹⁷²⁰. The Scheme would represent a significant financial risk, as demonstrated by the Sheffield Supertram, which is losing money¹⁷²¹.

Katie Fabri OBJ 1797

The material points¹⁷²² were:

- 6.936 Katie Fabri has been a resident of Headingley since 2009. Her main concerns are regarding the safety of pedestrians, wheelchair users and cyclists travelling around the Leeds City Region and that the NGT Scheme only focuses on one mode of transport, the trolley vehicle.

¹⁷¹⁷ Document OBJ/1166 OBJ/1166-106 Document 16: Trees Improve our Air Quality

¹⁷¹⁸ Document OBJ/1166 OBJ/1166-106 Document 26: Leeds Cycling Action Group Cycle Audit report October 2008

¹⁷¹⁹ Document OBJ/1166 OBJ/1166-106 Document 28: Article on the Optare Versa EV

¹⁷²⁰ Document OBJ/1166 OBJ/1166-106 Document 19: NWLTF Survey

¹⁷²¹ Document OBJ/1166-106 Document 27

¹⁷²² Documents OBJ 1797 Objection, dated 31 October 2013, OBJ/1797-100 and OBJ/1797-101

- 6.937 The distance of the proposed NGT route is the right length to be able to be cycled and it connects residents to schools and work places as well as two major universities. Travelling between these locations could be more easily walked and cycled if the roads were made safer for those choosing these modes of transport. The evidence suggests that there is a demand for improved cycle corridors within Leeds¹⁷²³. Also, the 'Highway to Health' programme commissioned by the DfT is investing in a 23 km 'Cycle Super Highway' between Leeds and Bradford.
- 6.938 The NGT proposal would reduce the width of the pavements and widen the carriageways in the area of Headingley, which would discourage walking and cycling. The Business Case has indicated that it would increase road congestion, result in an increase in greenhouse gas emissions and attract part of its patronage from active modes (walking and cycling).
- 6.939 The realignment of the junction of St Anne's Road/Shaw Lane/Otley Road and the removal of the cycle lane and safe area for turning right on Otley Road between St Chad's Drive and Cottage Road, where there is a pre-school venue, youth club and church venue as well as a cinema, would discourage people to cycle or walk. The entire route needs to integrate better safety considerations for people moving around their neighbourhoods on foot and by bicycle to prevent the risks from inactivity.

James Buchan OBJ 1765

The material points¹⁷²⁴ were:

- 6.940 James Buchan is a resident of Adel and uses the Nos 1 and 28 buses to travel into Leeds City Centre. He is concerned about the effect of the NGT Scheme on the residents on the A660 corridor.

¹⁷²³ Insurance Company Cycleguard suggest from findings that 55% of cyclists and non-cyclists in the Yorkshire Region were willing to use their bicycles to go to work

¹⁷²⁴ Documents OBJ 1765 Objection, dated 28 October 2013 and OBJ/1765 SOC and oral evidence to the Inquiry

- 6.941 The trolley vehicles would only have seats for about a third of the passengers and it would not be acceptable for the elderly to have to stand for the journey into Leeds. The stops would be less frequent than the bus stops and so the NGT would be less attractive to use. The nearest NGT stop to Adel would be at the Bodington Park and Ride, which would be about 1 mile away, whereas the nearest bus stop for the Nos 1 and 28 buses is about a 5 to 6 minute walk. The existing buses are expected to have their services halved. The effect would be that people from Adel would drive to other nearby towns.
- 6.942 The proposals would reduce the green areas in north Leeds, including at Bodington Park and Ride and in Headingley, and would pass through 6 CAs, which would be badly harmed.
- 6.943 In order to reduce traffic on the A660, a better scheme would be to restore the single track railway line to Otley and increase the capacity on the Leeds to Harrogate and Leeds to Ilkley railway lines. The overall effect of the NGT Scheme would be to reduce public transport for residents of the A660 corridor.

Ian Liptrot OBJ 268

The material points¹⁷²⁵ were:

- 6.944 Ian Liptrot is a resident of the Belle Isle area, an ex-bus driver and a member of the A660 Joint Council.
- 6.945 The cost of the Scheme is put at £250 million but no account has been taken of inflation and the design and cost of vehicles which has still to be decided. The length of the route at about 14 km with 26 stops from end to end and 580m apart would mean passengers having further to walk at either end. The priority given to the NGT at junctions would mean that all other road users would be inconvenienced. Speed humps along the route would be removed because they could cause the trolley vehicle wires to disengage from the overhead wires.

¹⁷²⁵ Documents OBJ 268 Objection, dated 26 September 2013, OBJ/268 SOC and OBJ/268-100
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6.946 The changes to the southern route to take account of the HS2 route are ill-conceived and not properly thought out. The route would take part of St Joseph School grounds and go through a pedestrianised precinct in Hunslet, adjacent to two rows of houses. The section along Balm Road and Belle Isle Road would disrupt local people and traffic and would result in a widening of the road, the loss of trees and the disfigurement of Belle Isle Circus. Winrose Grove would be made one way for traffic, allowing 2 way movements for the NGT, with the potential to make other roads into rat-runs. There would only be 3 NGT stops from Belle Isle into the City, compared to 15 bus stops. The land to be used for the terminus at Stourton is notorious for being waterlogged and the public has been denied the right of use of this land. The final stage of the route at Stourton disrupts four sheltered housing complexes.

George Jennings OBJ 1505

The material points¹⁷²⁶ were:

6.947 George Jennings is a resident of Horsforth. He does not consider the trolley vehicle, or any bus-based solution, would have sufficient capacity to significantly reduce congestion. It would also take up more road space. The maximum capacity, stated at 160, would provide for a maximum of 3,000 passengers an hour, of which 20% would be transferring from cars¹⁷²⁷. All the consistent research and experience of the past 50 years indicates that this type of installation would attract 5% of motorists, rather than 30 to 40% for a rail based alternative¹⁷²⁸. About 45% of the proposed route would be mixed with general traffic. A tramway would take less space¹⁷²⁹, which would enable two tracks to be laid on one side of Otley Road, rather than bus lanes either side.

¹⁷²⁶ Documents OBJ 1505 Objection Letter, dated 31 October 2013, OBJ/1505 SOC, OBJ/1505 PoE and OBJ/1505-100

¹⁷²⁷ Document C-1 Table 12.4 AM peak percentage and footnote 2: The interpeak and PM peak hour forecasts are 11.3% and 10.1%, both more than double the historic average

¹⁷²⁸ Sustainable Light Rail paper by Professor Lewis Lesley to the Claverton Conference 2008

¹⁷²⁹ A double track tramway takes 17 feet 6 inches (5.334m) road space, which is about 3m less than two bus lanes at 4.2m

6.948 The Scheme would be smaller than the previous Supertram proposal. Some of the costs have been artificially moved from the capital cost to annual operating costs, such as the leasing of trolley vehicles at an annual cost of £6.2 million¹⁷³⁰. The vehicles would be replaced every 12 years, whereas a tram, which would cost about £2 million, would need to be replaced less frequently. The operation life cycle for trams is one-third longer than a bus-based solution, and the capacity is more than double when vehicles are coupled in pairs, with a lower staff/passenger ratio, leading to lower running costs.

6.949 The best opportunity for a fully integrated regional rapid transit scheme would be a tram train, which would not be realistically possible if the trolley vehicle system is built. Therefore, a modern light rail system should be considered.

Ian Moxon OBJ 1128

The material points¹⁷³¹ were:

6.950 Ian Moxon is a resident of Leeds. He objects on the basis that only one city within West Yorkshire would benefit from NGT and within that City only one route. The NGT infrastructure would damage an attractive and historically important corridor and exacerbate the congestion on it, with access restrictions for general private and commercial traffic. The congestion difficulties on this corridor are not significantly worse than that in many parts of the West Yorkshire region. The funding should be used for a more comprehensive solution to the transport problems of the region. Other technologies are available that are as clean or cleaner than the proposed trolley vehicle system, including hydrogen fuel cell and hydrogen internal combustion vehicles, all electric buses and hybrid diesel-electric buses.

Dr Ruth Cunliffe OBJ 967

The material points¹⁷³² were:

¹⁷³⁰ Document APP SOC Table 11.3

¹⁷³¹ Documents OBJ 1128 Objection Letter, dated 15 October 2013 and OBJ/1128-100

¹⁷³² Document OBJ/967 SOC

6.951 Dr Cunliffe resides near to the A660, north of the Outer Ring Road. She was represented at the Inquiry by Mr Steel. Her objection is based on the Scheme increasing congestion, damaging the environment, and disadvantaging the elderly due to the lack of seating space on the vehicles, increased distances between stops compared to buses and a reduction in current bus services. A better solution would be to use battery powered buses and cycle lanes.

Statutory Objectors in writing and not appearing

The material points¹⁷³³ were:

Alison Ruud OBJ 116

6.952 Alison Ruud trades as 'Floral Expression', and is a tenant and occupier of 86 Otley Road, of which part of the hardstanding to the front would be acquired or used (Parcel No 09012) under the Order. She has objected to the disruption during construction, congestion and pollution caused by its operation, the environmental harm, and the potential loss of passing trade due to a reduction in parking areas, closing roads and making some roads one-way.

Twenty One C Limited OBJ 132 and LBC/017

6.953 Twenty One C Limited trades as 'Best Kept Secret', which employs 3 staff and has a turnover of £300,000. It is a tenant and occupier of 27-29 Headingley Lane, of which the access, forecourt and car park would be acquired or used (Parcel No 11052) and part of the hardstanding at the rear would be additional land to be acquired or used (Parcel No 11053), resulting in the demolition of the building, under the Order. It objects on the grounds that it, and other businesses along the route, would have to close due to the Scheme.

Eleanor Walles OBJ 142 and Mr A Taylor OBJ 195

6.954 Eleanor Walles is a residential occupier of 3 Lawnswood Gardens and Mr A Taylor is a residential occupier of 6 Lawnswood Gardens, of which part of the

¹⁷³³ Letters of Objection submitted to the DfT and Document APP/211
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private road, footway and grassed verge would be acquired or used (Parcel Nos 05014 and 05015) under the Order. They object to the Scheme generally.

Barmston (Park Row) LLP OBJ 146

6.955 Barmston is the owner and/or tenant and occupier of buildings to which the Order would give rights to attach OLE (Parcel No 15017). The grounds of objection are that the fixings could impede or prevent maintenance to, or repair of, the building.

Zoe Holman OBJ 149, Steven Haggerty OBJ 419, Ascanio Pagliaro OBJ 1117

6.956 Zoe Holman is the tenant and occupier of the building at 257 Otley Road where she runs a clothes shop, named Therapy, and Steven Haggerty is the owner and occupier of the building at 253 Otley Road, where he runs the business Westrow Hairdressing on West Park parade, to which the Order would give rights to attach OLE (Parcel Nos 07032 and 07034). Ascanio Pagliaro is the owner and occupier of 249 Otley Road, running the business known as Tocco Magico from the building on West Park parade, to which the Order would give rights to attach OLE (Parcel No 07036).

6.957 The objectors are concerned about loss of parking in the area, the proposed one-way system and signals, the loss of part of the forecourt and trees at the front and disruption during construction, all of which would harm the viability of their businesses. Zoe Holman is also concerned about the obstruction of views of the front window of the premises by the NGT stop shelter, which would result in loss of business.

Jeremy Thompson for Street Clothes Ltd OBJ 189

6.958 Street Clothes Ltd is the freehold owner and occupier of buildings at 9, 11, 13 and 15 Bridge End to which the Order would give rights to attach OLE (Parcel No 16014). It is concerned that the building would be inappropriate to have OLE attached to it.

***David Cardus OBJ 211 and OBJ 1266 and Fiona Cumming and Ian Percival
OBJ 1793***

6.959 David Cardus is the freehold owner of 257 Otley Road (Parcel No 07032) and a lessee, tenant and occupier of 13-14 Park Row (Parcel No 15021) and La Salle, Chadwick Street (Parcel Nos 16103 and 17001). The Order would give rights to attach OLE to these buildings. He has objected generally to the Scheme.

6.960 Ian Percival is a tenant and, with Fiona Cumming, is an occupier of 14 Park Row. They object to the disruption to Park Row and the negative impact on the lives of about 300 residents at Park Row, due particularly to the OLE that would be attached to the buildings, and the disruption and harm to Hyde Park caused by the loss of trees and shrubs, which would have a detrimental effect on the wildlife.

***Paul Thompson OBJ 222, Linda Brownridge OBJ 309, Jeffrey King OBJ 378;
Elizabeth Watson-Kay OBJ 635 and Chris Goldthorpe OBJ 1550***

6.961 The objectors are tenants and occupiers of Woodlands Court, from which part of the private road and footway would be acquired or used (Parcel No 05027) under the Order. They have objected generally to the Scheme and are concerned about access.

***Lakhbir Singh and Parmjeet Lally OBJ 265, Randeep Lally OBJ 266 and
Navkiran Lally OBJ 267***

6.962 The objectors are owners and occupiers as businesses of the buildings at 2, 4 and 6 Belle Isle Road to which the Order would allow part of the frontage would be acquired or used (Parcel Nos 20013, 20015 and 20017) and temporarily acquired or used (Parcel Nos 20014, 20016 and 20018), and 3 Moor Road, to which part of the frontage would be temporarily acquired or used (Parcel No 20012). They have objected on the grounds that their businesses would be harmed by the disruption during construction, as the premises would be difficult to access.

Michael and Angela Rimmer OBJ 291 and Matthew Reid OBJ 497

6.963 Michael and Angela Rimmer are lessees and occupiers of 232 Otley Road, part of the front garden of which would be acquired or used (Parcel No 07019) and part temporarily used (Parcel NO 07018) under the Order. They have objected generally to the Scheme. Matthew Reid is Director of 232 Otley Management Co Ltd, who is the freehold owner of the property, and has objected to the loss of about 1.8m from the front of the property and the destruction of trees and shrubs that provide privacy.

The Yorkshire Congregational Union OBJ 320¹⁷³⁴

6.964 The Yorkshire Congregational Union act as trustees of Headingley St Columba United Reform Church, Headingley Lane, of which land would be temporarily used (Parcel No 10051), and they have a tenancy and use of a car park and grassland to which part would be acquired or used (Parcel NO 10049) or be additional land to be acquired or used (Parcel No 10050) under the Order.

6.965 It is broadly concerned about the way in which the carrying out of the works would impact on the life of the Church and its ability to continue its witness and outreach programme as well as on its service to the community. The Church premises are not only used as a place of worship but also as an amenity for the community of Headingley¹⁷³⁵. The Union requires assurances regarding the parking and access arrangements to ensure that adequate space would be provided for vehicles, such as a hearse. Other concerns are regarding noise during the construction and operation of the NGT.

Hilary Murray OBJ 347

6.966 Hilary Murray is the freehold owner and occupier of 11 Kenworthy Garth, of which part of the footway and grass verge would be temporarily used (Parcel No 01002). She objects to the inconvenience and invasion to privacy that

¹⁷³⁴ Documents OBJ/320 Objection letter, dated 11 October 2013, OBJ/320 SOC, OBJ/320 PoE, OBJ/320-100 and OBJ/320-101

¹⁷³⁵ Document OBJ/320 SOC Schedule 1: Regular Users of Rooms 2014

would be caused to her and her family by the use of the land and possible removal of trees.

Nigel Riley, Corrocoat Corrosioneering Ltd OBJ 386

6.967 Nigel Riley is the Works Director of Corrocoat Corrosioneering Ltd, of which temporary use of land forming the accessway to the premises would be given under the Order (Parcel No 18014). It employs nearly 100 people, who he suggests would not benefit from the NGT for their travel to work, and he is concerned that the works would affect deliveries to and from the factory. The NGT would add further sets of traffic signals near to the factory and access to the main yard on Stafford Street would be prevented to traffic coming from the south. HGVs would have difficulty entering and leaving Stafford Street.

OMI Estates Limited OBJ 414

6.968 OMI Estates Limited is the freehold owner of buildings at 14-16, 19-21, 23 and The Marriott Hotel, Boar Lane, to which the Order would give rights to attach OLE (Parcel Nos 15065, 15069, 15074 and 15079), and to acquire or use associated land (Parcel Nos 15064, 15068, 15080 and 15099). Pinsent Masons, who are acting on its behalf, do not consider that a compelling case in the public interest has been demonstrated for taking the compulsory purchase powers and it has submitted a holding objection.

Stratton II Sarl OBJ 574

6.969 Stratton II Sarl is the freehold owner of The Malt House, Chadwick Street, to which the Order would give rights to attach OLE (Parcel No 17004). Corum Advertisers Limited, who are acting on its behalf, consider that there would be sufficient land that would be acquired in the area which would provide adequate space for the provision of equipment to attach OLE and therefore the rights would be unnecessary.

Anne Sillars OBJ 620

6.970 Anne Sillars is the lessee and occupier of the building at 10 Bowman Lane, to which the Order would give rights to attach OLE (Parcel No 16079). She

suggests that an alternative solution should be found to attach the OLE, as it would be unnecessary and ugly, its maintenance would result in loss of privacy, particularly where there are balconies, and there would be safety and noise problems to residents.

Wilkinson Hardware Stores Ltd OBJ 638

6.971 Wilkinson Hardware Stores Ltd are the lessees and occupiers of part of the Arndale Centre, from which hardstanding land would be acquired or used (Parcel No 09053), additional land would be acquired or used (Parcel Nos 09050 and 10002) and rights would be given to attach OLE to the building (Parcel Nos 09052 and 10003) under the Order. It questions the need to acquire part of the footpath outside the store entrances on Otley Road, as this would not be part of the NGT route. Also, land for temporary use (Parcel No 10007) forms the entrance to the Arndale Centre's service yard via Wood Lane, used by large delivery vehicles, and should not be obstructed as it is the only suitable entrance for these vehicles.

Lawnswood School OBJ 675¹⁷³⁶

6.972 Lawnswood School is a secondary school located directly southwest of the Lawnswood roundabout at the junction of the Outer Ring Road and Otley Road and 1,150 pupils and 150 staff attend it, which is open between 0700 hours and 1800 hours during term times and during the holidays and evenings is used for community bookings. Students travel to the School by bus (No 1 and No 6 route), by car and by foot. The School occupies land to be acquired or used (Parcel Nos 05042 and 07003) and land to be temporarily used (Parcel Nos 05044 and 07004) under the Order. Jo Bell, Deputy Headteacher of Lawnswood School, has submitted evidence on behalf of the School, objecting to the Scheme.

¹⁷³⁶ Documents OBJ/675 Objection Letter, 24 October 2013, OBJ/675 PoE and OBJ/675-100
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Safety

- 6.973 Part of the School site is proposed to be used temporarily as a construction compound. This would be unsightly and a safety concern and there are more suitable alternate sites on the route. The School and its access points are very close to the route of the NGT and therefore the construction works, and are identified as a 'key sensitive receptor' for noise¹⁷³⁷.
- 6.974 Pavements would be narrowed around the School to 2m width, introducing a danger to pupils walking to school and alighting from buses. The DfT Guidelines recommend 2m to 3m wide footways with wider areas around schools¹⁷³⁸.
- 6.975 A new car park entrance and a deceleration lane would be required to protect pedestrians crossing and drivers turning. There are no proposals for a parent car park during the development phases for drop-off and pick-up, without which it would be dangerous due to the added congestion and complication of construction traffic. The NGT would introduce an additional means of transport which would impact on the safety of pupils, particularly as it would go directly through Lawnswood roundabout.

Environment

- 6.976 The removal of trees from the central reservation and on both sides of Lawnswood roundabout would result in increased noise which would impact on students' learning and in particular studying for exams. There would also be increased noise from queuing traffic due to changes in traffic lanes and dust during construction. This would mean that the School would be unable to open windows and sporting activities, including the use of the hockey pitches at the front, would be restricted during construction. Additional cleaning of the facades of the building would be required.

¹⁷³⁷ Document A-08e-2 paragraph 2.13

¹⁷³⁸ Document OBJ/675 PoE Appendix: Manual for Streets pages 34 and 68

Travel

- 6.977 There is uncertainty over the length of the construction phase, which could cause an impact on school start times and increase travel times. The School would incur additional costs due to the need to provide supervision at the additional NGT stops, as well as at the current bus stops. Removal of parking areas near to the School would prevent parents dropping off pupils. This could lead to an increase in parents who drop their child/children off in Spen Gardens, which would cause traffic problems and congestion in that area.
- 6.978 The Scheme would encourage rat-running in the residential streets around the School thereby increasing the danger to pupils walking to school. There is no clear evidence that the proposals would reduce car usage and congestion.

School Finances

- 6.979 The construction period would have the potential to adversely impact on the School's image and appeal, with any confusion and lack of easy access affecting parental choice. The School relies on funding which is dependent to a large extent on the number of students, and therefore any fall in student numbers would fundamentally impact upon the School's finances.

Malinee Brown OBJ 704

- 6.980 Malinee Brown is the proprietor of Jino's Thai Café, which is a tenant and occupier of 46a Otley Road, to which the Order would give rights to attach OLE (Parcel No 09033) and part of the hardstanding at the front would be acquired or used (Parcel No 09034). The loss of forecourt could make the future of the business untenable and would result in the loss of at least one full time job. There would be disruption to trade during construction, which could result in the loss of the business. The OLE attachments could result in the loss of rent from residential property.

Freightliner Heavy Haul Limited OBJ 744 and Freightliner Maintenance Limited OBJ 877

6.981 The companies are the lessees and occupiers of a depot at Flax Mill Road, from where land would be temporarily used (Parcel Nos 19020 and 19034), acquired or used (Parcel Nos 19021 and 19032) and additional land would be acquired or used (Parcel No 19033). They have submitted a holding objection, pending a settlement agreement regarding mitigation, access and compensation.

Carol Nadry OBJ 809 and OBJ 813

6.982 Carol Nadry has objected on behalf of Kids Academy Ltd, which is the occupier, and Majid Nadry, who is the freehold owner of a building and land off Holtdale Approach. Part of the footway that provides access to the premises would be temporarily used (Parcel No 01030). The objection is regarding the impact of the construction on the operation of the nursery; health and safety issues regarding the close proximity of the trolley vehicles to the premises; loss of amenity to the outside play area, due to the raised trolley vehicle levels; and loss of parking for safe pick-up and drop-off of babies.

6.983 Carol and Majid Nadry are also the freehold owners and occupiers of 178 Otley Road, from which part of the access, parking and front garden would be acquired or used (Parcel No 08004). They are concerned about the effect on parking, turning and enjoyment of their garden.

Mosshead Limited OBJ 821

6.984 Mosshead Limited is the freehold owner of a gravel car park to the side of Water Lane, part of which would be additional land to be acquired or used (Parcel No 16030). They object on behalf of Samuel Smith Old Brewery who is the occupier and operator of the Old Red Lion Hotel, which requires the land for maintaining the side of the building.

Catherine Beaumont OBJ 835 and David and Ann Beaumont OBJ 1691

6.985 The Beaumonts are the tenants and occupiers of flats in 1-12 Shiredene, Shire Oak Road, which would be affected by the temporary use of land (Parcel Nos 10023 and 10024) and the acquisition or use of land (Parcel No 10025). They object on general grounds and regarding the worsening of the view from the flats due to the OLE and loss of trees; the resulting increase in noise; loss of parking; and disruption during construction, including possible damage to the building.

Valli Forecourts Limited OBJ 857

6.986 Valli Forecourts Limited is the freehold owner of a petrol station, of which part of the forecourt would be acquired or used (Parcel No 08015). It has objected generally to the Scheme and specifically regarding its effect on the business, which could lead to its closure and the loss of 14 full-time and 7 part-time jobs and the owner's livelihood. The business operates a 24 hour service and is dependent upon motor vehicles. It could be harmed by the resulting increase in congestion and disruption during the construction period.

St Chad's Parochial Church Council OBJ 861¹⁷³⁹

6.987 St Chad's Parish Church would be directly affected by the temporary use of hardstanding egress, grassland and trees on the southern side of Otley Road (Parcel No 08017). St Chad's Parochial Church Council objects to the removal of 4 trees to accommodate the relocation of a bus stop north of the Church drive; the bus stop lay-by, which would create problems with its use by cars and the safe use of the entrance to the Church drive; and disruption during construction, particularly to the access to the Church, Vicarage, St Chad's Parish Centre and cricket and tennis clubs.

The Police and Crime Commissioner for West Yorkshire OBJ 948

6.988 The Order would give powers for the acquisition or use of additional land (Parcel Nos 05019, 05020 and 05021), the acquisition or use of land (Parcel

Nos 05022 and 05025) and the temporary use of land (Parcel No 05030), all in the freehold ownership of the Police and Crime Commissioner for West Yorkshire. The objection is regarding the access to the Weetwood Police Station and whether the Scheme has sufficient funding.

TF & JH(Braime) Holdings Plc OBJ 959¹⁷⁴⁰

6.989 TF & JH(Braime) Holdings Plc is the freehold owner and occupier of a factory on Hunslet Road, from which land would be acquired or used (Parcel No 17035) and temporarily used (Parcel No 17034). The grounds for objection are concerning the maintenance of the factory's 'out-goods' facilities at the rear onto Sayner Lane; the impact of the loss of the yard space on storage and loading; the possible loss of the access to the rear onto Sayner Lane; and the effect of the TRO on the ability to adequately use the 'out-goods' facilities. It is necessary that the company has adequate 'out-goods' facilities and route at the rear for the Pressings business to be able to operate viably and effectively and fulfil its new development and expansion plan and for the Elevator Components business to have adequate access to operate viably and effectively.

Leeds Metropolitan University OBJ 961

6.990 Leeds Metropolitan University is the freehold owner or the lessee and occupier of land to be acquired or used (Parcel Nos 14040 and 14042), additional land to be acquired or used (Parcel No 14025), land for temporary use (Parcel Nos 14024 and 14053) and buildings to which the right to attach OLE would be required (Parcel Nos 14041, 14052 and 14081) at Broadcasting House, Woodhouse Lane, the Rose Bowl and Cookridge Street. It is concerned about disruption to access and services and the effect on academic events, pedestrians and student perception during construction; the location and design of NGT stops and the relocation of bus stops; the powers associated

¹⁷³⁹ Documents OBJ 861 Objection letter, dated 29 October 2013, and OBJ/861 SOC

¹⁷⁴⁰ Documents OBJ/959 Objection letter, dated 29 October 2013 and OBJ/959 SOC

with the fixing and maintenance of, and liability for, the OLE; and the noise levels at the proposed substation near Queen Square House.

British Composite Tiles Limited and Colin and Jocelyn Frazer OBJ 977

6.991 The objectors are the freehold owners and occupiers of land to be acquired or used (Parcel Nos 16046 and 16055), additional land to be acquired or used (Parcel No 16043), land for temporary use (Parcel No 16044) and buildings to which the right to attach OLE would be required (Parcel Nos 16047 and 16056). The grounds for objection are that the temporary use of the land would cause significant harm to the continued use and operation of the property for residential and commercial purposes, unless the access to the garage door and the car lift that gives access to underground parking for 18 cars would not be blocked and a parking space to the south of the garage door would continue to be able to be used.

Urban Apartments Limited OBJ 1116

6.992 Urban Apartments Limited is the freehold owner and occupier of land that would be acquired or used (Parcel No 09027) and land for temporary use (Parcel No 09028). It has made a general objection to the Scheme.

Dawn Collins OBJ 1148 and LBC/008, Neil Hunt OBJ 1149 and LBC/026, and Imogen Bennett OBJ 1407 and LBC/043

6.993 Dawn Collins and Neil Hunt are the lessees and occupiers and Imogen Bennett is the occupier of the Pack Horse Public House, Woodhouse Lane, from which land would be acquired or used (Parcel No 12081) and rights would be required to attach OLE to the building (Parcel No 12082). They object on the grounds that the loss of the driveway would prevent the business from being able to continue, as it is used for deliveries, storage and collection of refuse and waste, unloading, parking and emergency access; and the fixing of the OLE would detract from the appearance of the building, make external repairs more difficult and may not be able to be supported by the structure. Imogen Bennett also is concerned that the OLE could damage her health due to noise.

Paragon Finance plc OBJ 1174

- 6.994 Paragon Finance manage the office at 24 Headingley Lane, of which RMP (Properties) Headingley Ltd is the tenant and occupier, and to which rights would be required to attach OLE to the building (Parcel No 11060). RMP are also the lessee and occupier of Buckingham House, from which land would be acquired or used (Parcel No 11022), additional land would be acquired or used (Parcel No 11023) and land would be temporarily used (Parcel Nos 11024 and 11026).
- 6.995 Paragon Finance has objected to the effect that the proposals would have on the RMP office at 24 Headingley Lane, particularly with regard to access during the construction and completion, including for the disabled, disruption to parking, congestion and the visibility of the signage at the premises. The business, which involves the letting of student, professional and social housing, could potentially be harmed by the Scheme due to these factors, which could result in the loss of 6 to 7 jobs and associated supporting business activity.

Brewery Wharf Management Company Limited (BWMC) OBJ 1175

- 6.996 BWMC is the resident's management company who control and manage the supporting infrastructure associated with the apartments within Brewery Wharf. The Order would give the rights to acquire or use land (Parcel No 16065) and to attach OLE to the building (Parcel No 16064) at 1 to 58 Waterloo Apartments and the rights to acquire or use land (Parcel Nos 16067, 16070 and 16072) and to attach OLE to the building (Parcel No 16066) at One Brewery Wharf.
- 6.997 The objection is based on the lack of information provided regarding the fixings and fittings to the Brewery Wharf buildings, particularly with regard to whether they would block views from the windows; the impact of lighting on the residents' windows; the impact of the proposed CCTV cameras upon the residents' privacy; and the lack of any formal access and maintenance agreement.

Jane Attebrah OBJ 1461 and J and E Higgins OBJ 1467

- 6.998 Jane Attebrah is the managing agent for a number of properties in Headingley, including a men's hairdresser at One Salon, 1 Norville Terrace, which has been running for over 6 years. J and E Higgins are the freehold owners of the property. The Order would allow the acquisition or use of part of the hardstanding at the south side of Headingley Lane, fronting the business premises (Parcel No 11017).
- 6.999 The objections are based on the effect on the business and flats above the business of the loss of the pavement, cycleways and vehicle access from Richmond Road and the noise and disruption to access during construction. This would harm passing trade and could lead to the closure of the shop, which would result in the loss of employment of the proprietor and staff and loss of future rent. Also, the traffic would be nearer to the front of the property, resulting in additional noise, and the pavement width would be reduced, which would have safety issues with regard to pedestrian access and bin storage. The use of the open land opposite the premises would be a more acceptable alternative.

Rob Moriarty OBJ 1474

- 6.1000 Rob Moriarty is the lessee and occupier of 1 Cromwell Court, 10 Bowman Lane, to which rights would be acquired to attach OLE (Parcel No 16079). As a wheelchair user, he has expressed concerns about the impact of the acquisition of land on the safe and secure access to the Brewery Wharf complex, to which he has been a resident since October 2005. He requires level access to and from the property and also access to the undercroft parking. Otherwise, he will lodge a discrimination claim under the Equality Act 2010.

Euro Garages OBJ 1486

- 6.1001 Euro Garages is the owner and occupier of Lawnswood Service Station, at the junction of St Helen's Lane with Otley Road, from which part of the forecourt would be additional land to be acquired or used (Parcel No 24007) and part

would be temporarily used (parcel No 24008). The objection to the trolley vehicle system is regarding access to the premises, particularly the length of time for construction works in the area and the proposed revisions to the entrance.

MMC Developments Ltd and MMC Partnership OBJ 1547 and LBC/059

6.1002 MMC are the freehold owners of 28-30 Park Row, to which rights would be acquired to attach OLE (Parcel No 15020) under the Order. The objection is based on the noise and vibration that would be caused on the building, which would be a nuisance to residents and have a detrimental effect on future letting and rental income; and the effect of the OLE fixing bolts on the aesthetics of the Grade II listed building.

Leeds Community Healthcare OBJ 1565

6.1003 Leeds Community Healthcare NHS trust operate a community clinic at Holt Park Medical Centre, which would be affected by the acquisition or use of part of its hardstanding and grassed area and car park (Parcel No 01026), as additional land (Parcel No 01027) and temporarily (Parcel No 01016). This would result in the number of car parking spaces at the Health Centre being reduced from 13 to 7, with the plans showing incorrect sizes for disabled spaces, which would have an adverse effect on access for those with mobility problems. The nearby Asda car park would be less attractive due to the distance from the Centre. The NGT stop directly outside the Centre would compound the access difficulty for patients attending general clinic appointments and the GP surgery. The reduction in car parking would also create additional pressures for clinical staff who need to visit the Centre for short periods. There is also concern about access for an emergency ambulance, particularly during the construction period.

Johnson Cleaners UK Ltd OBJ 1570 and Oceandale Securities Ltd OBJ 1800

6.1004 Oceandale Securities Ltd are the freehold owners and Johnson Cleaners are the lessee and occupier of 50a Headingley Lane, from which part of the accessway and footway would be acquired or used (Parcel Nos 11042 and

11044) and part would be temporarily used (Parcel Nos 11043 and 11045). The objections are regarding the harm to the business from the temporary and permanent measures, the lack of consultation and the inadequacy of the Scheme to address congestion in the area.

Park Row Limited OBJ 1586¹⁷⁴¹

6.1005 Park Row Limited is the freehold owner of 1 Park Row, from which land would be acquired or used (Parcel Nos 15037 and 15039) and rights acquired to attach OLE to the building (Parcel No 15038) under the Order. The current tenant of the property is Pinsent Masons LLP. Park Row Limited has the following concerns regarding the proposals.

Access

6.1006 With regard to the proposed temporary stopping up of Lower Bassinghall Street, the details and Order do not address how access to the rear of the property would be obtained or how the tenant would be able to ensure the safe evacuation of the property in the event of a fire or other emergency during the construction and operation of the Scheme.

6.1007 The highway works would cause disruption for vehicle and pedestrian users of the property, particularly to disabled visitors.

6.1008 The extensive works and road closures of the surrounding roads would impact on access to the property, as vehicular access to Lower Bassinghall Street can only be obtained via Lower Briggate and Boar Lane, and egress by a left turn onto Boar Lane with either a right turn onto Mill Hill or east along Boar Lane, Duncan Street and Call Lane. More detailed assessment work and mitigation proposals should be undertaken and produced in order to enable those affected by the Scheme to fully understand its effects.

¹⁷⁴¹ Documents OBJ 1586 Objection letter, dated 30 October 2013 and OBJ/1586 SOC

Noise, dust & vibration

6.1009 The property is occupied by the tenant for the provision of professional services. The proposed works would result in construction noise, dust and vibration, which would be highly likely to interrupt the tenant's use of the property and could have serious safety implications for visitors and/or users of the property. Adequate consideration has not been given to the fact that ventilation access for the property's underground car park opens out onto an area likely to be subject to extensive works and the front facade is an extensively glazed area which increases the property's sensitivity to the impact of noise and dust.

6.1010 In relation to the installation of OLE, the Promoters have not adequately explained how noise and vibration effects would be mitigated when the works to drill for the fixing bolts would be undertaken, which could have the potential to be extremely disruptive and costly to the tenant.

Visual Amenity

6.1011 The details do not specify to which buildings the OLE would be affixed and the exact nature of the OLE. As such, it is not possible to properly assess the level of impact that such works could have on the property. The exterior of the property could be subject to extensive development, particularly as it does not have a facade that lends itself easily to new apparatus or fixtures being attached. This could have a detrimental effect on the external appearance of the property, compromise its functionality, damage structural integrity and lead to windows and other features being obscured.

6.1012 The tenant has recently carried out extensive works to the main entrance and ground floor lobby of the property and invested in the refurbishment of the first floor for letting to a third party. Visual impacts to the exterior therefore also have the potential to affect the value and marketability of the property. Furthermore, the wider view of the Park Row streetscape would be detrimentally impacted by the imposition of additional street furniture or OLE, particularly as the street already houses a number of bus stops and items of

street furniture. Such items clutter the pedestrian areas and impede access to and from the property, with further additions only adding to this problem to the detriment, in particular, of safe pedestrian flow.

Legal and General Property Partners (Leisure) Limited and Legal and General Assurance (Pensions Management Limited) OBJ 1589

6.1013 Legal and General are the freehold owners of the property known as 'The Light' at the Headrow, which is a major leisure and retail venue with a multi-storey car park, and on an average month about 500,000 customers visiting it. The Order would give powers to acquire or use land at the property (Parcel Nos 14097, 15002A, 15003A and 15004) and rights to attach OLE to the buildings (Parcel Nos 14096 and 15003).

6.1014 The objection regarding the acquisition of land, of which Parcel No 15004 is the main access to a hotel, is that it has not been shown to be necessary. Also, the locating brackets for OLE on the building would represent a significant impediment to the maintenance of the façade of the building, requiring an agreement to be entered into with the Promoters.

6.1015 With regard to access, the access from Cookridge Street is important. The proposed re-alignment of Cookridge Street could result in significant costs being incurred in realigning the access. The permanent stopping up of Cookridge Street except for access by NGT and bicycles could remove access to loading traffic to the main entrance of the hotel and the only viable exit route from the car park. The access into the property from The Headrow should be retained. Therefore, unimpeded access at all these locations should be maintained and guaranteed at all times as, without such access, the works could result in significant operational difficulties and the potential closure of businesses.

6.1016 In terms of the proposed works, the additional parking bays on Dudley Way would seriously affect access to the property's delivery bay and car park, as it is not wide enough to support the bays and 2-way access. It could become congested at peak times, restricting access and potentially resulting in queuing

traffic waiting on the exit ramp to the car park which would cause serious exhaust fume issues in the underground car park. Moving kerblines forward on Dudley Way and Great George Street would impact on the amount of road space available, impeding traffic. The pelican crossing at the junction of these roads would create further traffic build-up and congestion, with a traffic signal system being a safer option, and feeding 2-way traffic onto Great George Street at peak hours would create serious problems and delays. The proposed closure of St Anne's Street would seriously disrupt traffic leaving and entering the car park at peak times.

6.1017 Legal and General are supportive of the principle of the Scheme and wish to work with the Promoters to develop a detailed design and management strategy for the area around its property. Further details of the proposed works are required and a guarantee given that access would be retained at all times.

The Canal & River Trust OBJ 1599

6.1018 The Canal & River Trust has a range of charitable objects, including to hold in trust or own and to operate and manage inland waterways for public benefit, use and enjoyment; to protect and conserve objects and buildings of heritage interest; to further the conservation, protection and improvement of the natural environment of inland waterways; and to promote sustainable development in the vicinity of any inland waterway for the benefit of the public. The Order includes the rights to attach OLE to the Leeds Bridge End (Parcel No 16021), of which the Trust is the freehold owner.

6.1019 As a statutory consultee and navigation authority for the Aire & Calder navigation, it seeks to ensure that the proposed development adjacent to the waterways would not harm their character and appearance, so as to preserve their enjoyment for all users. It has substantive concerns that insufficient information has been submitted to determine the impacts of the OLE on the setting of the Grade II listed Leeds Bridge and River Aire that the trolley vehicle would cross.

John Lewis Partnership Pensions Trust OBJ 1600¹⁷⁴²

6.1020 John Lewis Partnership Pensions Trust is owner of the freehold interest in Park Row House, 19-20 Park Row, to which the Order would give rights to attach OLE (Parcel No 15011). The LBC Application Ref 13/03926/LI seeks consent for the use of fixing bolts and brackets to be inserted into the façade of the property to support the OLE.

6.1021 The Trust supports the Scheme in principle but objects to the impact on the visual amenity of the Grade II listed building, the potential damage to the building that could be caused by the works and the potential for important maintenance and management operations to be impeded by the Scheme. Also, it is imperative that the property remains easily accessible at all times. The compulsory acquisition of the rights has not been justified and the Promoters have not demonstrated a compelling case in the public interest, particularly as no detailed discussions have taken place between the Trust and the Promoters.

6.1022 There is no compelling reason why the Promoters would need powers under Article 17(1) of the draft Order to affix OLE to extend to the whole of the property and the draft Order does not deal satisfactorily with the provisions for the location and fixing of apparatus, access rights, maintenance of the apparatus and the ongoing relationship between the Trust and the Promoters. Also, there is no provision for circumstances where, under Article 17(5), the Promoters and the relevant owner dispute whether the removal of apparatus is reasonably necessary.

6.1023 The powers in relation to the temporary stopping up of the full length of Park Row and surrounding streets under Article 10 of the draft Order raises the prospect of significant disruption to access to parts of the City Centre. Article 43 empowers the Promoters to impose waiting restrictions and restrict vehicular access to Park Row and some surrounding streets, but Article 43(8)

¹⁷⁴² Documents OBJ/1600 Objection letter, dated 31 October 2013 and OBJ/1600 SOC

should require the Promoters to consult owners of properties most likely to be affected by any changes. Also, the consultation requirements in Article 47(6) should require the same with regard to the powers to make byelaws for regulating the maintenance, or carrying out of works, to the facades of buildings to which OLE has been attached.

6.1024 Another concern is regarding the potential for the construction of the Scheme to have a material and adverse impact on the use of the property. The works should be carried out as speedily as possible and disruption to the City Centre should be minimised.

Stephen Oliver OBJ 1633

6.1025 Stephen Oliver is one of the freehold owners and Oliver & Co is the occupier of 259 Otley Road, to which the Order would give rights to attach OLE (Parcel No 07031). He is concerned that the Scheme would have a severe, prolonged detrimental effect on his practice and staff, and his clients and business in the immediate area and would result in a large number of closures and redundancies. The Scheme costs are not affordable, particularly as they would be likely to increase. The property, built in 1908, would be damaged by the fixing of high tension wires and gantry on the front, which would potentially cause the building to fall down and make it uninsurable. As a result, he would lose his livelihood and investment.

6.1026 The OLE would ruin the open and natural ambiance of the area and the associated equipment would potentially be dangerous. Although the office could benefit from the NGT stop being outside, most of the local businesses would probably have gone into bankruptcy or liquidation by the time that it would be operational, due to the prolonged severe impact of the construction. There would also be the loss of trees and additional delays to traffic at Lawnswood roundabout. With the closure of Bodington Hall, the reason for travelling on the NGT route to the former students' accommodation has ceased.

Damian Hirst OBJ 1643

6.1027 Damian Hirst is the tenant and occupier of Flat 2, 2 Water Lane, from which additional land would be acquired or used (Parcel No 16032) and land would be temporarily used (Parcel No 16034). He is concerned about the effect on his ability to park securely in the car park at the flats; the effect on the value of the apartment and ability to sell it; the visual impact of the proposed substation which would be immediately outside the bedroom window of the flat; and the effect of electromagnetic radiation from the substation on nearby residents, including at his flat, which would be about 8m away. The trolley vehicle would act in an identical fashion to a conventional bus and would have a limited positive impact on the area in comparison. The substation and yard should be moved so that it would not impact on the lives of residents and would have a lower visual impact.

Lucy Barker OBJ 1647 and LBC/005¹⁷⁴³

6.1028 Lucy Barker is an occupier of 6 Wood Lane, which would be acquired and demolished (Parcel No 10013). She and the other residents of the house would be severely affected, as two of the children attend Shire Oak School on Wood Lane and one of the women has lived in the house for over 20 years. They have maintained the property at their own cost. All of it would be destroyed by the NGT route, using out-of-date technology requiring overhead wires, the felling of trees and leading to increased congestion. The Scheme is not supported by the local people and would not represent value for money. Consultation has been inadequate. The transport problems on the A660 corridor would be better addressed by a combination of improved boarding procedures, ticketing, increased information for passengers and localised measures to reduce delays to public transport.

¹⁷⁴³ Documents OBJ 1647 and LBC 005 Objection letters, dated 31 October 2013 and OBJ/1647 SOC

Rolling Centre Limited OBJ 1672, Alan Howard OBJ 1678, Planatex Ltd OBJ 1679, Cyan Studios OBJ 1680, Carol Lesley Flesher OBJ 1681 and Northern Industrials Ltd OBJ 1682¹⁷⁴⁴

6.1029 Planatex Ltd is the freehold owner and occupier and the other objectors are occupiers and/or lessees of South Leeds Trade Centre, from which land would be acquired or used (Parcel No 20024) and temporarily used (Parcel No 20025). The Trading Estate comprises 5 units located on Belle Isle Road. The concerns are regarding the effect of the Scheme on the car parking spaces, particularly the loss due to the proposed relocation of the bus stop; its effect on the access and turning of delivery vehicles, particularly due to the relocation of the main access gate and changes to the central reservation; the safety of pedestrians and cyclists from the bus stop and new cycle lanes close to the premises; a resulting increase in traffic on Belle Isle Road accessing the proposed Stourton Park and Ride; and temporary disturbance during construction, particularly due to the use of the car park and relocation of the electric gates.

6.1030 The difficulties in access to, and egress from, and parking within the site could result in delayed production and problems with suppliers and clients, with a resulting loss of business, which could impact upon employment levels. The loading bay area for Rolling Centre Ltd at Unit 5 is shown incorrectly and the moving of the gates could impact upon the ability to park the HGVs that deliver steel to the premises. Alan Howard at Unit 3 would lose at least one car parking space and Planatex at Unit 4 would also lose car parking spaces, which would harm the operation of their businesses. Carol Lesley Flesher holds a superior interest in Unit 2, which is let to Cyan Studios Ltd. Northern Industrials Ltd, who hold a superior interest to the current tenant of Unit 1, has not had its car parking shown on the plans, which would be moved back due to the proposed moving of the front boundary fence, resulting in interference with delivery access to the main unit doors. The bus stop should

¹⁷⁴⁴ Documents Objection letters/Statements of Case, dated 31 October 2013

either be left where it is or relocated in the lay-by on the other side of the M621 motorway bridge.

RSPCA Leeds, Wakefield & District Branch OBJ 1677

6.1031 RSPCA Leeds is a lessee and occupier of a shop in the Arndale Centre, from which additional land would be acquired or used (Parcel No 09050) and rights would be given to attach OLE to the building (Parcel Nos 09050 and 09052). The objection is that the proposals would seriously affect the operations of its shop, which employs two permanent full time staff, together with volunteers, due to pedestrian access being affected, the interruption of services during construction, and the bypassing of the Arndale Centre by the NGT.

6.1032 Difficulties in accessing the parking within the site could result in problems with suppliers and clients, resulting in a loss of business, which could impact upon employment, and problems experienced during construction could result in long term loss of business. There is also health and safety concerns about the attachment of OLE to the building, concerns that the proposed cycle lanes either side of the NGT track would not be used and concerns about an increase in traffic due to journeys to and from the park and ride site.

Dr Jonathan Smith OBJ 1699

6.1033 Dr Jonathan Smith is a doctor at Headingley Medical Centre, which would be affected by the acquisition or use of land (Parcel Nos 10014, 10021 and 10022) and the temporary use of land (Parcel No 10015). He is concerned about the impact during construction due to the removal of car parking for patients, construction traffic impeding the exit from the car park for patients and doctors, and noise preventing windows from being opened in consultation rooms. During the operation of the NGT, there would be poorer access for patients and doctors, unless they live on the NGT route, and a poorer working environment and patient experience due to ongoing noise disturbance. He is also concerned about the loss of trees and that the Scheme would be unnecessarily expensive, not achieve improvements in congestion and be likely to reduce air quality.

Malmaison OBJ 1709

6.1034 Malmaison hotel would be affected by the compulsory purchase of rights to attach OLE to the building (Parcel No 16013) to which it is a freehold owner and occupier. The objection is based on the noise and vibration from the construction phase and the operation of the trolley vehicles, which would affect the occupants of 20 bedrooms that face onto Bridge End that only have single glazed windows; the effect of the OLE attached to the building on its appearance and the visual harm that it would cause to the City Centre CA; and the operational impact on the hotel in terms of servicing and deliveries, particularly with regard to the use of the lay-by on Swinegate, and access to the restaurant on Bridge Street.

Jurys Hotel Management (UK) Limited OBJ 1732

6.1035 Jurys hotel at 9 Brewery Place would be affected by the acquisition or use of land that it leases and occupies (Parcel No 16075) and the compulsory purchase of rights to attach OLE to the building (Parcel No 16076). It is concerned about the potential noise impact on the hotel operation during the construction and operation of the NGT, which is likely to pose a serious detriment to the business; and the impact upon the ability to access the property, which requires 24 hour access to be maintained for the benefit of customers, deliveries, servicing and emergency services. Insufficient details have been provided to show that the proposed compulsory powers of acquisition would be proportionate.

GE CIF Trustees Ltd OBJ 1736 and LBC/050¹⁷⁴⁵

6.1036 GE CIF Trustees Ltd is one of the lessees and occupiers of The Electric Press, Cookridge Street, to which the Order would give rights to attach OLE (Parcel No 14081). It does not object to the general principle of the Order, but objects to the lack of consultation; the effect of the installation of the OLE on the operation of the businesses located within the building; the effect of the

¹⁷⁴⁵ Documents OBJ 1736 Objection letters, dated 31 October 2013 and OBJ/1736 SOC

temporary use of land near to the building on pedestrian movements and access to the building, particularly with regard to providing a safe means of escape; the effect on access to the building for essential maintenance or repair works; the potential removal of the loading bay/taxi rank located outside the building on Cookridge Street; and the effect of construction works and permanent proposals on the operation of the business generally, including the accessibility of the building.

Academy Music Group Limited OBJ 1737 and LBC/002

- 6.1037 Academy Music Group Limited is the lessee and occupier of 55 Cookridge Street, to which the Order would give rights to attach OLE (Parcel No 14068) and from which land would be temporarily used (Parcel No 14070). The fixing of the OLE to the Grade II listed building would cause harm to its significance. No assessment has been undertaken by the Promoters as to why the use of traction poles could not be utilised in the context of the property. Also, the height of the OLE would not allow double decker artist tour buses that regularly attend the property to pass underneath them.
- 6.1038 Any impact on access to the property during and after construction would be likely to pose a serious detriment to the business, particularly with regard to deliveries to the cellar drop on Portland Gate, parking of tour buses on Cookridge Street, access to the car park at the rear, turning space for articulated lorries attending the property and the effect of the proposed cycle way on parking at the property. Also, the proposed changes to the highway layout and the likely increase in traffic volumes would pose a significant risk to the safety of the public attending the property, particularly with regard to narrowing of the pavements.
- 6.1039 There remains considerable uncertainty as to the extent of the proposals in so far as they would impact upon the interests of Academy Music Group Limited in the property and a failure to properly explore alternatives to the fixing of the OLE to the building. Therefore, the proposed compulsory powers of acquisition cannot be regarded as proportionate in these circumstances.

Northern Gas Networks OBJ 1752

6.1040 Northern Gas Networks is the gas infrastructure provider and maintainer for the Leeds area. It objects on the grounds that Schedule 11 of the draft Order would not give sufficient protection for statutory undertaker's infrastructure, particularly with regard to how the future maintenance, expansion and renewal of the gas network would be undertaken in those streets affected and subject to the Order. As such, the proposals would impact upon the ability of the statutory undertaker to carry out its statutory functions on the network.

Network Rail OBJ 1791¹⁷⁴⁶

6.1041 Network Rail would be affected as tenants and occupiers of Trinity Shopping Centre, from which land would be acquired or used (Parcel Nos 15052, 15063 and 15073) and rights would be given to attach OLE to the building (Parcel Nos 15053 and 15075) and buildings in Briggate and Boar Lane, on which rights would be given to attach OLE (Parcel No 15070). It is also the freehold owner of land at Balm Road bridge, which would be acquired or used (Parcel Nos 19018, 19021, 19025, 19026 and 19028) and temporarily used (Parcel Nos 19019, 19020, 19024 and 19027).

6.1042 The objection is based on the documentation not being sufficiently detailed to assess fully the potential impact of the Scheme on Network Rail's land. Where there would be an impact, protective provisions should be included within the Order. There would also be a need for Asset Protection agreements in respect of the land and/or rights that would be required, together with the submission of a land Clearance application.

Round Strategies Limited OBJ 1802¹⁷⁴⁷

6.1043 Round Strategies Limited are the freehold owners and occupiers of land at the Village Hotel, Spenfield House, Otley Road, part of which would be acquired or used (Parcel No 07041) and part temporarily used (Parcel Nos 07040 and

¹⁷⁴⁶ Documents OBJ 1791 Objection letter, dated 31 October 2013 and OBJ/1791-100

¹⁷⁴⁷ Documents OBJ 1439 Objection letter, dated 30 October 2013, OBJ 1802 Objection letter, dated December 2013 and OBJ/1802 SOC

07043). It purchased this land on 5 December 2013 from De Vere Land Limited, formerly AHG Venice Limited, who objected to the Scheme.

6.1044 It objects to the demolition and rebuilding of the Grade II listed boundary wall and the loss of part of the curtilage, which would lead to substantial harm to the setting of the Grade II* listed Spenfield House.

6.1045 In conclusion, the proposals do not meet the statutory duties under the 1990 Act, the objectives of the NPPF and local policies and guidance as set out in the adopted UDP.

Non-Statutory Objectors in writing and not appearing

Most of the concerns have been represented by those objectors that have appeared at the Inquiry. I have included the following representations from objectors who intended to appear but failed to find a convenient time or decided not to appear, together with a summary of the other objections that were made.

Professor Gordon Andrews OBJ 1637

The material points¹⁷⁴⁸ were:

6.1046 Professor Andrews is a resident of West Park and Professor of Combustion Engineering at the University of Leeds with expertise on pollution from transport vehicles. He has been leading a research project that involves the measurement of emissions and greenhouse gases from vehicles under real world congested traffic conditions for 15 years, using the A660 in Leeds and roads close to it. He objects to the Scheme on the basis that the EIA is inadequate and non-compliant with the EU requirements and that the air quality and carbon assessments in the Technical Appendices A on Air Quality and B on Carbon¹⁷⁴⁹ are inadequate and have serious flaws.

6.1047 The EIA demonstrates a lack of knowledge of the health implications of exceedences of the 24 hour PM₁₀ limits which would be made worse by the

¹⁷⁴⁸ Documents OBJ/1637 SOC and OBJ/1637 PoE
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NGT Scheme. The Scheme would also make greenhouse gas emissions worse than if buses were continued to be used, and the increase in congestion that would occur for the other traffic on the route would result in a significant deterioration of air quality along it, particularly in the Headingley and West Park areas. As a consequence of the inadequate air quality assessment, the health implications of the NGT are also inadequately assessed. Headingley already is one of the highest pollution hot spots in Leeds for NO₂ and the highest for PM₁₀¹⁷⁵⁰.

6.1048 The current A660 north of the City Centre from the Metropolitan University outward to Bodington has 6 sets of traffic lights, 8 pedestrian crossings with lights and two roundabouts. These create the traffic jams, which are worst at the times of high traffic loadings in the morning and evening rush hours. In the morning traffic is already backing-up from the City Centre to beyond the Ring Road, a 4 km traffic jam. In the evenings it is backing-up at least from the City Centre to the Shaw Lane traffic lights at Headingley. Traffic jams are bad in Headingley at virtually all times of the day.

6.1049 The NGT Scheme would add more traffic lights and pedestrian crossings. The plans show that there would be 7 new traffic lights, including the Lawnswood roundabout, and 9 new signalled pedestrian crossings, resulting in a total of 17 traffic lights and 17 pedestrian crossings onto the route over the 5 km from Leeds Metropolitan University to Bodington. The other traffic would be reduced to one lane where currently there are two at Bodington Park and Ride. Problems would arise with the crossing of the road by the NGT, where it would move from the central lane to normal lanes and from the Headingley bypass. The NGT would be given priority so that it would only need to stop at NGT

¹⁷⁴⁹ Documents A-08c-1 and A-08c-2

¹⁷⁵⁰ The Leeds Air Quality Report 2011 shows that the roadside monitoring station at Headingley, which is directly on the route affected by the NGT, has given the highest level of PM₁₀ in Leeds and indicates that NO₂ exceeded the European annual average air quality standard of 40 µg/m³ value for impact on human health and the 30 µg/m³ limit for the protection of vegetation, varying between 47 and 51 (The data for 2011 and 2012 are 44 µg/m³ for both years). There were only two other sites in Leeds worse than this and these were in the City Centre

stops and this would require traffic light control to stop all other traffic when it passes through.

6.1050 The resulting delays would cause complete traffic snarl up on the road, which is already the most congested road in Leeds with many houses and large work places (the universities and the Arndale Centre) adjacent to a major source of pollution. It also includes three significant shopping areas and restaurants, many with pavement seating. The Scheme would harm businesses in the City Centre and would create additional traffic on Weetwood Road, Burley Road and Kirkstall Road as drivers would take avoiding action.

Air Quality

6.1051 Much of the traffic will join the route in a cold start state. The procedures that the Promoters have used¹⁷⁵¹ have not recognised the importance of the cold start for their air quality assessment and they have no mention of using the 'Enhanced Cold Start Procedures' in the protocol that they were following, even though it was part of that protocol. The procedures that should have been used are provided by AEA¹⁷⁵², which takes account of the fact that the majority of emissions of CO₂, HC and NO_x occur in the cold start. This is a major failing of the air quality assessment.

6.1052 In the assessment, there is no agreement between the model and the real air quality measurements. In the worst case a measurement of 48 µg/m³ is predicted as 23 µg/m³, an error of over 100%. Out of 28 measurement points one was predicted correctly. The predictions actually show that there was no correlation between the predictions and the measurement. The conclusion that the NGT would have negligible impact on air quality in Leeds and along the route is thus worthless and of no merit. Similarly the PM₁₀ predictions are for two measurement stations only and these were 26% and 22% too low relative to the measurements¹⁷⁵³. Thus both NO₂ and PM are under predicted

¹⁷⁵¹ Document APP SOC

¹⁷⁵² Cold Start Advanced Model - user guide Issue 1 AEA 3

¹⁷⁵³ Document A-08c-1 Technical Appendix Air Quality Figure A.3

and no attempt was made to predict the number of exceedences of the daily limit under EU requirements. The procedures used in the prediction are incapable of predicting exceedences of the daily limit and yet this is the key health issue.

- 6.1053 The increase in vehicle pollution and cold start emissions in congested traffic should not have been left out of the EIA. The predictions have no means to include congested traffic effects. The higher acceleration rates and the greater number of accelerations in congested traffic cause more fuel to be used and use higher engine powers with more NO_x emissions. In any assessment of the impact of the NGT, its effect on congestion of other traffic and on the consequences for emissions must be included. As this was not done for the NGT, its air quality impact cannot be determined and the conclusion of no significant impact is not justified.
- 6.1054 The key pollutants considered in the air quality impact of the NGT were NO_x, particularly NO₂, PM₁₀ and PM_{2.5}. However, ozone should also be considered as part of photochemical smog and the legal requirements are for consideration of SO₂, benzene, CO, butadiene and ozone. As the other traffic on the proposed NGT route would have their emissions increased by the additional congestion, it would increase these pollutants. European directives on polycyclic aromatic hydrocarbon (PAH) and heavy metals (from the electric motor, the batteries used to store the regenerative braking energy and friction on the overhead cables) would also require these to be included. None of this has been considered in the air quality assessment of the impact of the NGT.
- 6.1055 Increases in ambient pollutant concentrations as a result of emissions from road vehicles are greatest very near to the road, and reduce significantly with increasing distance. The Design Manual for Roads and Bridges identifies that contributions from traffic emissions to ambient pollutant concentrations are generally negligible at a 200m distance from the road. Around 5,000 households and 10,000 people live within 200m of the NGT route and the impact on air quality for them should have been assessed, not the impact on the average air quality in Leeds.

Carbon Emissions

- 6.1056 The alternative transport modes CO₂ figures are out-of-date, as by 2020 EU legislation will force the passenger car average greenhouse gas emissions for each manufacturer's fleet to be 95 g/km and vehicles with emissions lower than this are already in production. If a vehicle average occupancy rate of 1.56¹⁷⁵⁴ is used, the carbon emissions per passenger km will be 56 g/km. This is lower than those estimated for the trolley vehicle at 75 g/km, which would depend on the occupancy rate assumed and the assumption that the grid delivered electricity can be reduced from the present 450 g/kWh to 307 g/kWh by 2020. However, the Department for Energy Climate Change's lowest estimate for 2020 is 330 g/kWh¹⁷⁵⁵. Neither of these estimates for 2020 is likely to be delivered in the 6 remaining years¹⁷⁵⁶, as to achieve the near 300 g/kWh assumed would require doubling of nuclear and renewables.
- 6.1057 There has been a continuous development of buses with new engines, including regenerative braking, and the Vision 2020 programme in Europe will deliver a reduction of fuel consumption from today's level of 34 L/100 km to 26 L/100 km¹⁷⁵⁷ (13 gCO₂/km for 50 passengers and 65 gCO₂/km for 10 passengers). As fuel is the largest operating costs of buses, there is an incentive to always use the latest technology buses with the lowest fuel consumption and these will be used in 2020 and should be the basis of comparison.
- 6.1058 Comparing the bus diesel engine CO₂ emissions with those of the trolley vehicles in 2020 would be about 175 gfuel/kWh for new engines (525 gCO₂/kWh) and the electricity consumption is currently delivered at 450 g/kWh from the grid with the Promoters assuming that it will be 303 g/kWh in 2020. This ignores the inefficiency of the electric motor drive

¹⁷⁵⁴ Document A-08c-2 Technical Appendix B–Carbon

¹⁷⁵⁵ From AEA Technology Pathways to 2050, detailed analysis, 2011, based on current carbon reduction strategies through to 2020

¹⁷⁵⁶ Non-CO₂ electricity is 30% of total generated electricity, which gives 450 gCO₂/kWh

¹⁷⁵⁷ ACEA and Rolf Leonhard, Bosch Diesel System– Efficient solutions for future powertrains, 6th AVL Proc. Int. Commercial Powertrain Conf. 2011 page 81-86 ICPC 2011-2.6

for the trolley vehicle, which is given as 88.2%¹⁷⁵⁸. This increases the carbon emissions from the grid from 450 g/kWh to 510 g/kWh, which is very close to that for buses in 2020.

- 6.1059 Increasing the congestion as a result of the NGT Scheme would have a negative impact on the greenhouse gas emissions for other traffic that would outweigh any benefit, if any, of the substitution of buses by trolley vehicles.

Headingley Business Forum OBJ 647

The material points¹⁷⁵⁹ were:

- 6.1060 Headingley Business Forum represents some of the businesses located in Headingley. The objection includes a list of 25 businesses, employing a total of 278 workers. They believe that the NGT is the wrong scheme for the area and for the route proposed and would be bad for businesses, bad for the local economy, and bad for the local tax payer.
- 6.1061 The unique village character of the area, which contributes to a vibrant local economic climate, would be negatively affected by the Scheme as a result of gantries with wires outside premises, widened roads, pavements narrowed reducing footfall, and parking disappearing. Many of the businesses benefit from the cosmopolitan feel of the locality with its pavement seating for cafes and restaurants. The detriment to amenity would not only adversely affect the businesses for the long term, but also during the very significant and more immediate construction period.
- 6.1062 The legacy of the proposed trolley vehicle Scheme would be contrary to NPPF, as it would not support sustainable economic growth or support the viability and vitality of town centres. There does not appear to be any economic impact study undertaken by the Promoters to assess the effect of the proposed development on businesses in the area.

¹⁷⁵⁸ Document A-08c-2 Technical Appendix B–Carbon 2.26, Table 2.4

¹⁷⁵⁹ Documents OBJ 647 Objection letter, dated 22 October 2013 and OBJ/647 SOC

6.1063 The consultation alluded to in the Statement of Consultation does not represent the views of a business forum, but the views of the people attending the meeting with the Promoters.

6.1064 As around 30% of the total £250 million costs of the Scheme would be raised locally, there is a real concern that the local authority, through the planning process, would use its legal right under a Section 106 agreement to force businesses to help pay further for infrastructure contributions for the Scheme.

Councillor John Illingworth OBJ 1684

The material points¹⁷⁶⁰ were:

6.1065 John Illingworth has represented Kirkstall Ward on LCC since May 1979. None of the proposed route passes through Kirkstall Ward, but Kirkstall is adversely affected by overspill traffic from the A660 corridor, and Kirkstall residents have an interest in the recreational facilities that would be affected by the Scheme.

6.1066 He supports the principle of bus-based, segregated public transport in Leeds, and he voted to support the NGT application at LCC meetings in 2013. He considers that the latest NGT proposals suffer from numerous serious defects, and require fundamental and extensive modifications to make them acceptable to the public and capable of delivering cost-effective public transport to the citizens of Leeds.

6.1067 One reason for this is that the public consultation has been poor, and the Promoters have not engaged properly with the public and debated the significant policy issues raised by the Scheme. The Promoters have failed to provide accurate, complete and timely information and have introduced major changes at a very late stage when it was difficult for objectors to properly consider them.

¹⁷⁶⁰ Documents OBJ 1684 Objection letter, dated 29 October 2013, OBJ/1684 SOC and OBJ/1684 PoE

- 6.1068 TfL provides a 'gold standard' in public transport in terms of comfort, convenience, fares, service frequencies, 'oyster' cards and provision for disabled passengers. Journey times in both Leeds and London could be further improved by additional bus priority measures.
- 6.1069 The proposed trolley vehicles would be much too large, which combined with their lack of manoeuvrability, would prevent them from penetrating into residential areas, and result in a worse service for many existing bus users than that provided by the current diesel vehicles. They would be inflexible, require separate stops, have excessive turning circles and swept paths, increase the danger to cyclists, and require major tree-felling and junction alterations that would not be necessary if the Scheme were based on double-decker vehicles, similar in size to a London bus.
- 6.1070 The current proposals at Holt Park seem likely to result in commuter parking in residential areas, to the great disadvantage of local residents. The same risk is present in other sections of the route, but could be minimised by smaller vehicles giving improved service to residential areas, and easier, cheaper extensions of the new service to outlying areas of Leeds. If the terminus remains at Holt Park, a residents' parking scheme would be required and a low-rise multi-storey car park for at least 1,500 cars should be constructed on the current Asda surface car park (or nearby) to accommodate the expected additional commuter vehicles without intruding into residential streets.
- 6.1071 It is undesirable to have completely separate stops, and to prevent other providers from using NGT facilities. Some duplication of bus stops might be necessary to cope with increased passenger numbers, but in general there should be many more stops along the NGT route, which must allow limited stop and multiple stop vehicles to coexist along the same route. The proposed Bodington Park and Ride would be too small to have much impact on traffic daily flows, and also would result in a significant overall loss of playing fields. A larger multi-storey facility would make more efficient use of land.
- 6.1072 Playing pitches should be replaced on vacant brownfield land in central Leeds, where the need is greatest, to help mitigate the serious problems of childhood

obesity and ill health in minority ethnic and other disadvantaged populations, and to minimise travel costs for inner-city families. The National Institute for Health and Care Excellence recommends that educational sports facilities (such as Bodington) should be shared with local communities, and that more stringent obesity guidelines should apply to South Asian residents who face greater risks.

6.1073 The A660 must accommodate a greatly increased number of cyclists if LCC's Public Health policies are to succeed. There has not yet been sufficient attention to the needs of cyclists, and the latest design for the Lawnswood roundabout would be particularly dangerous for cyclists turning right.

6.1074 Many people find overhead wires visually intrusive. Vehicles would require energy storage facilities and/or some alternative source of motive power, to allow the wires to be interrupted at sensitive locations, to handle breakdowns, and also to permit overtaking, temporary route changes and limited stop provision. It would be better to use smaller inductively charged electric buses, as presently trialled in Milton Keynes, instead of the huge vehicles using outdated overhead technology that are proposed. The system must accommodate a much wider range of alternative power options, including hybrid vehicles, inductively charged batteries, hydrogen fuel cells and more esoteric future designs such as cryogenic engines and bio-engineered electric power sources.

6.1075 Alternatives to be considered include linked gyratory systems where the A660 joins both North Lane and Shaw Lane, interconnected on both sides of the Arndale Centre, so that all public transport and emergency vehicles could share the same fully segregated routes. Also, congestion charging and other forms of demand management, because it is essential that Leeds reduces its overall CO₂ emissions. In the transport sector this can only be achieved by a significant modal shift, although the NGT proposals seem unlikely to deliver this.

6.1076 The capital cost of the Scheme should be kept as low as possible, so that a low fare structure could be established and maintained when the route would be

extended to other parts of Leeds. Such an extension could be largely financed from local resources given the very limited access to central Government grants.

Summary of other objections

The material points were:

6.1077 The Applicants have summarised the main objection issues¹⁷⁶¹, of which most have been raised by the objectors that appeared at the Inquiry.

6.1078 Many of the letters of objection were based on standard letters. One of the most widely used of these states the following:

- More than 400 mature trees would be felled and vital green space destroyed, including Headingley Meadow, Monument Moor and Belle Isle Circus;
- Local small businesses would be severely adversely affected;
- Victorian buildings and walls would be partly or completely demolished and the heritage and character of Headingley and Hyde Park would be destroyed.
- The Scheme would lead to currently well used bus services 1 and 6 becoming less frequent.
- The Scheme would not be value for money, costing about £250 million, £77 million from LCC, for 20 trolleybuses on one route.
- There has been too little, and mostly ineffective, consultation about the scheme.

6.1079 The main general issues, other than those related to the LBC and CAC applications, raised in the letters of objection from those not appearing at the Inquiry can be summarised as follows.

¹⁷⁶¹ Document APP/219

Effect on Property

- 6.1080 There would be an impact due to the demolition of listed walls and buildings in CAs and alterations to listed buildings, as well as from the attachment of OLE to buildings.
- 6.1081 The NGT/cycle lane outside Nos 2 to 8 Otley Old Road would prevent access to these properties for deliveries, visitors or emergency vehicles unless the trolley vehicles would be able to overtake parked vehicles. Access and egress from these properties would be made more difficult and dangerous across the NGT lane. This would reduce the marketability and value of these properties.

Consultation

- 6.1082 There has been no official proper consultation with the local residents on the Scheme. At 4 public meetings there has been overwhelming opposition which has not be reflected by the Promoters. The support for the Scheme is based on a questionnaire giving very little detail that was issued in 2009.

Effect on Vehicular Traffic/Pollution

- 6.1083 The Promoters have admitted that the NGT Scheme would make congestion worse. Proposed changes that would add to congestion and increase rat-running include the alterations to the junction of Otley Old Road and Otley Road, the closure of Shire Oak Street, prohibiting right turning movements into St Anne's Road and changes to accommodate the off road section around the Arndale Centre.
- 6.1084 Generally, various road junction closures and prohibited turns would make it difficult for traffic crossing the route and accessing adjacent properties. Delays and rat-running would be increased by the proposed new traffic signals and trolley vehicle crossings. Emergency service vehicles would be compromised by increased congestion in Headingley, with potentially serious consequences.

Effect on Cycling

- 6.1085 Many of the objections submitted that related to concerns about the effect of the NGT proposals on cycling referred to the Leeds Cycling Campaign standard letter. This letter suggests that the proposal has provided for cycling as an afterthought on the most cycled route in Leeds. It further suggests that the Business Case is not aligned to Council objectives which seek to not increase motorised traffic and disregarded the health and cost benefits that investment in cycling offers. It criticises the approach taken in not providing segregated space for cyclists, which is generally recognised as the best way to encourage people to cycle, and failing to adopt the best practice design from Manual for Streets 2 or to comply with guidance document LTN2/08 regarding width of cycling facilities and mitigating the danger to cyclists at pinch points. It suggests that the design is not aligned with the City's cycling strategy and the forthcoming Cycle Super Highway.
- 6.1086 Additional concerns about the effect on cyclists are that the silent articulated trolley vehicles sharing inadequate narrow cycle lanes would not represent a safe cycling environment. The extra-long articulated vehicles would present particular dangers to cyclists due to the lack of physically separated cycle lanes, insufficient bus lane widths to enable the trolley vehicles to safely overtake cyclists within the lane, cyclists being caught on the inside of the trolley vehicles when they are entering a turning manoeuvre and the lack of safe provision for cyclists wishing to make their own turning manoeuvres at some of the junctions.
- 6.1087 Concerns about the route south of Leeds are that the NGT route clashes with that of the only safe identified cycle route southwards. There would be a lack of a safe neutral area between on-street car parking and cycle lanes on Belle Isle Road, which would represent a danger to cyclists, particularly from car doors being opened. The NGT would reduce this space from the current approximate 3m to being immediately adjacent.
- 6.1088 Concerns about the route north of Leeds are that it is a main passage for students and that failure to make provision for cyclists would directly

undermine the investment that Leeds University, Leeds Metropolitan University, Leeds Trinity University, Leeds City College and Leeds Teaching Hospitals NHS Trust are putting into actively encouraging students to choose cycling. Cyclists are considered to have been completely ignored despite it being the most frequently cycled route used by Leeds residents.

Effect on Pedestrians

6.1089 The closure of the Weetwood Lane junction would re-route traffic either past a primary school or a retirement home, both of which are accessed by vulnerable pedestrians. There are 2 high schools (Ralph Thoresby and Lawnswood) directly on the route and 7 primary schools (Cookridge, Holy Name, Ireland Wood, Richmond House, Weetwood, Spring Bank and Rose Court) on or close to the route, which have safety issues.

6.1090 The removal of speed humps and some of the road crossings on the route could result in safety problems. There would also be safety issues where the proposed Headingley off-road section crosses Shire Oak Street, Shire Oak Road and Wood Lane due to the number of pedestrians that use these roads.

Effect on Existing Bus Services

6.1091 The existing bus services (Nos 1, 6, 28, 97 and X84) that use the A660 corridor would be delayed to give priority to the trolley vehicles. It is forecast that the Nos 1 and 6 would be halved as a result of the NGT. The No X84 service carries people from much further beyond Leeds than the NGT proposes and benefits from a limited set-down service from within the Ring Road. Many of the existing bus stops would be moved to less convenient locations to allow for NGT stops to be located. The closure of Weetwood Lane at the junction with the A660 would have an adverse impact on the No 28 bus service.

Effect on Character and Appearance

6.1092 The loss of hundreds of mature trees along the route would spoil the environment for those living in the attractive surrounding areas. The loss of shops and businesses and the closure of roads in the Headingley area would

destroy the functionality of the centre. The demolition of a Victorian house at 6 Wood Lane and historic walls in the Headingley area, together with the loss of green space, would drastically change the character of the area.

Planning Policy

6.1093 The NGT proposal would contravene the Headingley and Hyde Park Neighbourhood Design Statement, as it would negatively impact on the appearance and character of the area.

Cost and Whether Value for Money

6.1094 The £250 million for the NGT includes the expectation that £77 million would be from LCC revenues.

6.1095 The low capacity of the NGT Scheme would not achieve modal change in transport. The aspiration to reduce car traffic by 21% may be a gross overestimate, given that the Bodington Park and Ride site, with only 850 spaces, would be able to accommodate only about 6% of the traffic using the route. After the car park would be full there would be no subsequent reduction in traffic on the route.

6.1096 There would be no dedicated non-stop service to or from the City Centre. The capacity of the trolley vehicles would be between 120 and 160 passengers, with the majority standing. This would provide a poorer service to the elderly, less able, families with children and hospital attendees than the existing bus. The vehicles would be likely to be full at the peak times meaning that there would not be space for others along the route to board. Additional traffic could be attracted to the route.

6.1097 The Bodington Park and Ride to Holt Park part of the route would not be sustainable or viable. The Holt Park Centre does not provide any significant parking and the current bus service is used by too few passengers to justify the benefit of building the additional part of the route. Also, travel times would not be improved for the existing buses as the roads in the Holt Park area do not suffer from very high levels of congestion.

- 6.1098 The Bodington Park and Ride would be unlikely to be attractive to car users who would have to park, walk to the trolley vehicle stop and wait up to 6 minutes to pay a fare for a trolley vehicle, and travel further when they arrive in Leeds City Centre. The cost of the fares would be likely to be similar to the cost of parking in the City Centre and the inconvenience of using the Park and Ride would be likely to outweigh any time saving benefit.
- 6.1099 The benefits suggested have not been proven. In terms of employment, construction jobs would increase but these would be short term. As about 75% of the expected users would be from the existing buses, jobs would be moved from one system to another. Increased 'rat-runs' through quiet residential areas and unsightly overhead wires would not result in any increase in residential prices along the route.
- 6.1100 About 7% of the expected users of the NGT would be from existing walkers and cyclists. This is unlikely to be based on valid quality research, as they would have to give up their preferred mode of transport, which is quick and free, in order to pay and ride on a trolley vehicle after wasting up to 6 minutes to get on, which would not go from their home or to their destination nor provide the exercise of a bike or walking.

Wildlife Habitats and Ecology

- 6.1101 A green corridor that constitutes an entire ecological system on Headingley Hill and central Headingley would be destroyed by the Scheme. The loss of the mature trees would remove the potential for carbon capture and a tree canopy for roosting bats and nesting birds to survive.

Operational Noise and Vibration

- 6.1102 The loss of many mature trees in Headingley would increase the impact of the traffic noise from the A660 on residents as they help to dampen the noise, especially when in leaf.

Construction Impact

6.1103 The route through Headingley would result in massive disruption during the work for the trolley vehicle infrastructure which would cause congestion for years and future problems for surrounding areas.

Design and Operation of the Trolley Vehicle System

6.1104 The trolley vehicle is being promoted for WYCA to be able to run a public transport service independently of bus companies, requiring a TWA Order for a fixed line system. It would be an outdated mode of transport. Worldwide, trolley vehicle services are on the decline. In Canada, Edmonton scrapped its system and Vancouver has the only remaining one. The USA has 5 remaining out of an original 50. There are none in the UK.

6.1105 Once completed, there would be very little chance of alteration, as the route would be inflexible due to the overhead wires. The trolley vehicle would have difficulty overtaking another trolley vehicle or other obstruction. The proposed articulated vehicles could experience similar difficulties in the wet and snow to buses that have been operated on the No 1 route.

6.1106 There is very little information to support the claims that the NGT would be a modern, reliable and integrated form of transport. It would take about 5 years to complete and by that time technological advances would make it outdated with electric buses becoming viable.

6.1107 With regard to it being integrated, there would be separate stops for buses and trolley vehicles, the trolley vehicles would have dedicated lanes and there is no evidence that it would be integrated with existing bus timetables, but would seem to be in direct competition. With the bus stops and trolley vehicle stops being separate and a significant distance apart, those wishing to use public transport would have to decide beforehand which means they would use.

Effect on Businesses and the Economy

6.1108 The proposed development would have an adverse effect on businesses along the route. There would be fewer parking spaces available near a number of shops on the route, including taking the forecourts to the business premises, which would adversely affect their trade, as potential customers would decide to go elsewhere without being able to park. An example is at the West Park shopping centre with road and parking changes, including at Kepstorn Road, making the businesses less accessible for the disabled or non-local patrons.

6.1109 There is substantial evidence of damaged and destroyed businesses because of difficulties related to the construction of similar schemes in Nottingham, Sheffield, Edinburgh and Manchester.

Alternatives

6.1110 The alternatives that many objectors have put forward include the use of hybrid buses which are currently available, would not require the overhead wires, reducing the cost and effect on the environment, and would be a more flexible alternative, being able to be upgraded as technology progresses. Also, they include a park and ride scheme with direct shuttle buses between the site and the City Centre and improvements to provide dedicated cycle lanes to encourage cycling and speed up the journey time into the City centre on a bike.

6.1111 A Quality Bus Contract with existing or new operators would be able to achieve improvements to the bus services. The introduction of pre-paid journeys on buses, such as the Oyster Card scheme in London, would cut journey times by decreasing delays due to boarding. Delays due to conflicts between passengers entering and exiting the buses would be able to be reduced by the use of buses with separate doors.

Other Matters raised

6.1112 The effect of the overhead wires on TV, radio, satellite and broadband could compromise their quality and availability to both residents and businesses.

6.1113 The impact of emissions from the overhead wires on the health of nearby residents and those in nearby schools and businesses.

6.1114 The FRA has not been calculated for a 1 in 100 year plus climate change return period, but a smaller timescale, making it more likely that the area would flood as a result of the Scheme.

7 OTHER REPRESENTATIONS

Representations that appeared at the Inquiry

Anzir Boodoo REP/5

The material points¹⁷⁶² were:

Aims and Objectives

- 7.1 The Scheme is well designed and the risk to the NGT from congestion would be low but not completely absent. The proposals would be justified on the basis of alleviating the operational problems, particularly on the Otley Road corridor, where the high intensity of use is incompatible with the use of single entrance double deck buses with a pay the driver system and no bus priority measures, all of which would be tackled simultaneously by the Scheme.
- 7.2 The Scheme would deliver on all the following basic measures identified in the ITDP Bus Rapid Transit (BRT) Standard:
- Busway alignment, not interfered with by parking or deliveries;
 - Dedicated right of way;
 - Off-board fare collection;
 - Intersection treatments; and
 - Platform-level boarding.
- 7.3 The Scheme would connect 2 corridors through the centre of Leeds, the northern corridor having a very high bus patronage and suffering from severe congestion at peak times and sometimes inter-peak and the southern corridor

¹⁷⁶² Documents REP/005 Representation, REP/005 PoE, REP/005-100, PEP/005-101 and REP/005-102

serving a number of key destinations and parts of Hunslet and Belle Isle Road corridors which have heavy bus traffic.

- 7.4 The current use of single entrance double decker buses in conjunction with the absence of off-bus ticketing, aside from season tickets, and the lack of bus priority on most corridors creates an operationally dysfunctional bus system with boarding times at key stops being long enough for buses to bunch up, causing further delays. By adopting a full rapid transit operation, the Scheme would alleviate these problems on the corridor, as well as provide encouragement for drivers to shift from the car to public transport.

Main Alternative Options considered by Promoters

- 7.5 Infrastructure improvements could deliver reduced journey times with priority, lower impact on other road users, and from other road users, through segregation and conflict management and a better environment for passengers before and after their journey. Insufficient evidence has been provided on alternatives to the central Headingley section behind the Arndale Centre and Hyde Park Corner where the solutions proposed are sub-optimal.
- 7.6 Vehicle improvements could deliver reduced emissions, especially at roadside, and, with multi-door boarding, lower dwell times at stops. The FWY hybrid double deck bus proposal with multi-door boarding should be investigated regarding whether it would be implemented. Its alternative proposal to the Supertram has not been followed through and it should have been implemented already had it been viable or FWY had been serious about providing a faster and more reliable bus service on its own and without the infrastructure investment.
- 7.7 With regard to the technology chosen, alternatives such as diesel hybrids and flash charging have been considered. While trolley equipment is not high tech, it is relatively cheap, reliable and proven.

Likely Impact of Construction and Operation

- 7.8 The construction impact would be lower than that of a tram based scheme, due to there not being a requirement to move services. It is important that the construction is approached in a joined-up manner to minimise disruption.
- 7.9 The impacts of operation would be those which impact on the operation of the service itself, those which impact on other road users and those which impact on non-users. The impacts on non-users would be through visual intrusion, which would be potentially lower than a tram system due to improvements in wiring technology, noise, with some areas having higher levels due to traffic diversions but mostly a reduction due to the replacement of diesel buses, and congestion, which should be ameliorated by the segregation that would be provided and the encouragement of longer distance drivers to use Park and Ride.
- 7.10 The impacts on other road users would be that other bus services would be speeded up through priority measures on Otley Road/Woodhouse Lane and Belle Isle Road and the implementation of M-Card. However, NGT would still have faster boarding times through multiple doors and faster acceleration. Cyclists would gain some improved provision and pedestrians would gain additional crossings on some parts of the route. Logistics operations would be minimally affected due to relocations of some delivery bays. Other road users would mainly be impacted through the implementation of bus priority measures and a small amount of local reductions in parking.

Written Representations

The material points were:

- 7.11 The owner of 265 to 267 Otley Road has requested reassurances about disruption to the businesses of the tenants.
- 7.12 NE's comments are regarding the following:
- The Proposed development as submitted would not damage or destroy the interest features for which the nearby Breary Marsh Site of Special

Scientific Interest (SSSI) has been notified. It therefore does not represent a constraint.

- With regard to the effect on bats, the proposed mitigation is broadly in accordance with the Bat mitigation guidelines and should maintain the population identified in the survey report and a condition to secure the mitigation is recommended.
- Based on the survey for European Protected Species, the proposed development would be unlikely to affect otters.
- There may be opportunities to incorporate features into the design which are beneficial to wildlife, such as the incorporation of roosting opportunities for bats or the installation of bird nest boxes, in accordance with Paragraph 118 of the NPPF and Section 40 of the NERCA.
- There may be opportunities to enhance the character and local distinctiveness of the surrounding natural and built environment; use natural resources more sustainably; and bring benefits for the local community, such as through green space provision and access to and contact with nature.

7.13 Town Centre Securities plc have submitted a representation in respect of the compulsory acquisition of Land Parcel 14061 and potential interface issues between the land at Merrion House, on which a scheme is currently being developed, and Land Parcels 14046 and 14059¹⁷⁶³.

7.14 WYG has raised a number of access issues for themselves and the Arndale Court building which need to be addressed in more detail before it can formally offer its support for the NGT.

7.15 Sport England has made the following comments:

- The replacement of up to 8 playing fields of Leeds University that would be impacted upon by the proposed park and ride facility by a significant compensation package, including the creation of 4 new artificial pitches,

¹⁷⁶³ Document APP/211: Updated Book of Reference

complies in principle with Sport England's playing field policy exceptions E1 and E5 and NPPF paragraph 74.

- Model conditions should be used to ensure that the replacement playing pitches would be provided prior to the commencement of the works to develop the park and ride site, and to ensure that the replacement pitches would be fit for purpose and compliant with Sport England/sport national governing body design and technical guidance.
- 7.16 Verizon Business, formerly MCI-WorldCom International Limited, is a licensed Statutory Utility that has plant in the area concerned and require 24/7 access to its apparatus.
- 7.17 WYAAS recommends a planning condition to secure works to provide an evaluation of the full archaeological implications of the proposed development.
- 7.18 Arla Foods, which has over 25% of its UK workforce based in Stourton, has suggested that the NGT Scheme should be approved on the proviso that LCC enhances the current pedestrian and cycle routes to the proposed Stourton Park and Ride site, thereby increasing the connectivity of local employment and preventing Leeds Valley Park from being a car dominated destination.
- 7.19 The representation by Bramhope & Carlton Parish Council is as a result of its objections not being subject to the necessary Council member approval under section 239 of the LGA1972 for ratification. These objections are based on:
- The disruption along the A660 corridor, including traffic diversions during the construction period;
 - The adverse impact of the NGT on overall travel times for bus users, particularly the No X84 service, and drivers; and
 - The expectation that at a completion of around 2020 NGT would offer no net benefits overall compared to already planned improved bus services.

8 REBUTTALS BY THE APPLICANTS

The material points were:

Matter 1: The aims and objectives of, and the need for, the Scheme

8.1 The majority of objectors do not seek to argue that there is no need to make transport improvements. Some, such as FWY, put forward a strong argument that there needs to be an improved transport network in Leeds¹⁷⁶⁴, and that public transport provision in the NGT corridors is deficient¹⁷⁶⁵. Some, such as NWLTF and its constituent residents' associations, Weetwood Residents' Association and West Park Residents' Association, acknowledge that the northern corridor is congested and that improvements are required. Their concerns include the A660 operating at or near to capacity at peak times, particularly the junction of Otley Road and North Lane, which causes congestion leading to delays of up to half an hour in the evening peak period¹⁷⁶⁶. Others do not seek to dispute the principle of the Scheme¹⁷⁶⁷.

Matter 2: The justification for the particular proposals in the draft TWA Order including the anticipated transportation, regeneration, environmental and socio-economic benefits of the Scheme

8.2 Although there would be an increase in vehicle mileage, as a result of giving priority to public transport vehicles at junctions, and some walkers would use NGT, these matters are well known to the Applicants, have been taken into account, and do not diminish or otherwise have any impact upon the considerable benefits relied upon in support of the application.

¹⁷⁶⁴ Document OBJ/923 SOC: FWY Statement of Case paragraph 14.2

¹⁷⁶⁵ OBJ 923 Mr Turner in cross examination

¹⁷⁶⁶ OBJ 1354 Dr Dickinson in cross examination

FWY

- 8.3 With regard to modal shift, NGT demand source is identified in the Business Case Review¹⁷⁶⁸, where the table shows transfer from car and active modes combined in the same row, whereas in earlier versions of the Business Case those two sources were shown separately¹⁷⁶⁹. The representation of active and car modes is a limitation of the model, particularly given that not all car and active mode trips (eg those within a zone) are represented¹⁷⁷⁰. Although the shift from car and active modes is not separated in the figures set out in the January 2014 Business Case Review, the estimate given of the proportion of transfer from car demonstrates that modal shift is a significant benefit of the Scheme.
- 8.4 In terms of the Merseyside trolleybus system proposals¹⁷⁷¹, it is distinguishable from the NGT proposals in that it was in the late 20th Century and for the following reasons:
- a) Although aimed at relieving congestion in Merseyside, congestion was acknowledged to be relatively low¹⁷⁷². The NGT routes are acknowledged to suffer from significant levels of congestion.
 - b) There was a very low level of development sites along the Merseyside route¹⁷⁷³. In Leeds, there are sites which are likely to benefit, and which are adjacent or close to the route.
 - c) In the Merseyside case, there was no overall support in the Knowsley and Liverpool UDPs¹⁷⁷⁴. In Leeds, there is longstanding support in the UDP for a rapid transit scheme on the north and south corridors which is reaffirmed (in relation to NGT) in the emerging CS, there is UDP support for park and ride sites¹⁷⁷⁵ and there is support in the SEP¹⁷⁷⁶.

¹⁷⁶⁷ For Example Mr Natkus in cross examination

¹⁷⁶⁸ Document C-1 Table 12.4 page 12-28

¹⁷⁶⁹ Document C-2 Table 8.4

¹⁷⁷⁰ Explained by Mr Chadwick in cross examination

¹⁷⁷¹ Documents OBJ 923 FWY/101: Inspectors' Report and FWY/100: SofS Decision

¹⁷⁷² Document OBJ 923 FWY/101 paragraph 431

¹⁷⁷³ Document OBJ 923 FWY/101 paragraph 434

¹⁷⁷⁴ Documents OBJ 923 FWY/101 paragraphs 436 and 439 and FWY/100 paragraphs 8 and 11

¹⁷⁷⁵ Document D-2-9 policies T16 and T17

- d) In Merseyside, alternative routes were available¹⁷⁷⁷ and in the NGT no full alternative routes are suggested.
 - e) In Merseyside no allowance (debit) was made in the Business Case for the possible revenue impact on buses¹⁷⁷⁸. The NGT Business Case includes a debit entry for impact on bus service providers¹⁷⁷⁹.
- 8.5 The total cost of the Scheme is expressed in 2010 prices, but it includes an allowance for inflation¹⁷⁸⁰. The figures quoted are for capacity in the peak hour, whereas passengers travel throughout the day. By restricting consideration to capacity, no account is taken of journey time savings, quality improvements and punctuality benefits. The DfT require a full business case analysis to be undertaken in order to understand the benefits of a project.
- 8.6 The transport impacts on business user disbenefits in the operational phase of £223.6 million cost to business is taken from the Transport Economic Efficiency (TEE) table and includes the impact on private transport operators. If that element were to be removed the figure for business vehicles would be £41 million (cost to business). Also, the model does not allow goods vehicles to change the times of day at which they travel and therefore overstates the impact on goods vehicles¹⁷⁸¹. Furthermore, overall benefits to all users far outweigh the disbenefits. The overall present value of economic efficiency is £396 million¹⁷⁸².

FSB

- 8.7 The decision to proceed with a trolley vehicle system was made before the advice given by DLA Piper to the Promoters in September 2009, as it was already the preferred option¹⁷⁸³. Therefore, there is no evidence to show that

¹⁷⁷⁶ OBJ 923 Mr Brooks acknowledged in cross examination that the NGT Scheme can be distinguished from the Merseyside proposal on the planning policy support point

¹⁷⁷⁷ Document OBJ 923 FWY/101 paragraphs 462 and 464

¹⁷⁷⁸ Documents OBJ 923 FWY/101 paragraph 477 and FWY/100 paragraph 19

¹⁷⁷⁹ Document C-1 Table 17.1

¹⁷⁸⁰ Document C-1 Table 19.1

¹⁷⁸¹ Document APP-7-2: Mr Chadwick PoE paragraphs 3.68 and 3.69

¹⁷⁸² Document C-1 Table 17.1

¹⁷⁸³ Document C-1 paragraph 4.15 and Mr Henkel in re-examination

such a system was chosen because it can be consented through the TWA 1992 procedures.

Professor Todd

8.8 The use of the UDM has been commended by the DfT¹⁷⁸⁴, and there is no reason to disagree with its approach.

Matter 3: The main alternative options considered by the Promoters (including alternative modes to bus, and alternative means of propulsion) and the reasons for choosing proposals comprised in the Scheme

FWY

8.9 The references given by FWY to a number of cases¹⁷⁸⁵ concern the circumstances in which consideration of alternatives is required when determining a planning application. It is acknowledged that the Scheme would cause some (less than substantial) harm to heritage assets and on that basis consideration of alternatives is relevant. Alternatives have been considered, and that consideration has been thorough. That harm cannot be avoided by pursuing some alternative scheme (whether route alignment, technology, means of mitigation or other alternative) as there is no fundable and deliverable alternative which meets the Scheme objectives.

8.10 The LCA considered in the Business Case¹⁷⁸⁶ is a double decker hybrid bus. The Review of Technology Alternatives¹⁷⁸⁷ included consideration of catenary free electric buses.

8.11 With regard to FWY's NBFL, an improved bus service would be welcomed, but would not meet the Scheme objectives. FWY's suggested investment of £97 million in a fleet of 260 new 'Routemaster' buses and in new smart card technology would simply address the quality of the buses, despite FWY

¹⁷⁸⁴ Document C-1-18 paragraph 2.13

¹⁷⁸⁵ For Example Case *Langley Park School for Girls v LB of Bromley* [2009] EWCA Civ 734 and Document L-APP-8: Case *Forge Field Society v Sevenoaks DC* [2014] EWHC 1895

¹⁷⁸⁶ Documents C-1 page 5-7, Table 5.1 and REB-2 OBJ/1719 Rebuttal to Professor Bonsall paragraph 2.110

referring to them as 'second to none' on the NGT corridors¹⁷⁸⁸. There is no basis on which it can credibly be contended that a fleet of new buses would materially ameliorate the existing problems of punctuality, reliability and journey time.

- 8.12 FWY has indicated that its decision to invest in the new buses depends on the following three pre-conditions¹⁷⁸⁹: the outcome of consultation, the allocation of funds from the WYTF, and either the cancellation of NGT or a decision being made on the TWA Order, together with the additional factor that the WYCA should enter into the West Yorkshire Bus Partnership Framework¹⁷⁹⁰. This creates considerable uncertainty as to whether FWY's proposals would go ahead as there are conditions attached and differences of opinion over those conditions.
- 8.13 In terms of the previous record of FWY, First Group communicated with the DfT before the decision was made to withdraw funding for Supertram. The National Audit Office Report¹⁷⁹¹ indicates that First Group identified Leeds as one of the cities for which its brand of bus rapid transit 'ftr' was particularly suitable. This makes it clear that First Group did communicate with the DfT in 2004, put forward ftr as a bus based alternative to the tram and ftr was only introduced on one route in Leeds, being withdrawn from that route after a short period. The Atkins report, commissioned by the DfT and produced in the autumn of 2005¹⁷⁹², refers to First Group demonstrating 'ftr'¹⁷⁹³, and that it had identified ten corridors (including those served by the Supertram routes) where it felt it might be possible to introduce ftr along with associated bus priority measures¹⁷⁹⁴.

¹⁷⁸⁷ Document C-1-1

¹⁷⁸⁸ OBJ 923 Mr Cheek oral evidence at the Inquiry

¹⁷⁸⁹ OBJ 923 Mr Turner oral evidence at the Inquiry

¹⁷⁹⁰ OBJ 923 Mr Alexander oral evidence at the Inquiry

¹⁷⁹¹ Document G-4-93 paragraph 11

¹⁷⁹² Document G-4-55

¹⁷⁹³ Document G-4-55 paragraph 3.81

¹⁷⁹⁴ Document G-4-55 paragraph 7.3

- 8.14 FWY have over 900 buses¹⁷⁹⁵ of which 22 are hybrid, bought with the aid of Government grants from the Green Bus Fund to bridge the gap between the cost of a diesel bus and a hybrid bus. The new Routemasters would cost more to acquire and carry approximately the same number of passengers, albeit with fewer seats¹⁷⁹⁶, than existing buses. FWY has not explained how, when it is not viable to acquire a hybrid bus without grant, it would become viable to do so with a more expensive vehicle. No business case has been provided that includes an estimate of patronage figures.
- 8.15 No information has been given of a consultation programme, or the criteria against which the outcome of the consultation exercise is to be judged¹⁷⁹⁷. FWY's position on the WYTF is also unclear¹⁷⁹⁸. The position on whether the decision is dependent upon the cancellation of NGT is also unclear. The pre-condition regarding a bus partnership agreement is also vague and incoherent and the documents submitted by FWY¹⁷⁹⁹ do not specify the terms of any bus partnership agreement and no term has been identified of any partnership agreement upon which NBFL is dependent. FWY have not been prepared to reveal its business plan or equivalent that it has suggested had been prepared which included patronage and revenue forecasts and operating costs and the fare structure is not known and has not been modelled¹⁸⁰⁰. One of the reasons given by the Supertram Inspector, and endorsed by the SofS¹⁸⁰¹, for rejecting the alternative of enhanced buses was that those proposing it had not put forward a business case. Furthermore, the NBFL proposal is undeveloped¹⁸⁰² and journey time savings (if any) that would arise have not been calculated¹⁸⁰³.

¹⁷⁹⁵ Document OBJ/923/03: Mr Turner PoE Table 1 pages 3 to 4

¹⁷⁹⁶ Document OBJ/923/03: Mr Turner PoE Table 11: a conventional diesel bus has 72 seats, a new Routemaster 62

¹⁷⁹⁷ OBJ 923 Mr Alexander in cross examination suggested that there was no criteria

¹⁷⁹⁸ OBJ 923 Mr Turner oral evidence to the Inquiry suggested that the decision to introduce NBFL was dependent on the allocation of particular funds to bus priority measures

¹⁷⁹⁹ Documents OBJ 923 FWY/149 to FWY/152

¹⁸⁰⁰ OBJ 923 Mr Turner oral evidence to the Inquiry

¹⁸⁰¹ Documents D-6-2 paragraph 69.3 and G-4-1 paragraph 10

¹⁸⁰² For example, its environmental impacts have not been anywhere assessed

¹⁸⁰³ OBJ 923 Mr Turner in cross examination stated that journey time savings would depend in

- 8.16 Even if FWY did invest in some new buses it remains entirely unclear what benefits this might deliver. Much of the claimed benefits would arise as a result of anticipated reductions in dwell times, which would be dependent upon ticketing and staffing arrangements. FWY has not budgeted for any additional staff¹⁸⁰⁴, and has not devised a ticketing strategy whether in terms of the level of fares or fare collection. Although it has made reference to alternative technologies such as catenary free electric buses¹⁸⁰⁵, it does not propose the use of such vehicles on the NGT corridors. This could confirm the Promoters' view that catenary free electric buses do not, at present, represent a realistic alternative. The use of NBFL as an 'interim solution' is unacceptable in that it would not solve the acknowledged problems.

NWLTF

- 8.17 The contention made that WebTAG guidance on alternatives has not been followed¹⁸⁰⁶ appears to be based upon a misunderstanding of guidance and practice to assume that the whole process has to be restated at each iteration of the Business Case. Alternatives have been thoroughly considered from the preparation of the initial Business Case in 2007¹⁸⁰⁷, consideration of appropriate route corridors in 2009¹⁸⁰⁸, the MSBC 2009¹⁸⁰⁹, and a review of technology alternatives in 2014¹⁸¹⁰. The combination of these documents fulfils the objectives of WebTAG guidance.
- 8.18 The effectiveness of the suggested interventions, which include junction improvements, a northbound bus lane in Headingley Lane and a short stretch of bus lane on Headingley Lane in the vicinity of St Columba's Church¹⁸¹¹, has not been assessed by NWLTF and would not provide a solution to the identified

part on highway infrastructure improvements (if any) on the route

¹⁸⁰⁴ OBJ 923 Mr Turner in cross examination

¹⁸⁰⁵ Document OBJ 923 FWY/155 for example

¹⁸⁰⁶ Documents OBJ 1719 NWLTF/122 paragraph D5, and NWLTF/128 closing submissions paragraph 12

¹⁸⁰⁷ Document C-5-1

¹⁸⁰⁸ Document C-4-2

¹⁸⁰⁹ Document C-4: Mode options are considered in chapter 5, in particular Table 5.1

¹⁸¹⁰ Document C-1-1

and accepted deficiencies. No clear alternative is advanced by NWLTF, whether an Optare Metrodecker or other vehicle, let alone one which would be funded, or has been demonstrated to be able to provide a reliable service on the NGT corridors. NWLTF has referred to information contained in the proofs of evidence of other objectors¹⁸¹²

Matter 4: The extent to which the Scheme would be consistent with the National Planning Policy Framework, national transport policy, and local transport, environmental and planning policies

8.19 Objectors who have presented the Scheme's impact on a particular area of Leeds cannot then claim to present a balanced view as to the competing merits and de-merits of the whole scheme. It follows that their calls for the whole scheme to be rejected on account of the localised harm they identify cannot credibly carry any significant weight¹⁸¹³. Additionally, most of the residents' groups concerned with the impact of the NGT north line rely on local CA appraisals and management plans to argue that the Scheme would be unacceptable¹⁸¹⁴, but they endorse the implementation of NGT¹⁸¹⁵, being entirely consistent with LCC's strategic policies. Those who simply ignore them cannot credibly claim that their analysis should be given any significant weight¹⁸¹⁶.

¹⁸¹¹ Document OBJ 1719 NWLTF/128 paragraph 13(iii)

¹⁸¹² Document OBJ 1719 NWLTF/128 paragraph 14(iii): footnote 9 in Mr Sleeman's PoE Optare press release

¹⁸¹³ See for example OBJ 1641 Ms Carey Jones who confirmed in cross examination that SHCA's analysis was 'wholly negative' and SHCA's assertion at paragraph 44 that it 'believes that there is an asymmetry between the costs and benefits of the Scheme' but it has made no attempt to undertake any analysis which could properly support such a conclusion, or be tested under cross examination; and OBJ 1727 Mrs Pickering who confirmed that in reaching its conclusion that the Scheme should be rejected it had paid no regard to the Development Plan policy support for the Scheme

¹⁸¹⁴ For example Document OBJ/1719 SOC page 21; OBJ 1641 Ms Carey Jones' oral evidence to the Inquiry relying on Document D-5-3 page 20: Headingley Hill, Hyde Park and Woodhouse Moor CA Appraisal and Management Plan

¹⁸¹⁵ For example Documents D-5-3 page 27 and D-3-3 (Hyde Park) paragraph 17.7.5

¹⁸¹⁶ For example Document OBJ 1719 NWLTF/128 paragraph 45

- 8.20 The argument that, if the current proposal does not follow the route shown in the UDP, it is contrary to the policy is wholly without merit¹⁸¹⁷. The UDP policy is *'about supporting and protecting public transport priorities'*¹⁸¹⁸ and a proposal, such as NGT, which follows the route as indicated, save for a minor variation (eg in the route from Belle Isle to Stourton) accords with the policy. The fact that there is a minor variation does not rob a proposal of that support. In any event the changes to the key diagram to the draft CS ensure that the current NGT proposal is aligned with up-to-date planning policy.
- 8.21 The policy set out in paragraph 74 of the NPPF is designed to protect existing open space. UDP policy T17¹⁸¹⁹ allocates the sites for park and ride and the competing priorities of protecting open space and using the land to provide park and ride facilities had been resolved in favour of park and ride in the process of preparation and adoption of the plan. It would undermine the planned system to undertake the assessment again at the development management stage. Furthermore, the playing fields would be replaced.

NWLTF

- 8.22 It is necessary to consider the whole route when considering the contribution that NGT would make to growth. The ability to provide reliable, punctual and relatively rapid transit into the City Centre would facilitate and assist in achieving growth in the City Centre, and in south Leeds. NWLTF has ignored the clear policy support for NGT¹⁸²⁰. In relation to UDP policy T16¹⁸²¹, the test implied by the criterion at the fourth bullet point is that a proposal for a park and ride site should be acceptable in terms of travel impacts, not that every aspect of an associated scheme has to result in traffic reduction. In any event, there is predicted to be a reduction in car trips¹⁸²².

¹⁸¹⁷ Mr Natkus in oral evidence

¹⁸¹⁸ Mr Speak in cross examination

¹⁸¹⁹ Document D-2-9 page 128

¹⁸²⁰ Document OBJ/1719 PoE3: Mr Ray PoE

¹⁸²¹ Document OBJ 1719 NWLTF/128 paragraph 32

¹⁸²² Documents OBJ 1719 NWLTF/128 paragraph 36(ii), and NWLTF/122 paragraph C 15 page

- 8.23 With regard to efficiency, the TEE table¹⁸²³ in the Business Case demonstrates its effect on efficiency would be positive.

A660 Joint Council

- 8.24 The A660 JC's suggestion that economic growth is to be discouraged is wholly at odds with all relevant Government policy. Its approach to the undeveloped (privately owned) land at Headingley is that various policies relating to the protection of green space and other open space apply and should prevail, even though there is no right of public access to this land. The balancing exercise of reconciling the desire to protect open space and to provide for public transport was carried out in the plan making process. The fact that a public transport route can cross the open land at Headingley is established by UDP policy T13¹⁸²⁴, the UDP proposals map¹⁸²⁵, and the draft CS key diagram¹⁸²⁶.

WRA

- 8.25 In terms of UDP policy N1, which protects green space, it has to be read together with the rest of the plan. If a site is allocated, as for example is the Bodington Park and Ride site, the allocation prevails. Similarly the decision to identify a route, originally for Supertram now for NGT, was taken in the plan making process, for example the route is shown as bypassing the centre of Headingley. The decision to route a public transport system behind the Arndale Centre in Headingley has been taken in the plan making process. To revisit the principle would undermine the plan led system.

SHCA

- 8.26 With regard to UDP policy S8¹⁸²⁷, which seeks to maintain and enhance neighbourhood shopping by a particular means, namely co-ordinating public and private sector initiatives, there is no evidence that NGT would have any

¹⁸²³ Document C-1 Table 17.1

¹⁸²⁴ Document D-2-9 page 124

¹⁸²⁵ Document D-2-8 Map 16

¹⁸²⁶ Document APP/159

¹⁸²⁷ Document D-2-9 page 229

impact on any such initiatives. In any event, NGT would have marginal retail impact on the neighbourhood shopping centre at Hyde Park¹⁸²⁸.

FWY

- 8.27 The principle of a trolleybus system on the route proposed is established in the relevant planning policies subject to detailed consideration of the particular scheme proposed and the proposal, as a new modern form of public transport, accords with UDP policy T12, and with T13 in that it (broadly) follows the route shown on the UDP proposals map¹⁸²⁹. Amongst the measures envisaged by UDP policy T15 was the provision of bus lanes¹⁸³⁰, and bus lanes would be 'enlarged' and their length and hours of operation would be increased by the proposals¹⁸³¹. The park and ride element of the proposals accords with UDP policy T17.
- 8.28 The NGT is defined in the glossary of the draft CS and Spatial policy 11 makes plain that the interventions which are to be supported include those identified on the key diagram, such as NGT¹⁸³². The Scheme is therefore consistent with and supported by this policy. The NGT proposal also accords with the LTP, the Leeds City Region Transport Strategy, and the SEP¹⁸³³.
- 8.29 If FWY's assumption that the introduction of NGT would have an adverse impact on existing bus services is misplaced, its analysis no longer stands. NGT would have a beneficial impact on public transport services overall, and as a result there is no basis for this assumption. Furthermore, even if there would be some adverse impact on existing public transport services (for example if the frequency on bus route Nos 1 and 6 were halved), that impact would not undermine or alter the planning policy support for the Scheme.

¹⁸²⁸ Mr Speak in re-examination

¹⁸²⁹ OBJ 923 Mr Brooks agreed in cross examination

¹⁸³⁰ Document D-2-9 UDP paragraph 6.4.14

¹⁸³¹ Document APP/120 summary pages 2 and 3

¹⁸³² Document APP/206

¹⁸³³ OBJ 923 Mr Brooks in cross examination

There is no policy which states that public transport intervention which has an adverse impact on buses is to be resisted¹⁸³⁴.

8.30 With regard to paragraph 31 of the NPPF, which indicates that local authorities should work with, amongst others, transport providers when developing strategies, FWY had the opportunity to, but did not, participate in the UDP process and the CS process. It made representations on the LTP but did not suggest that NGT was an inappropriate solution¹⁸³⁵.

8.31 Supporting text remains part of saved local plans¹⁸³⁶. The NPPF is material to any decision taken both on whether to make the Order, and on whether to direct that planning permission be deemed to be granted pursuant to section 90(2A) of the Town and Country Planning Act 1990.

Matter 5: The likely impact on the public, businesses and the environment of constructing and operating the Scheme

Noise

8.32 None of the objectors have presented any evidence to suggest that the noise assessment undertaken by the Promoters was wrong, either in terms of its methodology or its conclusions. No evidence has been produced to demonstrate that LCC would not properly discharge its environmental protection functions, even though it is one of the Scheme Promoters. It is entirely proper for the noise assessment to use the output of the LTM in order to assess the Scheme's likely significant environmental impact. The LTM confidence limit of plus or minus 30% is in relation to NGT patronage and not traffic flows more generally. In any event, predicted traffic flows used for the purposes of environmental assessment will almost inevitably rely upon the output of a model which will have a confidence limit, and it is entirely

¹⁸³⁴ OBJ 923 Mr Brooks in cross examination

¹⁸³⁵ OBJ 923 Mr Alexander PoE Appendix F: FWY's representations on the LTP

¹⁸³⁶ Document L-APP-4: Case R (*Cherkley Campaign Group Ltd*) v *Mole Valley DC* [2014] EWCA Civ 567 Richards LJ at [18]

appropriate to adopt the central case when assessing likely significant effects¹⁸³⁷.

- 8.33 There is clear policy support for the proposition that noise impact diminishes as receptors become used to a noise source, ie that 'habituation' is relevant to the determination of likely noise impact¹⁸³⁸. The existing noise profile is set out in the ES¹⁸³⁹. The impacts are set out in detail¹⁸⁴⁰. Also, the well-established noise mitigation measures set out in the CoCP would be effective and LCC would seek rigorously to enforce the code¹⁸⁴¹. The worst case scenario is concerned with noise generation and the 'average case' was in relation to traffic flows derived from the LTM¹⁸⁴².

Air Quality

- 8.34 Professor Andrews' evidence is not based on the most up-to-date evidence ie Document B-2. The model used is '*recommended in guidance*'¹⁸⁴³. The concerns as to the Scheme's air quality impact appear to stem in large part (if not entirely) from a belief that the Scheme would cause 'complete traffic chaos'¹⁸⁴⁴. Professor Andrews has no apparent traffic management or junction modelling expertise and his assertions as to the Scheme's traffic impacts are countered by the Applicants' analysis¹⁸⁴⁵. The ES shows that the adjusted

¹⁸³⁷ Document APP/208

¹⁸³⁸ Document E-4-4: DMRB Volume 11 Section 3 Part 7 paragraph 3.37: '*A change in road traffic noise of 1 dB LA10,18h in the short term (eg when a project is opened) is the smallest that is considered perceptible. In the long term (typically 15 years after project opening), a 3 dB LA10,18h change is considered perceptible. The magnitude of impact should, therefore, be considered different in the short term and long term*'; and Mr Forni confirmed (unchallenged) in cross examination that he had assessed the noise impacts of the Scheme in accordance with the guidance

¹⁸³⁹ Document B-4 Noise Technical appendix Annex B sets out baseline survey results

¹⁸⁴⁰ Documents A-08e-2 and B4: Technical Appendix I – Noise and Vibration; and APP-13-2 Mr Forni PoE

¹⁸⁴¹ Mr Forni in cross examination rejecting the assertion that there would be a conflict of interest

¹⁸⁴² Document APP-13-2: Mr Forni PoE at eg paragraphs 4.10, 5.20, 5.22, 5.27 and 8.4; and Mr Forni's reference to average case was in response to a question in cross examination about traffic flows

¹⁸⁴³ Document OBJ/1637-100: Italicised text under Response 1

¹⁸⁴⁴ Document OBJ/1637 SOC paragraph 1.4.14 at the top of the third page of text and the following heading

¹⁸⁴⁵ Documents APP-6-2 and APP-6-3

model results for Headingley are within 0.7% of the NO₂ measured value and 2.8% of the measured PM₁₀ values respectively¹⁸⁴⁶. The evidence before the Inquiry shows that Leeds does meet air quality standards on NO₂, ozone and PM¹⁸⁴⁷ and the Headingley monitoring station does not have exceedences in the UU 24 hour PM₁₀ limits¹⁸⁴⁸. It is not necessary for the ES to assess the Scheme's impact on SO₂, CO, butadiene and ozone¹⁸⁴⁹. There are no EU CO emission standards¹⁸⁵⁰.

- 8.35 With regard to Professor Griffiths, the ES does not assess the Scheme's impact in terms of road surface erosion and brake and tyre wear because the impact is not likely to be significant¹⁸⁵¹. He is not in a position to compare the merits/demerits of alternative technologies, for example the environmental impacts of battery-based buses compared to the impact of remote electricity generation for NGT¹⁸⁵².
- 8.36 FWY has submitted no evidence at all to support any of the numerous assertions that it has made. Its assertion that, because some of Leeds' NO₂ monitoring stations were more than 15m from the nearest roadside, the readings at those locations were likely to be lower than at roadside locations is directly contrary to what is said in the ES¹⁸⁵³ ie some monitoring stations, although further than 15m from the nearest roadside, are located close to major roads with high traffic volumes and therefore monitored values may be higher than actual background concentrations.

¹⁸⁴⁶ Document B-2 page 65 Table A.4 and Table A.6 (Site A3- Headingley); and Document REB-2 OBJ1637 response 2: The model adjustments follow DEFRA guidance

¹⁸⁴⁷ Document B-2 page 25 Table 3.4 and Table 3.5 (NO₂ and PM); and Document REB-2 OBJ 1637 response 11 for Ozone and OBJ 1637 Professor Andrews' Rebuttal: *'I am quite happy to accept that there is no significant impact of the NGT on ambient NO_x then there will be no impact on ozone ...'*

¹⁸⁴⁸ Document B-2 page 5 Table 1.1 allows 35 days per years where 24 hour mean concentrations can be above 50ug/m³; Table 3.3 shows that this has not been exceeded (the relevant number of exceedences are shown in brackets)

¹⁸⁴⁹ Document OBJ/1637-100 response 10: *'I did not say that these pollutant[s] were important'*

¹⁸⁵⁰ Document OBJ/1637-100 under 'NGT rebuttal argument 6'

¹⁸⁵¹ Document REB-1 OBJ0728 paragraph 2.16

¹⁸⁵² Document REB-1 OBJ0728 paragraph 2.16.3

¹⁸⁵³ Document OBJ 923 FWY/159: FWY closing submissions paragraph 249; and Document

Carbon

- 8.37 The assertion that by giving priority to NGT at junctions, other vehicles (private vehicles and goods vehicles) would divert, and therefore there would be a very small increase in greenhouse gas emissions is set out in the Promoters' evidence¹⁸⁵⁴. This assessment is based upon the current grid energy mix¹⁸⁵⁵ and, when considered in terms of emissions per person km travelled, NGT provides a carbon efficient means of transport per journey¹⁸⁵⁶.
- 8.38 FWY's submissions are not supported by any evidence eg the assertion that 76g per passenger km for bus or coach is a '*more reasonable estimate*'¹⁸⁵⁷ for carbon emissions than that put forward in the ES. The Carbon ES methodology is beyond credible challenge, including its reliance on Government-backed emission factors¹⁸⁵⁸.

Landscape, townscape and visual amenity

- 8.39 Many objectors do not agree with the conclusions set out in the ES but no one has sought to undertake a remotely comparable analysis of the Scheme's likely landscape impacts. FWY refer to OLE infrastructure in other cities¹⁸⁵⁹, but each scheme will turn on its own merits. OLE is not necessarily harmful, it has become an accepted part of the streetscene in many historic European cities¹⁸⁶⁰ and the fixings would not be obtrusive¹⁸⁶¹. Just because the stops would be visible does not mean that they would be significantly harmful to the character and appearance of the area eg the proposed new stop outside the

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¹⁸⁵⁴ Document APP-7-2: Mr Chadwick PoE paragraph 3.98

¹⁸⁵⁵ Documents APP-7-2: Mr Chadwick PoE paragraph 3.98 and APP-15-2: Mr Leather PoE paragraph 4.24 with increased use of renewable sources there is an opportunity to reduce emissions

¹⁸⁵⁶ Document APP-15-2: Mr Leather PoE paragraph 8.22

¹⁸⁵⁷ Document OBJ 923 FWY/159: FWY closing submissions paragraph 262

¹⁸⁵⁸ Document A-08c-2 paragraph 2.8ff and paragraph 2.18 for emission factors

¹⁸⁵⁹ Document OBJ 923 FWY/159: FWY closing submissions paragraph 327

¹⁸⁶⁰ Document D-2-5 paragraph 159.9

¹⁸⁶¹ Document B-13 page 42; Document G-4-52 for NGT information paper A3: Land & Property - Building Fixings and Overhead Line Equipment; Document A-08k Urban Design and Access Statement page 50; and Document G-4-88 the Manchester 2CC Inspector's report paragraph 10.25

Three Horseshoes pub which, together with accompanying landscape proposals, would create a new focus to the local centre¹⁸⁶². The impact of the stops is assessed in the ES as having a simply contemporary design¹⁸⁶³.

- 8.40 The criticisms of the photomontages concern matters such as sky colour and the presence/absence of ephemera such as litter. However, they are fit for purpose in that they give a visual representation of the Scheme at various points along its route. There is no basis to the assertion that the residents of Hyde Park are more sensitive receptors than other residents in Leeds, as no explanation has been given why, for example, car ownership levels in an area might affect local residents' sensitivity to built development. The evidence presented by the Promoters assesses the Scheme's likely impact on trees in great detail¹⁸⁶⁴.

Land use, including effects on commercial property and the viability of businesses, and community facilities

- 8.41 With regard to Ms Howard Long's main concerns, one of which is regarding access to the car park at the rear of the premises, it is shared by Mr and Mrs Baskind, but the evidence demonstrates that the junction of Shaw Lane and Otley Road would function safely and would not materially increase queuing past the entrance to the car park¹⁸⁶⁵. The Promoters have however said that they will consider a yellow box junction should that prove necessary¹⁸⁶⁶. There is no legal right to use the car parking spaces to the front of the property¹⁸⁶⁷, and there is no evidence to suggest that the loss of the spaces (access/exit from which requires a reversing movement either from or into the A660) would materially affect the operation of the business.

¹⁸⁶² Document APP-10-2: Mr Walker PoE paragraph 5.18

¹⁸⁶³ Document APP-10-2: Mr Walker PoE paragraph 3.17

¹⁸⁶⁴ Document APP-10-2: Mr Walker PoE paragraphs 6.1 to 6.11 and 10.12; Document A-08i Arboricultural survey; and Document APP/183 quantifying tree losses in CAs

¹⁸⁶⁵ Document APP-6-2: Mr Robertson's PoE paragraph 5.81ff and Document APP-6-3 Appendix 6 page 17

¹⁸⁶⁶ Document REB-1 OBJ1388 paragraph 2.5

¹⁸⁶⁷ OBJ 1388 Mr Nabarro in cross examination; and Document REB-1 OBJ1388 paragraph 2.3

- 8.42 Mrs Carey-Campbell's main concerns relate to the availability of parking and to access to her premises at 265A Otley Road, which would be maintained and deliveries would continue to be made. In addition, unrestricted parking would be maintained immediately outside 265 Otley Road¹⁸⁶⁸.
- 8.43 In terms of the WRA's concerns about the effect upon on-street parking spaces in the Far Headingley Area, whichever figure is accepted on the number of spaces affected¹⁸⁶⁹, the impact cannot be said to be unacceptable.
- 8.44 HCML's case that DF7 would have an unacceptable impact on Headingley Castle is not based on an assessment of the Scheme's overall benefits versus its overall impacts, but a comparison between DF2 and DF7. Furthermore, HCML says it would withdraw its objection if the alignment was returned to DF2 and three other conditions were met (fencing, tree screening and construction access)¹⁸⁷⁰. The Promoters have produced detailed evidence setting out the physical differences between DF2 and DF7¹⁸⁷¹ and explained in detail the basis of the topographical surveys undertaken¹⁸⁷². DF7 would not have a significantly greater impact than DF2 whether in terms of tree loss, noise, security, ecology or heritage¹⁸⁷³. The gradient of the private access drive would be improved, making it easier for all types of user¹⁸⁷⁴.
- 8.45 The Promoters have consulted with the residents of Headingley Castle¹⁸⁷⁵, a consultation response form had been submitted in December 2012, and the Inquiry has been informed of HCML's concerns. The Supplementary Information to the ES reaches a sensible conclusion as to the setting of Headingley Castle¹⁸⁷⁶ (identified as the landscaped grounds, enclosed gardens and woodland) and there is no dispute that the main views of the Castle are to

¹⁸⁶⁸ Document A-13 Sheet 7

¹⁸⁶⁹ Document REB-2 OBJ1354 Appendix B

¹⁸⁷⁰ Document OBJ/461 PoE section 12

¹⁸⁷¹ Document G-4-91

¹⁸⁷² Document REB-2 OBJ0461

¹⁸⁷³ Document REB-1 OBJ0461

¹⁸⁷⁴ Document APP/192 Appendix E Advice Note AN65, July 2014 summary section 4

¹⁸⁷⁵ Document REB-1 OBJ0461 Appendix 1: meeting 3 July 2013; and Document APP/193: meeting 28 May 2013

¹⁸⁷⁶ Document B-13 page 126

the south and west. The level of impact is a matter of judgment and HCML would not object to DF2.

Open space and recreational facilities

- 8.46 The route across Woodhouse Moor has been carefully chosen as being preferable to on-road running for a number of reasons including the protection of trees on the Moor¹⁸⁷⁷. Whilst the Scheme would be harmful in some respects (land take and severance), judged against the LQP standard NGT would improve Woodhouse Moor by in particular the restoration of the extensive area of hard surfacing to the north of the Marsden statue to amenity grassland, the greening of the lower part of the Moor with a reinforced grass surface, the extensive tree planting, the provision of a new children's playground, the introduction of signage and the refurbishment of the access points¹⁸⁷⁸. The amount of open space in Hyde Park and Woodhouse presented in the ES is correct¹⁸⁷⁹.
- 8.47 The impact of NGT on the open land through which it would pass to the rear of St Columba's Church is not concerning public open space¹⁸⁸⁰ and it does not therefore fall for assessment under the LQP standard. The new pocket park in Headingley, would help to address the acknowledged shortfall of public open space in Headingley¹⁸⁸¹ and it would meet the LQP standard¹⁸⁸².
- 8.48 The need to take open land at the Clarendon Road/Woodhouse Lane junction is to give additional highway space to allow traffic to be stored prior to turning right into Clarendon Road without obstructing through traffic, which would have to be north of the junction¹⁸⁸³.

¹⁸⁷⁷ Document APP-10-2: Mr Walker PoE paragraph 3.10 page 10

¹⁸⁷⁸ Document APP-11-2: Mr Flesher PoE and Table 2.2

¹⁸⁷⁹ Document APP/212

¹⁸⁸⁰ Confirmed by Mr Natkus, agent for the landowners, in cross-examination of Mr Flesher and by signage on site

¹⁸⁸¹ Document B-5: Open Space Technical Appendix Table 3.1 page 10 and paragraph 2.10 page 11

¹⁸⁸² Document APP-11-3: Appendix 1 to Mr Flesher PoE pages 7 to 9

¹⁸⁸³ Mr Smith in re-examination

- 8.49 With regard to the Scheme's impact on the Dales Way, a long distance walk of about 80 miles from Bowness on Windermere to Ilkley, the Leeds link starts at the Marsden monument on Woodhouse Moor. The Scheme would deliver landscape benefits to Woodhouse Moor and would not require the Leeds link to be stopped up or diverted or in any way hinder access to those who wanted to start or finish the walk at the Marsden statue¹⁸⁸⁴.
- 8.50 The Scheme's impact on Belle Isle Circus is assessed in the ES¹⁸⁸⁵ as being limited¹⁸⁸⁶ and beneficial when measured against the LQP Standard¹⁸⁸⁷.

Statutory Undertakers

- 8.51 With regard to investigations of the Statutory Undertakers' apparatus, C3 requests have been made¹⁸⁸⁸ and it is not possible at this stage in the process to make a C4 request.

Matter 7: The effects of the proposed trolley vehicle system on motorists, cyclists and pedestrians of constructing and operating the Scheme

Pedestrians

- 8.52 With regard to concerns about safety on Whitfield Way, it was considered in the safety audit, which advised that through the pedestrian area the track should be clearly demarcated¹⁸⁸⁹. The streetscape proposals would provide demarcation between the vehicle track and pedestrian routes¹⁸⁹⁰. The measurements of street widths given in the application documents have been agreed in a statement of common ground¹⁸⁹¹.
- 8.53 Concerns that the left turn be omitted to enable an additional pedestrian crossing to be provided at the Hyde Park Corner junction, cannot be addressed

¹⁸⁸⁴ Document APP/194

¹⁸⁸⁵ Document A-08e-1 pages 464 to 479

¹⁸⁸⁶ Document A-08e-1 Construction impacts assessed at paragraph 5.525; operational impacts at paragraphs 5.527 to 5.536 and visual impacts at 5.5.50 page 479

¹⁸⁸⁷ Document APP-11-2: Mr Flesher PoE page 10 and Document APP-11-3: Appendix

¹⁸⁸⁸ Document A-08g-3 paragraph 3.1

¹⁸⁸⁹ Document APP/106 paragraph 3.53

¹⁸⁹⁰ Document APP/106 paragraph 3.53.1 designer's response

as it would be necessary to enable the provision of a junction with working capacity¹⁸⁹². Similarly at the Shaw Lane/Otley Road junction, staggered pedestrian crossings on three arms are necessary to fulfil the two objectives of providing a junction with working capacity and providing safe crossings for pedestrians¹⁸⁹³.

8.54 With regard to the speed limit in shared areas, 10 mph would not be necessary as LTN 02/11¹⁸⁹⁴ suggests that 20 mph is desirable and preferably less than 15 mph. This issue has been considered in the road safety audit which has indicated that it is content with 15 mph¹⁸⁹⁵.

8.55 The NGT run times that underlie the Business Case between St Mark's Road and Blackman Lane, which includes Leeds University, assume an average link speed of 15.5 mph¹⁸⁹⁶, which is broadly consistent with the advice given by the auditors (a speed restriction in the order of 15 mph is assumed)¹⁸⁹⁷.

Cyclists

8.56 Changes have been made in response to the representations made by Leeds Cycling Campaign and others¹⁸⁹⁸. Other suggestions and concerns have been responded to in evidence¹⁸⁹⁹. NGT is a public transport scheme which also makes provision for cyclists, so far as is possible and practicable, rather than a cycling scheme per se and should not be rejected on the basis of not providing segregated facilities for cyclists. The document relied upon¹⁹⁰⁰ in support of segregated cycle routes is an academic paper, not policy guidance, and appears to provide a view which does not take into account the individual circumstances which apply to different routes.

¹⁸⁹¹ Document OBJ/1818 SoCG

¹⁸⁹² Document APP-3-2: Mr Smith PoE paragraph 10.2.10

¹⁸⁹³ Document APP-3-2: Mr Smith PoE paragraph 10.2.9

¹⁸⁹⁴ Document G-4-77 paragraph 2.15

¹⁸⁹⁵ Document APP/169 Appendix A

¹⁸⁹⁶ Document C-1-13 40th page Option 04 02 row 19

¹⁸⁹⁷ Document APP/106 page 3 paragraph 2.1.1

¹⁸⁹⁸ Document A-01-3 Annex 5 pages 79 to 82

¹⁸⁹⁹ Document APP-3-2: Mr Smith PoE section 10.2: For example the Hyde Park Corner junction is considered at paragraphs 10.2.10 to 10.2.12

- 8.57 The width of the combined cycle and NGT lanes complies with the guidance in LTN 02/08¹⁹⁰¹, footway (pavement) widths comply with the guidance in Manual for Streets¹⁹⁰² and the Scheme would extend existing cycle lanes.
- 8.58 With regard to the Highway to Health programme and the improvements brought about as a result of the Cycle Super Highway between Leeds and Bradford¹⁹⁰³, any further action to enhance facilities for cyclists in Leeds is not related to the works proposed in the TWA Order. So far as it is able to do so, the NGT project would improve facilities for cyclists.
- 8.59 The LTP sets out a road user hierarchy of consideration, not a hierarchy of provision¹⁹⁰⁴. The needs of cyclists and pedestrians is to be considered first, but the provision to be made for the various road users will depend upon the nature of the transport infrastructure under consideration. In this case, the NGT Scheme would bring forward improvements for cyclists and pedestrians which are appropriate for the roads which would be affected.

Safety

- 8.60 With regard to the effect on Blenheim Walk, the proposal would change it from southbound only to 2-way for all general traffic¹⁹⁰⁵, enabling Marlborough Gardens, Marlborough Grove, Blandford Gardens, Blandford Grove, and Churchill Gardens to be accessed from both the north and the south. The spacing between the entrances to these roads is well in excess of 20m (about 40m) and no safety issues or adverse impacts on the capacity of the St Mark's/Blenheim Walk junction are foreseen¹⁹⁰⁶.
- 8.61 The proposed closure of Weetwood Lane and signalisation of the St Chad's junction would result in beneficial changes to the traffic arrangements in that area where a number of accidents have occurred. The recommendation made

¹⁹⁰⁰ Document OBJ 1644 A660JC-102: Understanding Walking and Cycling

¹⁹⁰¹ Document G-4-74

¹⁹⁰² Document E-4-15, page 68 paragraph 6.3.22

¹⁹⁰³ Document OBJ/1797-101

¹⁹⁰⁴ Document D-6-11 page 50

¹⁹⁰⁵ Document A-11 Drawings TD 024, and TD 025

in the road safety audit to change the informal crossing at Park Terrace to a staggered Pelican has been accepted¹⁹⁰⁷. The junction arrangements would be safer¹⁹⁰⁸ and more convenient.

- 8.62 Reducing the number of right turning movements would be likely to be beneficial to highway safety¹⁹⁰⁹.

Traffic Regulation Measures

- 8.63 The proposed no-waiting/no-loading TRO restriction at the end of Kepstorn is a safety measure to protect sightlines at this junction, a feature common at most priority junctions. A loading bay would be provided on Kepstorn Road for local businesses and the unrestricted on-street parking would be retained away from the junction¹⁹¹⁰.
- 8.64 Bus lane restrictions would not be time limited¹⁹¹¹ as such limitations would be inconsistent with the aim of facilitating public transport which is best achieved by bus lanes that are open 24 hours a day. In addition, time limits would be disadvantageous to cyclists, as the proposed lanes would be available for bicycles and NGT.

Matter 8: The likely impacts of the Scheme on ecological interests

HLD

- 8.65 It is necessary to acquire HLD's land to provide a new pocket park (4,750 sq m) as mitigation for the ecological impact of the Headingley off-highway section of the Scheme, with a resulting loss of 5,037 sq m of good quality habitat¹⁹¹². Brooks Ecological concludes that *'In consideration of whether the proposed mitigation is suitable, we would have to conclude that it*

¹⁹⁰⁶ Mr Smith in cross examination

¹⁹⁰⁷ Document APP/106 paragraph 3.20

¹⁹⁰⁸ Mr Smith in re-examination

¹⁹⁰⁹ OBJ 573 Mr Broadbent's evidence at the Inquiry

¹⁹¹⁰ Document APP-3-2: Mr Smith PoE paragraph 10.15.8

¹⁹¹¹ Document OBJ 1719 NWLTF/128 paragraph 67

¹⁹¹² Professor Purseglove in cross-examination

*probably is*¹⁹¹³. The alternative proposals that it has suggested would not be appropriate¹⁹¹⁴, particularly given their smaller size, the greater separation from Headingley Castle and the greater disruption caused by NGT itself.

- 8.66 With regard to the impact on bats, the distinction between their value being defined as 'regional' rather than 'local' is a very fine one, being a matter of judgment, and does not affect the overall conclusion that the proposed mitigation would be necessary and adequate to offset the impact on the bats. The ES adequately explains that the mitigation meadow is needed to offset the impact on the bats¹⁹¹⁵.

Professor Griffiths

- 8.67 Professor Griffiths has no ecological qualifications and the evidence shows that the Scheme's ecological impacts could be successfully mitigated.

A660 JC

- 8.68 Mr Foren has no expertise on ecological issues and no evidence has been provided to support the assertion that the proposals would not provide adequate mitigation.

FWY

- 8.69 The methodology used in the ES is clear and robust¹⁹¹⁶ and there is no objection from NE. No evidence has been provided to show the likelihood of bats electrocuting themselves by perching on the cables to show that it is something that merits serious consideration given the wingspan of bats found in the UK. FWY has not suggested that the new planting to provide new ecological habitats would be unnecessary or that it would be unlikely to be successful. FWY's suggestion that the Supreme Court's decision in *Morge* was wrong¹⁹¹⁷ is rejected by the Promoters.

¹⁹¹³ Document OBJ/1611 PoE Appendix 4

¹⁹¹⁴ Document OBJ/1611 PoE Appendix 4

¹⁹¹⁵ Document A-08d paragraph 4.22 and Table 4.5

¹⁹¹⁶ Document A-08d section 2

¹⁹¹⁷ Document OBJ 923 FWY/159: FWY closing submissions paragraph 304

Matter 12: Whether the Scheme is reasonably capable of attracting the necessary funding

FWY

- 8.70 Mr Cheek has no experience of making business case submissions to the DfT, nor has he ever engaged in discussions with the DfT on the content of a business case on the behalf of a scheme promoter. Nor, it appears, has he any significant experience of using WebTAG. The guidance underpinning the approach taken has been in place for at least 8 years¹⁹¹⁸. A business case to be provided for the DfT must comply with the relevant and detailed guidance set out by the DfT, and must include a number of assessments including economic assessments which take account of wider impacts than would be the case with a business case prepared by a commercial organisation.
- 8.71 Given the time constraints, the BAFFB had to be submitted without including as much information as would have been desired in order to maintain the opportunity to receive central Government funding. The position had been explained to the DfT. The note provided with the business case submission¹⁹¹⁹ makes express reference to the fact that the boarding penalty for NGT that was used to compare with the AECOM soft factors report figures is a demand weighted average¹⁹²⁰.
- 8.72 Mr Chadwick is the only witness that has experience and expertise in the preparation of business cases for submission to the DfT on behalf of promoters. The central case is based upon an assumption as to likely bus operator reaction¹⁹²¹, which it is believed represents the outcome of acceptable probability¹⁹²². FWY has not put forward a clear view as to how it, as the main bus operator on the NGT routes, would react to the introduction of NGT. In terms of sensitivity tests, a judgment has to be made as to the

¹⁹¹⁸ Document E-3-16 page 22 paragraph 10.1.6

¹⁹¹⁹ Document C-2-4 page 8

¹⁹²⁰ Document APP/171 makes the same point

¹⁹²¹ Document C-1 paragraphs 11.20 to 11.25

¹⁹²² Document C-1 paragraph 17.17

number and extent and in this case there have been a range undertaken¹⁹²³.

The approach taken in preparation of a business case has to be proportionate to the task involved. The scenario that it would retain the level of services current at the time of introduction of NGT is considered in the Business Case, and it demonstrates that a change to the assumption that competing bus services would be rationalised has no significant impact on the BCR¹⁹²⁴.

- 8.73 With regard to the prospect of a 'fare war' and other similar speculation, FWY has put forward little clear information as to how it would plan to react once NGT is running. As a prudent company, FWY can be expected to consider the competition and how it would respond in about 5 year's time¹⁹²⁵. FWY could, at any time since the 2009 MSBC, have set out what its competitive response was likely to be and it could (if appropriate) have been tested by the Promoters, but it has not done so. The need to know what the impact would be on individual bus routes is necessary for FWY, but not in order to prepare a business case¹⁹²⁶.
- 8.74 FWY has suggested that it would maintain existing services on route Nos 1 and 6 and that there was a potential threat to route Nos 28 and 97¹⁹²⁷. However, it was not prepared to reveal financial information relating to route Nos 28 and 97¹⁹²⁸. Given that the highest that FWY put its case on route Nos 28 and 97 is that it would review the position, and given that it has not released the financial information which would allow a more informed view to be taken, the assumption made for the purposes of the business case that there would be no change is both reasonable and robust.
- 8.75 In the economic case NGT revenues have been reduced by an assumed 5% to allow for revenue loss¹⁹²⁹. In the financial case assessment, a revenue risk reduction of 20% has been applied. That approach demonstrates the

¹⁹²³ Document C-1 Table 17.10 set out a summary of the full range of sensitivity tests

¹⁹²⁴ Document C-1 Table 17.9

¹⁹²⁵ OBJ 923 Mr Cheek in cross examination

¹⁹²⁶ Mr Hanson in cross examination

¹⁹²⁷ OBJ 923 Mr Alexander in cross examination

¹⁹²⁸ OBJ 923 Mr Turner in cross examination

prudence of the approach taken by the Promoters and consequent robustness of the revenue predictions¹⁹³⁰.

- 8.76 With regard to patronage, Mr Cheek's work, and the assumptions that underlie it, cannot be tested, and he has not criticised the base data used in the LTM¹⁹³¹. His figures are based on the assumption that NGT's walking catchment would be limited to 400m, but he had not undertaken any analysis of whether potential passengers might be prepared to walk further to NGT than to the existing bus. This is despite his concession that people would be prepared to walk further to different modes of transport eg heavy rail, light rail and buses, and that it is well established that people will walk further to trams than to buses¹⁹³². Increasing the NGT catchment to 600m increases the population to about 69,000, and using 800m the population increases to about 88,000¹⁹³³. Given that the NGT would have significant advantages over regular buses in terms of quality, speed and punctuality, Mr Cheek's analysis is unrealistic and is likely to result in a severe under-estimate of potential patronage.
- 8.77 The formula applied by Mr Cheek to the demographic information does not take account of local preferences for public transport use, and has not been disclosed. The outcome of Mr Cheek's analysis is that the current bus services are underperforming, as it shows that they attract 5.1 million trips out of a predicted 8.2 million¹⁹³⁴.
- 8.78 The Promoters' approach to base its patronage figures upon passenger interviews and control counts¹⁹³⁵ is consistent with WebTAG guidance, and there can be no valid criticism of it. Mr Cheek has taken a potential total

¹⁹²⁹ Document C-1 paragraph 21.15

¹⁹³⁰ Document C-1 paragraph 21.19 page 21-3

¹⁹³¹ Document OBJ 923 FWY/119 paragraph 5.1 and confirmed with Mr Cheek in cross examination

¹⁹³² OBJ 923 Mr Cheek accepted in evidence that it would be generally appropriate to use an 800m catchment for trams, depending on journey time advantage

¹⁹³³ Document REB-3 OBJ/923 paragraph 2.8

¹⁹³⁴ OBJ 923 Mr Cheek in cross examination accepted that it demonstrates that the existing service is deficient and that improvement is required

patronage by restricting his search to an area 400m either side of the route, and yet has relied upon ETM data for those boarding and alighting which is not restricted to those living within 400m of the route. WebTAG refers to a distance of under 1 km¹⁹³⁶ and TfL's guidance on its Public Transport Accessibility Level (PTAL) methodology indicates that a maximum walk is defined as 8 minutes or 640m (the distance for light rails is 12 minutes or 960m)¹⁹³⁷. However, Mr Cheek's estimate of potential transfer from bus to NGT is in the same broad range as the Promoters' estimate¹⁹³⁸.

- 8.79 In terms of quality factors, Mr Cheek considered the boarding penalty of 5.55 minutes within the range which he would expect and applied it in his generalised costs model. It is derived from the SP work and FWY has not argued that it was an inappropriate boarding penalty. The relevant WebTAG guidance indicates that the application of a crowding factor is not recommended in every case¹⁹³⁹ and that crowding should only be modelled in two instances, namely where it is likely to have a significant effect on traveller behaviour, or where an effect on crowding is one of the objectives of the Scheme¹⁹⁴⁰. Neither circumstance is present in this case, nor is it appropriate to model crowding¹⁹⁴¹. However, the Promoters have conducted a sensitivity analysis in which they applied a crowding factor¹⁹⁴² by using an alternative NGT quality value hypothetically representing conditions with all seats taken but plenty of room to stand throughout the day¹⁹⁴³, with a BCR of 2.63¹⁹⁴⁴.

¹⁹³⁵ Document C-2-8 paragraph 5.2

¹⁹³⁶ Document E-3-15 paragraph 4.3

¹⁹³⁷ Document APP/168 page 2

¹⁹³⁸ Document OBJ/923 SOC Appendix 2 paragraph 3.6.5: 61.5% of passengers would transfer; and Document APP/126 paragraph 1.7: 16,328 of the total 23,755 are predicted by LTM to transfer (69%)

¹⁹³⁹ Document E-3-17 paragraph 6.4.1 indicates that a crowding factor can be applied, not should or must be applied

¹⁹⁴⁰ Document E-3-17 paragraph 6.4.4

¹⁹⁴¹ Mr Hanson in re-examination

¹⁹⁴² Document REB-2 OBJ 1719 paragraph 2.11

¹⁹⁴³ Document APP/137

¹⁹⁴⁴ Document REB-2 OBJ/1719 paragraph 2.11

- 8.80 Mr Cheek's assessment of generalised journey times failed to include a stop penalty¹⁹⁴⁵ and therefore pays no regard to the attractiveness of the proposed NGT stops compared to existing bus stops (lighting, CCTV, shelter etc).
- 8.81 Mr Cheek has accepted that trolleybuses would be qualitatively superior to standard buses¹⁹⁴⁶. It is necessary to reflect the qualitative difference in modelling likely patronage. One way of doing that is to apply a quality penalty and that penalty can be derived from SP analysis for a particular scheme, or from other research, such as the research work done by AECOM for the DfT. The AECOM soft factor work is now set out in WebTAG¹⁹⁴⁷. SDG's SP assessment uses a 5.55 minute factor¹⁹⁴⁸ and application of the AECOM research (now included in WebTAG) would produce a 5.63 minute factor¹⁹⁴⁹. It follows that there is no proper basis on which to criticise the conclusions of the SP analysis.
- 8.82 In terms of operating costs, Mr Cheek's model has them 17.3% higher than in the Promoter's case¹⁹⁵⁰, which is as a result of different assumptions on NGT service patterns and number of staff employed¹⁹⁵¹. When operating costs are compared on a like-for-like basis, there is no material difference between Mr Cheek's figures and the Promoters' figures.
- 8.83 Suggested changes in the proportion of students living in Headingley between 2008 and 2014 have not been supported by reference to any figures. The information submitted¹⁹⁵² indicates that, although changes have taken place in student population in the period between 2006/2007 and 2011/2012, the overall change in areas adjacent to Headingley, Hyde Park and Woodhouse is not great.

¹⁹⁴⁵ OBJ 923 Mr Cheek in evidence: '*I decided to omit a factor which is relevant and influences travel demand*'

¹⁹⁴⁶ OBJ 923 Mr Cheek in cross examination; and Document Mr Cheek PoE Appendix 5

¹⁹⁴⁷ Document APP/171 3rd paragraph

¹⁹⁴⁸ Document C-2-4 page 8

¹⁹⁴⁹ Document APP/171

¹⁹⁵⁰ Document OBJ 923 FWY/119 paragraph 4.6

¹⁹⁵¹ Document APP/128

¹⁹⁵² Document OBJ/171 SOC reference 44: Assessment of Housing Market Conditions and Demand: Trends in North West Leeds, Unipol in particular graphs 10 and 11

- 8.84 With regard to additional sensitivity tests, the guidance in TAG Unit 3.15.5¹⁹⁵³ has been complied with in that at least two alternative scenarios in addition to the core scenario have been considered. A total of 22 tests are listed at Table 17.10 in the Business Case Review¹⁹⁵⁴. The test that existing bus services would be maintained is a highly unlikely scenario as, given the reduced patronage levels on routes parallel with NGT, the bus companies would be unlikely to maintain existing services over the entire 60 year appraisal period. The number of tests is to be kept to a manageable level¹⁹⁵⁵.
- 8.85 In terms of the ability of local Government to contribute towards the capital costs and to maintain NGT in the event of an operating shortfall, there is a long history of consideration of the need to provide funds, and approval for the provision of such funds. A summary of the approvals given at the time of the BAFFB submission sets out how the funding requests were considered by the Promoters¹⁹⁵⁶. LCC has a substantial budget, and it is not appropriate for a publicly funded authority (such as WYCA or LCC) to set aside a contingency when the budget for the year under consideration has not been set. There is no reason to doubt the Promoters' means or intention to deliver the Scheme, as to do so would be to doubt the declarations made by the section 151 LGA 1972 officers.
- 8.86 The assumption that the quality differential between the Preferred Option, the NBA and the LCA remains constant over the appraisal period is one made in every similar business case¹⁹⁵⁷. It is not possible to anticipate every change in technology that might occur over 60 years. The assumption is entirely reasonable given that advances in technology for one mode are likely to be matched by advances for another.
- 8.87 In terms of the sufficiency of the 20 trolley vehicles, as the service would be procured under a leasing arrangement, it would be for the lessee to specify

¹⁹⁵³ Document E-3-24 paragraphs 1.6.1 to 1.6.2

¹⁹⁵⁴ Document C-1 page 17-10

¹⁹⁵⁵ Document E-3-24 paragraph 1.6.2

¹⁹⁵⁶ Document C-2-22

¹⁹⁵⁷ Mr Chadwick in re-examination

the service patterns, and the lessor to ensure that sufficient vehicles would be available. Vehicle inspections could be programmed, and in the event of a combination of unpredicted events, the schedule could be stretched.

- 8.88 Any suggestion that NGT quality stops, with level boarding, could be provided for existing bus services is unrealistic, as they would be designed for the NGT vehicles. While higher quality shelters could potentially be provided elsewhere, in many places this would not be possible without changing stop location and footway and carriageway works that are integral to the NGT project.
- 8.89 With regard to park and ride patronage Mr Cheek's capacity calculations¹⁹⁵⁸ are flawed¹⁹⁵⁹ and his assessment as to likely patronage figures '*has to be altered in the light of the changed assumption*'. The fare assumptions made that they would be broadly equivalent to conventional buses¹⁹⁶⁰, about increases, and the fact that the shortest existing bus fare stage is not intended to be replicated¹⁹⁶¹ are entirely reasonable and appropriate. The reduction in FWY fares¹⁹⁶² may or may not be retained, and there has not been a uniform reduction in FWY fares, for example by changing the zoning system some passengers will face a fare increase. In any event, the sensitivity analysis includes tests based upon reductions in revenue¹⁹⁶³.

NWLTF

- 8.90 The advice given in TAG Unit 3.19¹⁹⁶⁴ is that a failure to meet or the meeting of validation standards does not necessarily lead to the conclusion that a model is or is not fit for purpose. Furthermore, it is always necessary, when considering fitness for purpose, to have in mind what the purpose is. In this case the model has not been used to derive flows at individual junctions so as

¹⁹⁵⁸ Document OBJ/923/02: Mr Cheek PoE Appendix 2 and paragraph 5.4.2

¹⁹⁵⁹ Document OBJ 923 FWY/119 Table 113 corrected the calculations

¹⁹⁶⁰ Document C-1 paragraph 15.147

¹⁹⁶¹ Document C-1 paragraph 12.8

¹⁹⁶² Documents OBJ/923/06: Mr Alexander PoE paragraph 3.1, and FWY/159: FWY closing statement paragraph 200

¹⁹⁶³ Document C-1 Table 17.10: Revenue reductions of -15% and -25% are contemplated

to inform the design of that junction. The output of the LTM is suitable and fit for considering total corridor solutions, but not for limited interventions¹⁹⁶⁵.

The model is fit for the purposes for which it has been used, which is to inform consideration of total corridor solutions, in particular in deriving public transport patronage forecasts, in assessing changes in and total traffic along the corridor, and in providing inputs for the business case assessments.

- 8.91 The quality parameter (the boarding penalty) relies upon the increment derived from the SP research for the difference between an old bus and a very new bus. That increment was applied in the business case assessment to derive a quality penalty to distinguish between a bus and a trolley vehicle. The purpose of the quality factor or penalty is to allow the difference in customer preference between one form of public transport and another to be modelled. SP research, which is an established means of deriving these factors that allows the modeller to arrive at factors which are of specific relevance to a particular geographic area, was adopted in this case. The approach taken was to derive a differential value (based upon specific quality factors) between one form of transport and another and was entirely appropriate.
- 8.92 Given that the quality factor was used in modelling for the purposes of developing a business case for the DfT and the DfT have decided to grant Programme Entry based upon that approach, the criticisms made would only have a material impact if they led to the conclusion that, at the next stage of the funding process, funding was unlikely to be forthcoming, which they do not. As a result, even if the arguments are accepted, they would have no material impact on the approach to be taken when considering the SofS's Matter 12.
- 8.93 In terms of the arguments made, it is normal practice to apply quality factors, and to do so by selecting a mode constant, which is endorsed in WebTAG¹⁹⁶⁶.

¹⁹⁶⁴ Document E-3-25 paragraph 3.4.2

¹⁹⁶⁵ Mr Hanson in cross examination

¹⁹⁶⁶ Document E-3-22 paragraph 2.4.6

The use of fixed penalties or an approach which is proportionate to in-vehicle time (as advocated by Mr Cheek) are both endorsed in WebTAG¹⁹⁶⁷. The figures set out in the AECOM soft factors report (which now appear in WebTAG) provide a good starting point and as the figures derived from the SP work are consistent with the AECOM figures, it provides reassurance.

- 8.94 The boarding penalty quality parameter was arrived at by taking the willingness to pay (WTP) from the row in Table 2 in the Quality Factors Report¹⁹⁶⁸ entitled 'Bus type: from 'old' to 'very new' for commuting trips' (13.39) and dividing it by the figure for in-vehicle time when there is sufficient space to stand (-2.75). That methodology is set out in the Quality Factors Report¹⁹⁶⁹ and a specific example is given¹⁹⁷⁰. The source of the figures in Table 2 in the Quality Factors report is given in the footnote to that report¹⁹⁷¹. A combined quality penalty of 11.38 minutes has been arrived at, derived by taking a boarding penalty of 5.55 minutes and a stop penalty of 7.1 minutes (and deducting the 1.27 quality penalty for NGT).
- 8.95 The reasons for not using the trolley vehicle mode specific constant¹⁹⁷² are that a statistically significant trolley vehicle constant could not be derived from the SP work, but it is known that trip makers do place a value on the quality of a vehicle (due to factors such as relative ride quality, noise and comfort). Given that NGT has been specified to be a step-change in vehicle quality, such factors should be taken into account when modelling NGT demand and revenue. The consequence of not deriving a value directly from the SP work was that it was necessary to adopt a parameter to represent this quality uplift. The 'old' to 'very new' bus parameter was adopted to represent the quality uplift from 'average bus' to NGT. It was drawn to the attention of the DfT by

¹⁹⁶⁷ Document OBJ 1719 NWLTF/113 paragraph 6.2.12

¹⁹⁶⁸ Document C-2-4 Appendix A page 3

¹⁹⁶⁹ Document C-2-4 Appendix A page 4

¹⁹⁷⁰ Document C-2-4 Appendix A page 6

¹⁹⁷¹ Document C-4-24 SP Study August 2008 Table 7.4 page 55

¹⁹⁷² Document APP/155

express reference in Table 2 of the Quality Factors Report¹⁹⁷³ and the methodology has been clearly set out.

- 8.96 There is no basis for associating the statistically significant ftr parameter with a trolley vehicle simply on the grounds that they have a similar outward appearance¹⁹⁷⁴, as it is factors such as ride quality, noise and comfort that lead to the appreciable quality difference. While in the SP the principal difference presented between a ftr and a bus was its outward appearance, in contrast to a trolley vehicle, ftr vehicles operated in Leeds at the time the survey was done and some respondents had direct experience of using ftr and others would have been familiar with the concept. Also, it is considered that the uplift in quality that a trolley vehicle would deliver is at least, if not greater than, the quality uplift that a new bus can deliver compared with an old bus. This approach was discussed with the DfT¹⁹⁷⁵ and the DfT subsequently awarded the NGT Scheme Programme Entry status.
- 8.97 The Quality Factors Report and the SP Study were both before the DfT and the footnote to Table 2 in the Quality Factors Report provided an express reminder of the SP Report. The SP Report contains an express reference to 'exercise 7 (bus-trolleybus mode choice)'¹⁹⁷⁶. In addition, the example graphics contained in the SP Report include depiction of trolleybuses¹⁹⁷⁷, and the SP Report states that the model presented does not include mode constants for trolleybus and tram and explains that where such constants were added test models did not perform better than the presented model¹⁹⁷⁸. The report by Johnson et al for UKTram does not describe the quality penalty as dubious, it is the claim that the model is a success as it explicitly accounted for the various service attributes which was described as 'dubious'.

¹⁹⁷³ Document C-2-4 Appendix A

¹⁹⁷⁴ Document APP/155

¹⁹⁷⁵ Document C-2-4

¹⁹⁷⁶ Document C-4-24 paragraph 4.16

¹⁹⁷⁷ Document C-4-24 figures 4.4 and 4.7

¹⁹⁷⁸ Document C-4-24 paragraph 7.46

- 8.98 The assumption made that all NGT would have good lighting and no specific lighting quality value was applied is an approach that is consistent with the WebTAG guidance which does not (when referencing the AECOM soft factors report) refer to any indicative value for lighting¹⁹⁷⁹.
- 8.99 It would not be appropriate to apply the same penalty factor to bus and to rail and this was not the approach taken in the modelling work, as is made plain in the AECOM local model validation report¹⁹⁸⁰. The approach taken to rail¹⁹⁸¹ is to apply a penalty and, given the fact that around 3.2% of daily NGT usage is forecast to transfer from rail services, any uncertainty in the representation of rail quality would not have a material impact on the total predicted usage of NGT.
- 8.100 There is no evidence to demonstrate that those asked for their response in the SP work gave any additional or any undue weight to lighting factors due to the fact that surveys were carried out in January at a time following press reports relating to crime at bus stops.
- 8.101 In terms of restricting the range of quality factors which might be assumed to improve in the DM scenario, the Promoters have made appropriate assumptions based upon changes that are committed or can reasonably be expected to occur¹⁹⁸².
- 8.102 The quality parameter recommended for CCTV¹⁹⁸³ has not been overestimated, as the figure used in the public transport model in the LTM has been reduced by over 4 minutes (being the value of CCTV per trip) to reflect the fact that there would continue to be a general roll out of CCTV¹⁹⁸⁴, which was identified in the AECOM document¹⁹⁸⁵. The consequence was made explicitly¹⁹⁸⁶ where

¹⁹⁷⁹ Document E-3-17 paragraph 6.5.3 and Mr Chadwick in re-examination

¹⁹⁸⁰ Document C-2-4 paragraph 4.10 and Mr Chadwick in re-examination

¹⁹⁸¹ Document APP/172

¹⁹⁸² Mr Chadwick in cross examination and re-examination

¹⁹⁸³ Document C-2-4 Table 1: the value is 11.42 under the heading 'commute'

¹⁹⁸⁴ Document C-1-8 paragraph 4.2

¹⁹⁸⁵ Document C-1-8 paragraph 4.2; and Document C-2-33 page 3 PEBC submission (the same effect was achieved at this stage by adding to the NGT stop penalty to make it 5.73 minutes as opposed to 1.27)

the bus stop penalty is expressed as being 7.1 (minutes of generalised journey time). The figure derived from the AECOM soft factors report is 5.63 minutes for the boarding penalty, compared with the SP derived penalty of 5.55 minutes.

- 8.103 The fact that the values for quality factors adopted for LTM are consistent with the AECOM soft factors report figures (now incorporated in WebTAG) gives considerable reassurance that the penalties applied are appropriate, as does the fact that the DfT granted Programme Entry based upon those quality factors.
- 8.104 The guidance on whether to include the monetised cost of construction impacts is that they should be included '*where they are likely to be significant*'¹⁹⁸⁷. Whether such impacts are likely to be significant is a matter of judgment. However the judgment made in this case, not to include the monetised value of such impacts (although such impacts are assessed in the ES) is easily understood and justified. A trolleybus scheme causes much less disruption than a scheme which requires major changes to the road surface and structure such as a tram. The approach taken has been consistent with general practice in other cases, such as Manchester Metrolink (albeit that Metrolink is a tram scheme)¹⁹⁸⁸. In cases where construction cost impacts have been considered, as in Nottingham, the impact has been demonstrated to be small¹⁹⁸⁹. If there had been a need to assess monetised impacts of construction, the DfT officials would no doubt have raised it and they did not.
- 8.105 The relevant guidance in WebTAG indicates that there is at present no such requirement that the monetised impact on landscape should be considered¹⁹⁹⁰.

¹⁹⁸⁶ Document APP/103A page 1: the value is given as 7.1 (all day demand weighted average bus stop penalty for stops along the Northern NGT route)

¹⁹⁸⁷ Document OBJ 1719 NWLTF/113 paragraph 10.1.1

¹⁹⁸⁸ Document REB-2 OBJ/1719 paragraphs 2.77 to 2.78

¹⁹⁸⁹ Mr Chadwick in cross examination described the effect of closure a road in Beeston Nottingham as being 'incredibly small'

¹⁹⁹⁰ Document E-3-26 paragraph 2.1.4 penultimate bullet point

- 8.106 The run times have been provided by SDG and are set in the Runtime Assessment¹⁹⁹¹. The corridor is broken down into sections between transport nodes. Each section is then assigned a maximum cruise speed which takes account of the characteristics of the link¹⁹⁹². The model has been used to calculate the time spent and distance travelled in accelerating and decelerating and junction delays have been taken into account¹⁹⁹³.
- 8.107 The assumptions made as to dwell time are identified in the Runtime Assessment¹⁹⁹⁴. The 0.7 second addition per board and per alighter is part of an overall estimate, and is based upon TfL research. It is added to the fixed stop constant for both boarders and alighters (who may be boarding and alighting at the same time). The assumption that run times remain the same over the appraisal period is reasonable and appropriate given the infrastructure to be provided and the priority to be given at junctions. The predicted ratio of flow to capacity at Hyde Park Corner in 2020 is 66%¹⁹⁹⁵ showing that there would be ample spare capacity to accommodate any growth in the period to 2031.
- 8.108 If there is a more frequent service (the buses) which has a stop closer to the destination, the absolute journey time would be quicker (so long as the buses run on time and no bunching occurs). This demonstrates the importance of considering generalised journey time including quality factors. The buses may be advertised as being run at frequent intervals, but if they do not run reliably and punctually people seeking to make the journey may choose to use the less frequent but more reliable service.
- 8.109 With regard to the definition of the zones and coding of centroid connectors for the public transport model¹⁹⁹⁶, although imprecisions have been identified there is no systematic bias and the imprecisions are not of such magnitude as

¹⁹⁹¹ Document C-1-13

¹⁹⁹² Document C-1-13 paragraph 2.7

¹⁹⁹³ Document C-1-13 paragraphs 2.13 to 2.15

¹⁹⁹⁴ Document C-1-13 paragraphs 2.19 to 2.21

¹⁹⁹⁵ Document APP-6-3: Mr Robertson PoE Appendix 3 page 22

¹⁹⁹⁶ Document E-3-15: WebTAG Guidance section 4.3

to be significant¹⁹⁹⁷. Also, the model responds appropriately and is fit for purpose, as the overall performance down the corridor has been tested and shown to be appropriate. The centroid connector shown in the zone which includes the word 'Leeds'¹⁹⁹⁸ would not lead to an assumption that public transport passengers would prefer NGT to rail (from Headingley railway station) as a centroid connector to the railway station is also defined in the model¹⁹⁹⁹.

- 8.110 In relation to criticisms of the ASCs associated with park and ride sites, the model coding has been based upon the calibrated values for existing sites at Pudsey and Garforth²⁰⁰⁰. The model broadly replicates parking behaviours²⁰⁰¹.
- 8.111 The fact that the model outputs for Moor Road do not appear to be a realistic representation is an example of how a model may not and cannot be expected to produce a representation of flows at one junction but is fit for the purpose for which it has been used. The total amount of traffic has been represented in an appropriate way, but it has been assigned as travelling along Otley Road and turning left at Shaw Lane. The output of the LTM has not been the sole source of traffic flow data which has informed the design of the Shaw Lane junction. TRANSYT uses inputs which are based (substantively) upon observed flows²⁰⁰².
- 8.112 The flow represented on Weetwood Lane²⁰⁰³ is an example of a representation of flow which is at variance from observed data, and which variation is recognised and considered in the model validation report²⁰⁰⁴. That failure to meet benchmark criteria in relation to that particular link is taken into account in arriving at the conclusion that the model is fit for purpose.

¹⁹⁹⁷ Mr Hanson in re-examination

¹⁹⁹⁸ Document OBJ 1719 NWLTF/108 Figure 1

¹⁹⁹⁹ Document APP/144

²⁰⁰⁰ Document C-1-8 paragraph 4.3

²⁰⁰¹ Document C-1-3 paragraphs 4.5.12 and 4.6

²⁰⁰² Mr Robertson's evidence

²⁰⁰³ Document APP/103B page 6

²⁰⁰⁴ Document C-2-9 Figure 9 page 20: The screenline for Weetwood Lane is identified as CP979265 and Document C-1-3 Table page 9 identifies that the outputs for CP979265 fail for the 0700 and 0800 hours when judged against the benchmark criteria

- 8.113 The tables in the Business Case Review which assess the Preferred Option against the Scheme objectives and against policy objectives may require some limited amendments, but they do not undermine or alter the conclusion that the Scheme has a strong strategic fit with the relevant policies, which has been long accepted by the DfT²⁰⁰⁵.
- 8.114 The TEE table in the Business Case²⁰⁰⁶ balances the efficiencies and any inefficiencies, with the overall balance being overwhelmingly positive. The approach taken in the TEE table satisfies DfT guidance, monetises the plus and minuses and avoids any unbalanced approach.
- 8.115 Given the increased degree of certainty that can be obtained as the project progresses, and the consequent reduction in optimism bias, if changes do occur in the future, it is highly likely that there will be a resulting increase in the BCR²⁰⁰⁷.
- 8.116 In line with standard DfT practice the maximum referred to in the Programme Entry approval letter²⁰⁰⁸ is the maximum funding contribution not the maximum total cost. Furthermore, there is no condition which makes funding conditional on the total cost remaining the same. The purpose of the Programme Entry approval letter is not to make funding conditional on total costs remaining the same but to make it clear that any increase in costs would be the responsibility of the Scheme Promoters. The figures which appear in the 2012 MSBC²⁰⁰⁹ are expressed in 2002 prices discounted to 2002, whereas the figures which appear in the 2014 Business Case Review²⁰¹⁰ are expressed in 2010 prices discounted to 2010. When the figures are compared on a like-for-like basis, no increase in grant is required from central Government²⁰¹¹. The local Government contribution has increased as a result of the decision to

²⁰⁰⁵ Document C-6-13

²⁰⁰⁶ Document C-1 Table 17.1

²⁰⁰⁷ Mr Chadwick in cross examination and re-examination

²⁰⁰⁸ Document C-6-15

²⁰⁰⁹ Document C-2 Tables 8.9 and 8.10

²⁰¹⁰ Document C-1 Table 17.1

²⁰¹¹ Document OBJ/1719 SoCG

lease the vehicles, but such an increase is allowed for in the assessment carried out in the Business Case²⁰¹².

- 8.117 The argument that the UDM forecasts are flawed²⁰¹³ is based upon the contention that the assumptions about changes in generalised time are not robust. The 'quality penalties' assumed are entirely justified and were put before the relevant officials at the DfT.

WRA

- 8.118 Dr Dickinson put forward four alternative methods of calculating patronage. The figure based upon cordon counts would give more than adequate existing patronage for NGT to capture²⁰¹⁴. He is not able to identify the source of the average loading factor per bus of 27²⁰¹⁵, which forms an important part of his calculations, and which is inconsistent with his weekday 24 hour data²⁰¹⁶. Given this, Dr Dickinson's figures cannot be relied upon.

Matter 13: Whether there is a compelling case in the public interest for conferring on the Promoters powers compulsorily to acquire and use land for the purposes of the Scheme

Alison Ruud OBJ 116, Sara Holman OBJ 150

- 8.119 It is proposed to provide a parking/loading bay outside Nos 88-72 Otley Road, intended to be used for servicing of the business premises and short stay parking. The existing parking in front of the premises on the eastern side of Otley Road is within the bus lane and is permitted outside the morning peak period. The bus stop outside No 104 would be relocated adjacent to the parking/loading bay and the footway widened at this location. In terms of the use of Moor Road, the closure of Weetwood Lane and use of St Chad's Road

²⁰¹² Document C-1 Table 20.1: summary of funding sources

²⁰¹³ Document OBJ 1719 NWLTF/128 paragraphs 78 and 81(iv)

²⁰¹⁴ Document OBJ 1354 WRA/104 page 3/7

²⁰¹⁵ Document OBJ 1354 WRA/104 page 4

²⁰¹⁶ Document OBJ 1354 WRA/102A suggests a figure of 35

would not cause a significant increase in traffic, and any introduction of a one-way system would be subject to local consultation²⁰¹⁷.

Twenty One C Limited OBJ 132 and LBC/017

8.120 The property at 27-29 Headingley Lane is owned by the Promoters, having acquired it for the Leeds Supertram, and would be required to widen the main road in order to locate a feature NGT stop²⁰¹⁸.

Eleanor Walles OBJ 142 and Mr A Taylor OBJ 195

8.121 The right turn facility when exiting Lawnswood Gardens would be stopped up because of the NGT lane along the central reservation of Otley Road. To head south, it would be necessary to make a left turn and then a U-turn about 100m further along Otley Road²⁰¹⁹.

Barmston (Park Row) LLP OBJ 146, Jeremy Thompson for Street Clothes Ltd OBJ 189, Stratton II Sarl OBJ 574, Anne Sillars OBJ 620, Brewery Wharf Management Company Limited (BWMC) OBJ 1175 and John Lewis Partnership Pensions Trust OBJ 1600

8.122 Before any works would be carried out to attach fixings to a building, a structural survey would be undertaken to identify its suitability. No further details of the fixings, which would be at an approximate height of 6.5m, are available until the detailed design has been carried out. Assurances would be given within a deed with regards to the building fixings²⁰²⁰.

Zoe Holman OBJ 149, Westrow Hairdressing OBJ 419 and Ascanio Pagliaro OBJ 1117²⁰²¹

8.123 In order to accommodate the platform for NGT it would be necessary to utilise some of the space to the front of the businesses. NGT would offer a credible alternative to car users and reduce the need to provide parking spaces²⁰²².

²⁰¹⁷ Document APP/176 Tabs 2 and 8

²⁰¹⁸ Document APP/176 Tab 4

²⁰¹⁹ Document APP/176 Tabs 5 and 11

²⁰²⁰ Document APP/176 Tabs 6, 10, 43, 44, 83 and 115

²⁰²¹ Document APP-3-2: Mr Smith PoE Section 10.16

²⁰²² Document APP/176 Tab 78

- 8.124 The Therapy shop at 257 Otley Road only has an order sought for OLE equipment over the private forecourt of the parade of shops. Parking on the forecourt would be permitted and a dropped kerb could be provided to access that in front of No 257. There would be no loading or parking in the carriageway of roads on the immediate approach to the Otley Road/Spenneth Road junction to protect sightlines, as is standard practice. In this case the restriction would prevent the single northbound carriageway from becoming blocked and impeding all traffic, protect sightlines to the pedestrian crossing as well as the junction as a whole. Parking would continue to be available within 100m of the shop on Welburn Grove (Monday to Friday 0800 hours to 1800 hours, 2 hours parking, no return within 2 hours) and unrestricted on Kepstorn Road.
- 8.125 The trolley vehicle stop platform would be 300mm in height and the NGT stop shelter would be similar in size to the existing bus shelter situated in the same place. The bus stop shelter would be replaced with an NGT stop shelter which should not significantly affect views of the shops.
- 8.126 The construction activity would be standard highway works such as kerblines modifications and carriageway resurfacing. Access would be maintained to the properties throughout the construction period.
- 8.127 The layout of the highway would be unchanged at Kepstorn Road and the existing Spenneth Road roundabout. The only traffic lights would be those for the pedestrian crossings over the northern and southern arms of the roundabout.

David Cardus OBJ 211 and OBJ 1266 and Fiona Cumming and Ian Percival OBJ 1793

- 8.128 OLE would be attached to the 4 buildings at 257 Otley Road, 7 Holly Bank, 14 Park Row and La Salle, Chadwick Street and where needed supporting poles would be erected along the whole route. NGT would provide a fast, efficient, clean and environmentally friendly mode of transport for those travelling between these properties along the route and Headingley, Leeds City Centre and other key areas. With regard to Chadwick Street, the making of it one-way southbound only outside La Salle would mean that access from the

south would be from Crown Point Road, Black Bull Street and Chadwick Street²⁰²³.

Paul Thompson OBJ 222, Linda Brownridge OBJ 309, Jeffrey King OBJ 378; Elizabeth Watson-Kay OBJ 635 and Chris Goldthorpe OBJ 1550

8.129 During resurfacing works, the access to and egress from Woodlands Court would be likely to be affected but one lane would be likely to be kept open²⁰²⁴.

Lakhbir Singh and Parmjeet Lally OBJ 265, Randeep Lally OBJ 266 and Navkiran Lally OBJ 267

8.130 As a result of the bus lay-by, which would be necessary to prevent traffic and trolley vehicles from having to queue behind a stationary bus, and changes to the carriageway, part of the shop forecourts of Nos 2 to 8 Belle Isle Road would be encroached upon²⁰²⁵.

*The Yorkshire Congregational Union OBJ 320, B Mackintosh OBJ 341, S Bollon OBJ 619, Dr A Brownjohn OBJ 808, A Woodhouse OBJ 916 and I Lowrie OBJ 962*²⁰²⁶

8.131 The detailed design of the Scheme has not been undertaken but it is being developed so as to be able to provide an undertaking as to the maximum area of permanent acquisition within parcel Nos 10049 and 10050. Following this work, it is considered that the hearse and bridal vehicles would be able to be accommodated in the area retained by the Church after the compulsory acquisition.

8.132 Parcel No 10051 would be required temporarily for access only. This temporary access use is intended to be compatible with the access needs of the Church allowing emergency services, hearse and bridal vehicle access throughout the works.

²⁰²³ Document APP/176 Tabs 13 and 144

²⁰²⁴ Document APP/176 Tabs 15, 21, 29 and 104

²⁰²⁵ Document APP/176 Tabs 17, 18 and 19

²⁰²⁶ Document APP-16-3: Mr Caten PoE Appendix Section 11

8.133 In respect of parcel No 10047, detailed design work is being undertaken towards removing any requirement to use the small piece of car parking area that forms part of this parcel for any permanent or temporary works.

*Jennifer Phelps OBJ 381*²⁰²⁷

8.134 As per the CoCP, best practicable means would be applied during construction works to minimise noise (including vibration) at neighbouring residential properties²⁰²⁸. In terms of access and footfall, the CoCP sets out the protocol that the contractor would be required to comply with, including pedestrian access to be maintained to properties throughout the works. There is no expected impact on the facade of the property during construction.

8.135 There are no proposed changes to parking restrictions at the top of Richmond Road. The land is required to facilitate the relocation of an existing bus stop and the technical drawings show the forecourt being used for a footway only.

*Nigel Riley, Corrocoat Corrosioneering Ltd OBJ 386*²⁰²⁹

8.136 The property is situated on Stafford Street off Low Road in South Leeds. The existing Stafford Street/Low Road priority controlled junction allows all vehicle movements. The NGT alignment would cross Joseph Street around 15m set back from its junction with Low Road and it could not be any further away from Low Road due to the presence of houses and a school. Unless the NGT crossing/Joseph Street/Low Road junction is signalised there would be a safety hazard whereby traffic turning left into Joseph Street would have poor visibility of a northbound NGT vehicle approaching and this would be likely to lead to collisions. Traffic exiting from Joseph Street could be delayed by the traffic flow on Low Road and sit across the NGT alignment leading to reduced service reliability. In addition, this location is adjacent to a school and signalised pedestrian crossings would be required at this junction to improve safety.

²⁰²⁷ Document APP-16-3: Mr Caten PoE Appendix Section 13

²⁰²⁸ Document APP-13-2: Mr Max Forni PoE

²⁰²⁹ Document APP-3-2: Mr Smith PoE Section 10.38

- 8.137 An all movements signalised junction would need to include Stafford Street and a layout operating within capacity was not found. Therefore, prohibition of movements at the junction was necessary, including making Stafford Street a left-in left-out priority controlled junction and not part of the signalisation.
- 8.138 The swept path of a maximum legal (16.5m length) HGV has been modelled for the left turn into and out of Stafford Street and the junction would be adequate for these movements. There are diversionary routes for the right turn into Stafford Street from the south locally via Hunslet Road, Forster Street and Larchfield Road. The right turn exit from Stafford Street to the north would be locally diverted via Larchfield Road, Goodman Street, Atkinson Street and South Accommodation Road. In addition, there are wider and more strategic routes from the south and to the north via Church Street, Beza Street and the A61 to the M621 motorway.

Headingley Castle Management Limited (HCML) OBJ 461, Chris Barroclough OBJ 360 and Ian Barroclough OBJ 396, and Residents of Headingley Castle: Heather Marshall OBJ 806

- 8.139 Land would be required for the construction and operation of the segregated section of the NGT to bypass Headingley. Alternative proposals for railings on the boundary have been put forward for consideration. The final specification would be determined at the detailed design stage and the detailing would be subject to a planning condition. The proposal would ensure the maximum retention of trees. In terms of overall noise, there would be a change of less than 1dB from the operation of the trolley vehicles²⁰³⁰, which would generally be considered to be noticeable only when a subject is deliberately listening for a change. The noise from those using the footpath and cycleway adjacent to the NGT track would only be audible if it were from shouting.
- 8.140 The changes in the gradient of the access road would only be over short lengths that would either be 1% steeper or 1% less steep, with them reduced under the NGT. The traffic flows on the access road would remain relatively

²⁰³⁰ Document G-4-91 Section 5.1

low with the reoccupation of Shire Views by LCC. The junction with the trolley vehicle would operate satisfactorily even with any 'calling' of the signals for pedestrians and cyclists and significant queues would not build-up. The changes in the horizontal and vertical alignment between DF2 and DF7 have been considered as not making any material difference to the impact on Headingley Castle²⁰³¹.

*Lawnswood School OBJ 675*²⁰³²

- 8.141 Further design work has been carried out and as a result, parcel No 07004 would no longer be required for a construction compound. However, part of the parcel would be required to accommodate the works to create a new access. The design includes moving the existing school vehicular access at the Outer Ring Road some 40m to the west due to potential interaction with the Lawnswood roundabout junction. A deceleration lane has been included²⁰³³. The proposals would provide a signal controlled pedestrian and cycle crossing over the western arm of the Lawnswood roundabout junction, improving safety on a route to the school.
- 8.142 During the construction phase the access from Otley Road would remain open and an access from the Outer Ring Road would also be open throughout the works. In addition, access and egress onto Spen Gardens, which is not currently permitted, would be allowed throughout the construction works.
- 8.143 Whilst the duration of the works for the whole Scheme could be approximately two and a half years, the works in the location of the School would be for a much shorter period. It is anticipated that works to Lawnswood roundabout and on Otley Road past Lawnswood School would take between 5 and 6 months in total.
- 8.144 The existing footway past the school grounds alongside the Outer Ring Road would retain its current 2m width. A footway alongside the proposed left slip

²⁰³¹ Document APP/176 Tab 36

²⁰³² Documents APP-16-3: Mr Caten PoE Appendix Section 4; and APP-3-2: Mr Smith PoE Section 10.12

road from Otley Road to the Outer Ring Road would be 3m width. The existing footway past the school grounds on the western side of Otley Road between Weetwood Road and the school entrance would retain its current 3m width. Beyond the school frontage, some lengths of footways further afield on Otley Road which are on walking routes to the school would be narrowed but in all cases would be not less than 2m width. Manual for Streets recommends a minimum footway width of 2m and that consideration be given to a wider footway adjacent to a heavily used carriageway or adjacent to gathering places such as schools and shops.

- 8.145 The NGT proposals would reduce the general traffic lanes on Otley Road to one in each direction at a signal controlled pedestrian and cycle crossing in approximately the same location as the existing facility just to the south of the school entrance. This single lane arrangement would reduce risks for those who may choose to cross at the signalised facility, in particular school children, without waiting for the green man signal. This is because with a single lane the risk of a stationary vehicle, such as at the existing bus stop or cars waiting to pick up at the kerbside, masking a faster moving vehicle in the offside lane is avoided.
- 8.146 In addition, a signal controlled pedestrian and cycle crossing would also be provided across the NGT lanes. The NGT vehicles would be at low speed entering or leaving the stop area, have a warning bell and be driven by professional drivers. Signage and road markings would remind users to look both left and right when crossing the NGT alignment in the central reservation.

Lorraine Nelis OBJ 781 and Sarah Nelis OBJ 504

- 8.147 The land that is leased for the stabling and grazing of horses is in the ownership of WYCA, with an expiry date in July 2017 at which time the land should be vacated unless a new lease has been agreed. The options beyond

this date are to rehouse the horses on other potential fields or use land that would be left over to the north of the the NGT²⁰³⁴.

Wilkinson Hardware Stores Ltd OBJ 638

8.148 Access would be maintained for delivery vehicles up to 16.5m length to enable continued delivery vehicle access from Wood Lane into the Arndale Centre throughout the works. The land at the front would be required to ensure sufficient pedestrian rights²⁰³⁵.

Malinee Brown OBJ 704

8.149 The loss of part of the forecourt to 46/46a Otley Road would be the minimum amount needed to facilitate the proposed carriageway widening to provide an additional traffic lane for left turning traffic and the NGT. Undertakings would be made regarding the customer tables and chairs at the forecourt, the location of fixings on the building and the position of new trees²⁰³⁶.

Freightliner Heavy Haul Limited OBJ 744 and Freightliner Maintenance Limited OBJ 877

8.150 Alternative access points to the Flax Mill Lane entrance are being looked at in the event that the entrance would not be available or that access across the railway would not be available. Suitable provisions for access and mitigation would be included within the terms of agreement²⁰³⁷.

Carol Nadry OBJ 809²⁰³⁸

8.151 Kids Academy is located off Holt Farm Rise, Holt Park, where the NGT vehicles would be operating at low speed as this would be a shared space area with cyclists and pedestrians as well as being the terminus point for the route. No land would be required in the permanent case from the nursery although a small area used as a pedestrian access to the site would be required to help

²⁰³⁴ Document APP/176 Tabs 39 and 56

²⁰³⁵ Document APP/176 Tab 46

²⁰³⁶ Document APP/176 Tab 50

²⁰³⁷ Document APP/176 Tabs 54 and 69

construct the works. Access to the property would be maintained throughout the construction period. A retaining wall varying in height between 0.5m and 1.5m and for a length of about 30m is proposed between the NGT plaza and the Kids Academy entrance to overcome level differences, due to lack of space for an embankment.

- 8.152 Parking on Holtdale Approach would not be allowed, as this would impede the transit of NGT as well as other road traffic and could lead to safety issues on the approach to junctions and pedestrian crossings. Parking would be available within 100m of the Kids Academy in the main district centre car park and the Wellbeing Centre car park and the lay-by near the entrance is already used by the business. Access to the Kids Academy along Holt Farm Rise would be allowed within the proposals.

Mosshead Limited OBJ 821

- 8.153 The land would be restricted to temporary construction use and permanent acquisition of rights for the inspection, maintenance, renewal and associated activities related to the proposed substation and NGT²⁰³⁹.

Catherine Beaumont OBJ 835 and David and Ann Beaumont OBJ 1691

- 8.154 Shire Oak Street would no longer be accessible for traffic, including refuse collection, which would have to be from Shire Oak Road. With regard to the foundations of Shiredene flats, a retaining structure to account for about a 1.3m level difference would be constructed about 3m away and any protective measures would be included in the detailed design. Pedestrian and vehicular access to the property would be maintained from Shire Oak Road via Headingley Hall. Low level directional lighting would be used along the corridor to avoid light spill. In terms of noise, the closest side of Shiredene to the NGT is predicted to have a moderate/large adverse effect, which would be mitigated by a noise barrier²⁰⁴⁰.

²⁰³⁸ Document APP-3-2: Mr Smith PoE Section 10.11

²⁰³⁹ Document APP/176 Tab 61

²⁰⁴⁰ Document APP/176 Tabs 64 and 131

Valli Forecourts Limited OBJ 857

8.155 Part of the footway is required adjacent to the BP petrol station to allow kerb realignment and the repositioning of utilities and introduction of poles of the OLE. During the works, both accesses would be made available for use, except for possible occasional overnight closures²⁰⁴¹.

St Chad's Parochial Church Council OBJ 861²⁰⁴²

8.156 The access to the Church is included within Schedule 5 of the draft Order to be temporarily stopped up for the purposes of supporting construction work in the area. However, pedestrian access would be available at all times and vehicular access would be generally available albeit there may need to be some temporary vehicular access suspension.

8.157 The bus stop situated outbound and adjacent to the War Memorial would be relocated to the north so that it would be clear of the proposed signalised junction and bus stopping services would not block trolley vehicles entering the NGT stop. It would no longer have a lay-by, as originally proposed, so that the impact on trees would be reduced.

8.158 The large stone gate posts which stand at the entrance of the Church driveway are outside of the Order Limits and consequently the Promoters do not have powers for their removal or alteration. Construction works would be at least 10m away from them.

8.159 It would be necessary to tie the new kerblines for the widened Otley Road carriageway to the Church drive entrance and these works would be all within LCC land. There are no other proposals to alter Church Drive.

8.160 The design has been modified to provide a right turn waiting area for traffic into Church Drive. The pedestrian crossing and traffic signals to the south of

²⁰⁴¹ Document APP/176 Tab 66

²⁰⁴² Documents APP-16-3: Mr Caten PoE Appendix Section 6; and APP-3-2: Mr Smith PoE Section 10.20

Church Drive entrance would create gaps in the northbound traffic flow on Otley Road, increasing opportunities for right turning traffic into Church Drive.

- 8.161 The temporary stopping up of the Church Drive entrance would be required for minor kerblines which should be completed within a few days. The Church Drive entrance would be reduced from 2 lanes to a single entry lane to allow the kerblines to be completed. If it is not convenient to provide the egress via the existing alternative egress from the site some 90m to the north, access and egress could be provided at the junction of Church Drive with Otley Road using signal control over the short single lane section.
- 8.162 Carriageway widening of Otley Road and construction of the proposed signalised junction would take place over the course of several weeks and traffic flow would be maintained in each direction through traffic management. With these measures pedestrian and vehicular access to the site would be maintained throughout the works, although it would be inevitable that there would be some inconvenience until the works would be completed.

TF & JH (Braime) Holdings Plc OBJ 959²⁰⁴³

- 8.163 A new site access from Sayner Lane would be provided prior to closure of the existing access, which would ensure that vehicular and pedestrian access would be maintained throughout the construction works. The acquisition of land would reduce the back yard area, resulting in articulated lorries not being able to turn around within the site. However, as part of the works, a new turning head facility would be provided in Sayner Lane that would allow articulated lorries to be able to continue to make these turning manoeuvres. This arrangement would be compatible with the objector's proposed back yard reorganisation plans.

Leeds Metropolitan University OBJ 961

- 8.164 The effects on access, services and academic events during construction would be controlled by the CoCP. The relocation of the northbound bus stop

²⁰⁴³ Document APP-16-3: Mr Caten PoE Appendix Section 20
587

adjacent to Churchwood Avenue would be reviewed as part of the detailed design process. There is a draft OLE option agreement that details the responsibilities in relation to OLE attached to the building. With regard to the proposed substation at Queen Square House, the noise from proposed substations has been assessed²⁰⁴⁴.

British Composite Tiles Limited and Colin and Jocelyn Frazer OBJ 977

8.165 Reasonable endeavours would be used to maintain the access to the basement car park, the steps would be reorientated and access would be maintained to the existing substation. A suitable structural survey would be undertaken to establish whether the property would be suitable for OLE fixings²⁰⁴⁵.

Dawn Collins OBJ 1148 and LBC/008, Neil Hunt OBJ 1149 and LBC/026, and Imogen Bennett OBJ 1407 and LBC/043

8.166 The duration of the construction works on Woodhouse Lane between Raglan Road and Kingston Terrace is estimated to take between 4 to 6 weeks and these works would be controlled by the CoCP. Buildings have been identified for OLE fixings on the basis of height and proximity to the route, but before any works would be carried out structural surveys would be undertaken to identify whether the property would be suitable. The fixings would be required about every 25 to 30m or slightly closer on the inside of a bend and would be at a height of 6 to 8m. Therefore, they should not interfere with deliveries. With regard to the impact on signage, this would be considered at the detailed design stage. A building fixing deed would provide assurances as to how the fixings would be regulated, including for maintenance²⁰⁴⁶.

Paragon Finance plc OBJ 1174

8.167 There would be no change to the forecourt parking and the width of the footway in front of the property at 24 Headingley Lane would be increased by about 2m, which would be a benefit to pedestrians visiting the offices. An

²⁰⁴⁴ Document APP/176 Tab 74

²⁰⁴⁵ Document APP/176 Tab 75

²⁰⁴⁶ Document APP/176 Tabs 79, 80 and 87

undertaking would be given to review the provision of dropped kerbs during the detailed design stage. Taking account of safety considerations, they would be provided either at Headingley Lane or at Regent Park Terrace. Pedestrian access to the property, including for the disabled, would be maintained at all times. With regard to the prominence of signage, the NGT shelter would be likely to be about one third of the length of the stop area and therefore any impact on sightlines to the property would be likely to be limited and transitory.

- 8.168 With regard to Buckingham House, an undertaking would be given that would ensure that the boundary structure would be revised so that the car parking space would no longer be affected²⁰⁴⁷.

Leeds and Yorkshire Housing Association OBJ 1182

- 8.169 The remaining concern relates to the provision of appropriate boundary treatment, which could be overcome by the imposition of an appropriate condition²⁰⁴⁸. Concerns raised about the walls would be met by the imposition of conditions.

Jane Attebrah OBJ 1461 and J and E Higgins OBJ 1467

- 8.170 Richmond Road would be closed to traffic at its junction with Headingley Lane and part of the hardstanding area in front of 1 Norville Terrace would be acquired to provide a bus lay-by. An alternative route to Richmond Road would be via Richmond Avenue and Manor Terrace. Access and noise during construction would be controlled under the CoCP²⁰⁴⁹.

Rob Moriarty OBJ 1474

- 8.171 Public realm space would be designed in accordance with the relevant legislation. The proposal would retain the step free access to 1 Cromwell

²⁰⁴⁷ Document APP/176 Tab 82

²⁰⁴⁸ OBJ 1182 Mr Natkus in cross examination

²⁰⁴⁹ Document APP/176 Tabs 91 and 92

Court and tie in with the ramp, making it easier for wheelchair users to access and use the NGT²⁰⁵⁰.

Euro Garages OBJ 1486

8.172 An area of highway adjacent to the St Helen's Lane access to the premises would be used for resurfacing, realigning the carriageway and tying-in works which could require the access to be temporarily closed or restricted. The Otley Road access to the premises would not be affected²⁰⁵¹.

MMC Developments Ltd and MMC Partnership OBJ 1547 and LBC/059

8.173 Vibration effects on buildings due to the OLE fixings would be mitigated by the design of the mountings and fixings. Maintenance and close working arrangements would inevitably change for buildings close to the overhead wires and these would be covered by the building fixing deed²⁰⁵².

*Deborah Fahey OBJ 1558 and on behalf of Chris Smith OBJ 229*²⁰⁵³

8.174 Several parcels of land fronting Whitfield Avenue (Parcel Nos 18033 to 18042; 18044 to 18057, 18059, 18060 and 18063 to 18067) have been included within the Order application for temporary use to carry out landscaping and accommodation works. This would allow the rebuilding of boundary walls or fences if desired. The new boundary walls would be an option available to property owners and the works would only be undertaken by agreement with them²⁰⁵⁴.

8.175 The NGT design is based on a detailed topographical survey of the area undertaken by Longdin & Browning (Surveys) Ltd during 2009. The narrowest point of the adopted highway between Whitfield Square and Whitfield Avenue is 11.204m at Nos 1 and 41. This gives the following layout arrangement: 2m

²⁰⁵⁰ Document APP/176 Tab 93

²⁰⁵¹ Document APP/176 Tab 94

²⁰⁵² Document APP/176 Tab 103

²⁰⁵³ Document REB-1 OBJ1558

²⁰⁵⁴ Document REB-1 OBJ1558 paragraphs 2.4.1 and 2.4.2

eastern footway width, two NGT lanes at 3.6m width each, with potential narrowing to a minimum of 3.25m width, and 2m western footway width²⁰⁵⁵.

- 8.176 At present, Whitfield Way is pedestrianised adopted highway, whereas the proposals would introduce NGT vehicles to Whitfield Way. It is therefore expected that more people would pass the properties on Whitfield Way compared to at present. Whilst it is not accepted that this would give rise to any significant privacy issues, the Promoter would work with residents to consider measures which could be included as part of the proposed boundary treatment should residents consider that necessary²⁰⁵⁶.

*Leeds Community Healthcare OBJ 1565*²⁰⁵⁷

- 8.177 Holt Farm Rise would be realigned to accommodate the proposed NGT stop and plaza. Five car parking spaces (rather than six) within parcel Nos 01026 and 01027 would be required to realign Holt Farm Rise and to connect to the highway to the premises to enable access to the gas governor. Provision of five replacement car parking spaces²⁰⁵⁸ would be made in the car park opposite the premises, about 30m from the entrance.

Johnson Cleaners UK Ltd OBJ 1570 and Oceandale Securities Ltd OBJ 1800

- 8.178 The proposal would accommodate 6 parking spaces including a disabled space within the site, which is the same as existing, and the sign post would be relocated. The access would remain the same with egress changed from being onto Headingley Lane to being onto North Hill Road. No material change in traffic flow is expected on the part of the route in the area of the premises. Information is required regarding the position of underground tanks on the site²⁰⁵⁹.

²⁰⁵⁵ Document REB-1 OBJ1558 section 2.5

²⁰⁵⁶ Document REB-1 OBJ1558 paragraph 2.11.1

²⁰⁵⁷ Document APP-16-3: Mr Caten PoE Appendix Section 2

²⁰⁵⁸ Document A-11: Revised Technical Design Drawings (Rev P4)

²⁰⁵⁹ Document APP/176 Tabs 109 and 145

Park Row Limited OBJ 1586²⁰⁶⁰

- 8.179 The Order Limits extend approximately 10m along Lower Basinghall Street from its junction with Boar Lane to allow the new kerblines and surfacing on Boar Lane to be tied in with Lower Basinghall Street and do not extend any further along Lower Basinghall Street than is necessary. The proposals on Park Row include for carriageway resurfacing but there are no works proposed to the footway on Lower Basinghall Street at No 1 Park Row and therefore the building access points, including fire exit, would remain unobstructed by the works.
- 8.180 The works on Boar Lane and Lower Basinghall Street would be minor in nature. They would take place over the course of several weeks although individual sections of Boar Lane would have access restrictions for less than that time as works progress along the street. With agreed measures in place, pedestrian and vehicular access to Lower Basinghall Street would be maintained throughout the works, although it is inevitable that there would be some inconvenience until the works would be complete.
- 8.181 The works would be able to be carried out in a safe manner. The ventilation for the underground car park is on the building façade and vents onto the eastern footway of Park Row. There are no works proposed to this footway and there would be no need to block or impede the footway to facilitate the carriageway resurfacing works. Therefore the ventilation ducts would not be blocked by the works.
- 8.182 With regard to OLE, from an external visual inspection, the building appears to be suitable to accommodate building fixings and it is likely that up to 2 would be required. A structural survey of the building would determine whether this would be feasible. No works would be undertaken which would compromise the structural integrity of the building.

Otley Road: including Weetwood House Court OBJ 1591, Mrs Riddell OBJ 797, Mr Riddell OBJ 1168 and other residents of Weetwood House Court; Betty Claughton

²⁰⁶⁰ Document APP-3-2: Mr Smith PoE Section 10.34
592

OBJ 726; Margaret Bell OBJ 1817; Michael and Angela Rimmer OBJ 291 and Matthew Reid OBJ 497

8.183 Otley Road would be widened by a little under 2m on the north side in order to accommodate standard width lanes to allow the safe passage of all road users, including cyclists. This would require the compulsory acquisition of a narrow strip of land running along the frontage of Weetwood House Court and Nos 238, 236, 234a, 234, 232 and 226 Otley Road. The existing boundaries would be set back and re-established in accordance with design principles that have been set out²⁰⁶¹. Temporary rights would be required in order to facilitate the proposed boundary re-alignment. The impact on affected properties would be limited²⁰⁶².

The Canal & River Trust OBJ 1599

8.184 In respect of Leeds Bridge, OLE attachments to buildings on either side of the bridge would be used to facilitate the Scheme meaning that OLE support poles would not be used on the bridge structure²⁰⁶³.

The Morley House Trust OBJ 1608

8.185 The Morley House Trust (MHT) owns the former Leeds Girls' High School site which, excluding the nursery school at Ford House, is being promoted for development. LCC has resolved to grant planning permission for a scheme for the development of the Girls' High School site which is compatible with the current (DF7) proposals²⁰⁶⁴. The NGT Scheme would not prevent beneficial redevelopment of the former Girls' High School site.

8.186 As the MHT would be content with the Scheme as promoted in DF6²⁰⁶⁵, it has no objection, in principle, to the demolition and rebuilding of the wall (or part

²⁰⁶¹ Document APP-10-3: Mr Walker PoE Appendix 2

²⁰⁶² Document APP-10-3: Mr Walker PoE Appendix 2; Document APP-3-2: Mr Smith PoE paragraph 10.14: Weetwood House Court; REB-1 OBJ1817:Margaret Bell; and Document APP/176 Tab 151: swept path analysis in relation to 236 Otley Road

²⁰⁶³ Document APP/176 Tab 114

²⁰⁶⁴ Document APP/196

²⁰⁶⁵ OBJ 1608 Mr Natkus in cross examination; and Document G-1-4 illustrates DF6 in the material presented to the LCC Plans Panel

of the wall) on the southern side of Headingley Lane as part of that wall would be demolished and rebuilt if the DF6 proposals were to proceed.

- 8.187 With regard to the impact on the outdoor playing area at the Ford House nursery school site, the nursery school was moved to the Ford House site in full knowledge of the Supertram/rapid transit proposals, and the development of the site has taken place since 2002²⁰⁶⁶. The proposals for highway widening in the vicinity of Ford House (Buckingham Road) have been the subject of careful consideration with a number of options having been considered²⁰⁶⁷. As a result of the removal of a right hand turning lane on Headingley Lane, the land required to be taken has reduced.
- 8.188 Although there would be some reduction in the area available for outdoor play, the quantum of space would continue to exceed the minimum level set in the guidelines²⁰⁶⁸. Given that the existing and proposed playspace is immediately adjacent to the boundary wall, the quality of the reduced area would be comparable.
- 8.189 The main disadvantage of the DF6 proposal is that it would remove the current inbound cycle lane on Headingley Lane. The need to encroach onto the objectors' land arises as a result of providing a facility which would be of benefit to many, both cyclists and other road users. There is a clear public interest in retaining the inbound cycle lane. Given the significant public benefits to be gained by providing adequate facilities for cyclists, and the relatively modest additional encroachment onto the southern side of Headingley Lane, there is a clear and compelling case in the public interest to acquire the land.

²⁰⁶⁶ Document REB-1 OBJ1608 Appendix B: Aerial photographs

²⁰⁶⁷ Document REB-1 OBJ1608 Appendix: technical note

²⁰⁶⁸ OBJ 1608 Mr Natkus in cross examination; Document OBJ/1608 SOC Appendix: DLA design option report

Headingley Land Developments OBJ 1611

- 8.190 There is not an extant planning permission on the land, only an undetermined one²⁰⁶⁹. Alternative route alignments were considered (including DF2) and a judgment was taken that a route alignment which did not cause adverse noise impacts on St Columba's Church and on the servicing and parking arrangements for the Church should be preferred (DF7)²⁰⁷⁰.
- 8.191 With regard to the suggested alternative to the acquisition of land for the ecological mitigation area, it would consist of tree planting along the north eastern boundary. This boundary is overlooked by housing on Oakfield Road²⁰⁷¹ and the Promoters consider that the proposed mitigation meadow would be a large parcel of land with good links to habitat and with existing vegetation which could be used as a strong basis for habitat creation. Enhanced tree planting would not provide adequate foraging habitat. The land proposed for ecological mitigation is suitable and required for that purpose²⁰⁷². In addition, the provision of additional open space in a ward which is deficient in such space is an added benefit. A compelling case in the public interest is made out and there is no justification for making the modification sought.

Topland Ridgeway/Addington Capital OBJ 1613

- 8.192 In relation to Headingley Office Park, no evidence has been submitted as to the adequacy or lack of adequacy of current parking or of the impact of the proposals²⁰⁷³. The current access points onto Headingley Lane would be maintained²⁰⁷⁴. There is no evidence that a reduction in car parking spaces would have any adverse impact on the business park. The benefit to be gained by providing the inbound cycle lane provides a clear and compelling case to justify the acquisition of the land.

²⁰⁶⁹ Document APP-8-3: Mr Speak PoE Appendix 8

²⁰⁷⁰ Document G-4-91

²⁰⁷¹ Document REB-1 OBJ 1611 paragraph 2.51

²⁰⁷² Professor Pursglove in cross examination

²⁰⁷³ OBJ 1613 Mr Natkus in cross examination

Damian Hirst OBJ 1643

8.193 Land used as a car park for the residents of the flats at 2 Water Lane would be required to accommodate a new substation. Mitigation measures would include building a new wall to blend in with the surroundings²⁰⁷⁵.

Lucy Barker OBJ 1647 and LBC/005²⁰⁷⁶

8.194 Lucy Barker is a lodger of 6 Wood Lane which is owned by LCC. LCC is working with the occupants to re-house the lodgers.

Rolling Centre Limited OBJ 1672, Alan Howard OBJ 1678, Planatex Ltd OBJ 1679, Cyan Studios OBJ 1680, Carol Lesley Flesher OBJ 1681 and Northern Industrials Ltd OBJ 1682²⁰⁷⁷

8.195 Further scheme design has been undertaken in the location of the Trading Estate²⁰⁷⁸. The changes to the design mitigate the impact within parcel 20024, reducing the effect to one car parking space used by Northern Industrial Limited. This land is required to accommodate the repositioned bus lay-by and provision of a new bus lane. The alternative arrangement significantly reduces the temporary land requirements.

RSPCA Leeds, Wakefield & District Branch OBJ 1677

8.196 During construction access to the Arndale Centre for deliveries would be maintained via Alma Road, Wood Lane or both. The proposals would not affect the allocated ground floor parking space or access arrangements for first floor parking for the RSPCA²⁰⁷⁹.

²⁰⁷⁴ Document APP-3-2: Mr Smith PoE paragraph 10.28.1

²⁰⁷⁵ Document APP/176 Tab 121

²⁰⁷⁶ Document APP-16-3: Mr Carden PoE Appendix Section 9

²⁰⁷⁷ Document APP-16-3: Mr Carden PoE Appendix Section 23

²⁰⁷⁸ Document A-11: Revised Technical Design Drawings (Rev P4)

²⁰⁷⁹ Document APP/176 Tab 125

Dr Jonathan Smith OBJ 1699

8.197 The NGT Headingley stop would be close to the Headingley Medical Centre. Noise and disruption during construction would be controlled under the CoCP²⁰⁸⁰.

Malmaison OBJ 1709

8.198 The introduction of the trolley vehicles on Bridge End would not result in an increase in noise or vibration as they would be powered by electric drive, which would be quieter than diesel engines, and would run on rubber tyres. Access to the premises during construction would be managed by the CoCP.

Richmond House School OBJ 1733

8.199 Traffic flows on Glen Road would not materially increase because banning the right turn into Glen Road would focus these movements at the proposed dedicated right turn facility at St Chad's Road and traffic signals at peak times would only provide a green signal for Glen Road every other cycle. This would reduce the attractiveness of the junction for rat-running traffic. Glen Road and Chruchwood Avenue would be signalised at the junction with Otley Road, helping to control the flow of traffic to make Otley Road more predictable to cross²⁰⁸¹.

GE CIF Trustees Ltd OBJ 1736 and LBC/050

An agreement seeking to give the necessary assurances and mitigation would be developed²⁰⁸².

Academy Music Group Limited OBJ 1737 and LBC/002

8.200 The parking arrangements have been agreed and a building fixing deed would be entered into, with the consent of the landlord²⁰⁸³.

²⁰⁸⁰ Document APP/176 Tab 132

²⁰⁸¹ Document APP/176 Tab 135

²⁰⁸² Document APP/176 Tab 137

Northern Gas Networks OBJ 1752

8.201 It is not envisaged that the LTVS would adversely impact upon Northern Gas Networks' ability to carry out its statutory function in relation to the gas network. The final wording of an 'Asset Protection Deed' should be able to be agreed.

Network Rail OBJ 1791

8.202 Although works of attachment would be required to bridges over or beneath the railway with access thereto, the works would not impact upon operational railway and the arrangements between the parties should be able to be captured within the terms of the 'Basic Asset Protection Agreement' and settlement agreement that is being negotiated. The agreement and transfer cannot be finalised until Network Rail has concluded its own clearance procedures, including for the land to be acquired for the substation²⁰⁸⁴.

Round Strategies Limited OBJ 1802

8.203 The safeguards given in the agreement that had nearly been reached with the De Vere Group would be given to Round Strategies Limited²⁰⁸⁵.

Highfield Surgery OBJ 1811

8.204 The on-site car park has 19 existing spaces, 2 of which would be relocated and 2 set back by about 1.5m, with the number remaining unchanged. The existing car park access (to the south) would be relocated clear of the NGT stop area and a second access would be created at the northern end of the car park so that it would not be necessary to turn vehicles around in the site. The continued use of the existing turning head for car parking has to be seen in the context that, when making a planning application in 2011, the Surgery considered 16 spaces to be adequate.

²⁰⁸³ Document APP/176 Tab 138

²⁰⁸⁴ Document APP/176 Tab 143

²⁰⁸⁵ Document APP/176 Tab 146

- 8.205 In relation to off-site parking, a very significant amount of parking is available in the large district centre car park, and the parking bays reserved for those with disabilities are in that part of the car park closest to the Surgery. In addition, the Order would give the Promoters power to regulate on-street parking²⁰⁸⁶ and parking bays could be provided on Holtdale Approach²⁰⁸⁷. By restricting waiting to a limited time, more spaces would be likely to be available for dropping-off and for short stay parking than is the case at present, which allows unrestricted parking.
- 8.206 Both access and parking would be maintained²⁰⁸⁸. Given the benefits to the public of providing an NGT stop giving access to the district centre, there is a clear and compelling case justifying acquisition of the limited land interests²⁰⁸⁹ (the land to be acquired permanently is a footway which is adopted highway) from Highfield Surgery.

FWY OBJ 923

- 8.207 With regard to OLE fixings, it is not yet known whether there would be a need to make an OLE fixing to any individual building in respect of which rights are sought as the detailed design of the Scheme has yet to be finalised. Therefore, it is necessary to acquire all the rights sought if the Scheme is to be delivered.
- 8.208 Protection for property owners is provided by Article 25(1) of the draft Order, which limits the compulsory acquisition power to '*so much of the land ... as may be required*'. Accordingly, once detailed design is finalised, the extent of the rights required would be limited.

²⁰⁸⁶ Document A-01-4 Draft Order Article 43(2)(c)

²⁰⁸⁷ Document APP/176 Tab 149 page of letter from NGT dated 27 August 2014

²⁰⁸⁸ Document APP-3-2: Mr Smith PoE Section 10.10

²⁰⁸⁹ Document APP/211: Updated Book of Reference Numbers 01020, 01021 (temporary use), and 01022 (temporary use) pages 6 to 7

Matter 14: Substantive changes proposed by the Promoters to the draft TWA Order

8.209 With regard to the TROs allowing for events such as loading and unloading in bus/NGT lanes, Article 43 of the draft Order²⁰⁹⁰ allows for such details to be addressed by the Promoters when making TROs under the powers conferred by the Order (if made).

Matter 15: Any other relevant matters raised at the Inquiry –

Competition Law

8.210 Branding of NGT stops would make NGT legible and would be a distinguishable feature. It may or may not give the service an advantage but would not give rise to any competition law issues.

WRA

8.211 In terms of whether the placement and quality of the proposed NGT stops would be anti-competitive, the stops are not an essential facility that it is necessary to have access to in order to serve a particular market²⁰⁹¹, and therefore there would not be any breach of any relevant provision.

FSB

8.212 With regard to the Promoters' intention to establish an entity under their control to operate the trolley vehicles, the provisions in the Transport Act 1985 that relate to WYCA are section 59, which makes provision for the transfer of the bus undertakings of Passenger Transport Executives into separate companies formed pursuant to that section, and the transfer of the shares or other securities in such companies to the Passenger Transport Authority for the area; and section 60, which makes provision for the SofS to suspend the powers conferred by section 10(1)(i) of the Transport Act 1968 for a Passenger Transport Executive to carry passengers by road. In the case of the West Yorkshire Passenger Transport Executive (being the WYCA's

²⁰⁹⁰ Document APP/205: Filled draft Order

predecessor), this was implemented through the West Yorkshire Passenger Transport Executive (Exclusion of Bus Operating Powers) Order 1986 (SI 1653/1986) (Exclusion Order). Following this date, West Yorkshire Passenger Transport Executive did not have powers pursuant to any legislation to, itself, carry passengers by road, and therefore could not directly operate a bus service itself.

- 8.213 In respect of LCC, section 17 of the Transport Act 1968 (now repealed) made provision for transfer by order, by the Minister, of local authority transport undertakings to the Passenger Transport Executive for an area, including, pursuant to section 17(1)(c), the transfer of all powers and duties as may be determined by or under the order for the purposes of or in connection with such undertaking; and article 10(1) of the West Yorkshire Passenger Transport Area (Establishment of Executive) Order 1973 (SI 1973/1729) achieved this in respect of West Yorkshire Passenger Transport Executive, with the transferred undertakings including those of the Council (being the road transport undertaking carried on by the Council and known as Leeds City Transport). Therefore, following this transfer, LCC did not have powers or duties in respect of operation of a road transport undertaking in its area.
- 8.214 So far as WYCA is concerned, section 10(1)(i) of the Transport Act 1968 and the Exclusion Order are no longer relevant. Section 10(1)(i) was wholly repealed by the Local Transport Act 2008 and the Exclusion Order was revoked, as spent, by the Passenger Transport Executives (Exclusion of Bus Operating Powers) (Revocations) (England) Order 2014. Furthermore, section 99(1) of the Local Transport Act 2008 confers on an Integrated Transport Authority (ITA) and therefore WYCA (as successor to WYITA), a well-being power, which is subject to restrictions on exercise of that power where there is a prohibition, restriction or limitation on its powers contained in any enactment (section 100(1) Local Transport Act 2008). Section 102B and 102C of the Local Transport Act 2008, as amended by the Localism Act, provide the ITA with a further power to do anything which the ITA considers appropriate

for the purpose of the carrying out of any of the ITA's functions, insofar as it is not subject to certain pre-commencement and post-commencement limitations which do not apply in the present circumstances.

- 8.215 In addition, the combined authority is also vested, in its own right, with a general well-being power by sections 113A and 113B of the Local Democracy, Economic Development and Construction Act 2009 (as inserted by the Localism Act 2011). As a result, the WYCA has the power, so far as is necessary, to operate the trolley vehicle system in the way proposed.
- 8.216 So far as LCC is concerned, it now has a power of general competency pursuant to section 1(1) of the Localism Act 2011. This is subject to section 2 of the Localism Act 2011, which includes ensuring that the general power of competence does not enable a local authority to do anything which it is unable to do by virtue of a pre-commencement limitation, as defined in that section. Whilst section 17 of the Transport Act 1968 did previously restrict the Council from operation of a transport undertaking, this section has now been repealed, so there appears to be no express restriction or right of restriction on the Council in respect of operation of such an undertaking, where this falls within the power of general competency.
- 8.217 Therefore, both WYCA, as the successor to both the Passenger Transport Executive and ITA, and LCC are not subject to any specific restrictions suggested by the FSB and they do have a number of general powers which they can rely upon. Accordingly, even without any express statutory entitlement under the proposed Order, the Promoters could establish an entity to operate the NGT (though it is not their intention to do so).
- 8.218 In fact, the proposed Order as applied for includes express provision enabling the Promoters to operate the NGT services²⁰⁹² and, with the consent of the

²⁰⁹² Document A-01-4: Article 39 (power to operate and use authorised trolley vehicle system); Article 39(1): *'the promoter may operate and use the authorised trolley vehicle system and the other authorised works as a system, or part of a system, of transport for the carriage of passengers and goods'*

SofS to enter into agreements with others²⁰⁹³. These provisions, which are based on model clauses and similar provisions in existing guided bus and tramway orders, are within the permitted scope of a TWA Order. Sections 1 and 5 of the TWA 1992 expressly authorise the making of such orders in relation to the operation as well as the construction of trolley vehicle (and other transit) systems and the inclusion within such orders of all such provisions as may be necessary or expedient. Were there to be some existing constraint in the Transport Act 1985 or other legislation, this could also be overridden and would be by articles 39 and 49²⁰⁹⁴.

- 8.219 In respect of the funding of the operation of the trolley vehicle system, section 9A(3) of the Transport Act 1968 makes it the duty of the WYCA to secure the provision of such public passenger transport services as the WYCA considers appropriate to secure for meeting any public transport requirements within the area which would not be met apart from such action. Section 9A(4) states that the WYCA shall only have power to enter into agreements providing for services subsidies for the purpose of securing the provision of any such service where the service would not be provided or would not be provided to a particular standard without subsidy. Section 9A(4A) specifies that that standard in this case includes the vehicles used to provide the service. The Local Transport Act 2008 amended these provisions to allow the provision of services to specified standards, and prior to this, the powers only applied where services would not otherwise be provided.
- 8.220 As currently specified, these powers would restrict the Promoters from letting a bus service contract where services of the same standard were already operated without subsidy. They would not, however, restrict the Promoters from letting a service contract where services of that standard were not operated, and such service required subsidy.
- 8.221 It is common practice for service contracts let pursuant to the Transport Act 1985 to be let on either a gross or net cost basis ie either with the authority or

²⁰⁹³ Document A-01-4: Article 49 (powers of disposal, agreements for operation etc)

²⁰⁹⁴ Document E-1-15: TWA 1992 sections 5(3) and (4)

the operator retaining revenue. Therefore, the Promoters generally have the powers to pay the operating costs of the trolley vehicle system and take whatever farebox revenue would be collected.

- 8.222 The Promoters intend to let contracts for the construction, maintenance and operation of the NGT system. Therefore, whilst both the Order²⁰⁹⁵ and the underlying legislation would allow for direct operation by the Promoters, in reality the Promoters would let contracts for operation to a third party. Whilst the underlying legislation would therefore potentially allow the Promoters to let contracts for operation of the NGT system, should it require subsidy, they do not anticipate that any subsidy would be paid, and intend to rely upon the powers in the draft Order which reflect the equivalent power granted under other TWA orders.

Conclusion

- 8.223 There are no competition law, or transport law issues which would prevent the making of the Order.

Estimated passenger usage

- 8.224 Access distances to public transport vary depending on the nature and availability of services. Nevertheless, population growth in Leeds would increase demand and the forecast public transport demand in the corridor would increase as a result of overall service improvements. Finally, some demand would transfer to use NGT for improved access within the City Centre. Therefore, the forecasts that have been provided for NGT demand are reasonable and can be relied upon²⁰⁹⁶.

Adequacy of existing service

- 8.225 Metro monitors changes to bus provision and investment by bus companies across West Yorkshire. It also undertakes its own monitoring of bus patronage across West Yorkshire, as well as the performance of bus services. This data

²⁰⁹⁵ Document A-01-4: Articles 39(1) and 49

²⁰⁹⁶ Document APP-5-2: Mr Hanson PoE paragraphs 10.5 to 10.7 and sections 5 and 6

shows that investment by all operators in new ETMs has been incentivised by Government which offered a higher rate of Bus Service Operator Grant (BSOG) to bus operators which had smart-enabled ticket machines (ie could use the smart ticketing features enabled in all English National Concessionary Travel Scheme passes).

8.226 FWY, in common with other operators, has not met the Traffic Commissioner's Target²⁰⁹⁷ whereby *'95% of services should depart from stated timing points within the bracket of up to one minute early and up to five minutes late. Traffic commissioners expect 95 % of services to arrive at the final destination point no more than five minutes late'*. Typically operators have improved scheduling by using data from the Real Time Information (RTI) system. However, on-going analysis from RTI data demonstrates that bus services on the NGT corridors cannot provide the level of punctuality required for NGT²⁰⁹⁸. For example, analysis of the RTI demonstrates that bus punctuality is worse on a Monday morning compared to a Thursday morning, believed in part to be due to the higher volumes of ticket sales by bus drivers on Monday morning as passengers purchase daily or month tickets. With NGT, *'Drivers will not sell tickets...'*²⁰⁹⁹. This approach to ticketing, along with the proposed segregation for NGT would help it have substantially better punctuality than would ever be achievable by any bus services on the corridor²¹⁰⁰.

8.227 The market for bus services in Leeds is also highly concentrated, with most areas served by a single operator. The Competition Commission route analysis report²¹⁰¹ concluded that over 50% of routes in Leeds were likely to experience *'adverse effect of competition.'* The Competition Commission reported that *First Group noted 'there has been no change to the share of bus service provision in the Leeds area for some time' and that 'the competition situation is unchanged with Arriva reducing frequency rather than looking to*

²⁰⁹⁷ Document OBJ/923/06: Mr Alexander PoE paragraph 3.12

²⁰⁹⁸ Document C-1-11: NGT Punctuality Report

²⁰⁹⁹ Document APP-4-2: Mr Henkel PoE paragraph 4.16

²¹⁰⁰ Document REB-1 OBJ/923 paragraph 2.7

²¹⁰¹ Document APP-4-3 Appendix 2

*expand*²¹⁰². The TAS report²¹⁰³ estimates that current patronage is around 5 million trips per year whilst the potential market is over 8 million trips per year. This analysis indicates that current bus services are only achieving just over 60% of their potential. One of the reasons for this under performance is the length and variability of bus journey times, despite existing bus priority measures. Also, the level of traffic congestion makes headway management difficult, leading to bunching and a reduction of effective frequency. This problem is compounded by operators' practice of using the driver to sell single and period (daily/weekly) tickets onboard buses. The approach of the operators, and the under performance on these corridors, is a manifestation of the 'adverse effect of competition'.

- 8.228 There is an inherent difficulty in attracting new customers to a conventional bus product. This has led many other authorities across the country to introduce BRT and Light Rapid Transit (LRT) schemes, including schemes in South Hampshire, Cambridgeshire, Manchester Metrolink expansion programme and the Tyne and Wear Metro reinvigoration programme²¹⁰⁴. Without other transformational elements, a conventional or diesel/battery hybrid bus would not address in full some of the current factors inhibiting usage. A modern trolleybus system, with the environmental benefits of zero emissions (at the point of use), torque characteristics of electric motor propulsion and high levels of segregation would achieve far more in addressing the image problem of the bus than a more conventional vehicle with the legacy of an 'image' problem.

Integration with other transport modes

- 8.229 At key locations, such as in the City Centre, park and ride sites, Holt Park and elsewhere, NGT and non NGT bus stops have been located in close proximity

²¹⁰² Document G-4-72 page 8-46

²¹⁰³ Document OBJ/923 SOC Appendix 3 paragraphs 3.5 and 4.43

²¹⁰⁴ Document APP-1-2: Mr Farrington PoE

to provide convenient interchange between conventional bus services and NGT services²¹⁰⁵.

- 8.230 The specification of the NGT system has been developed to facilitate interchange while at the same time maximising the benefits to public transport users. Therefore, the forecasts and the conclusions drawn from them fully reflect the integration between NGT, bus and rail²¹⁰⁶.

Park and Ride sites

- 8.231 A systematic review of all the transport corridors in Leeds, summarised in the 2009 document 'Investing in Public Transport: A Framework for Leeds'²¹⁰⁷ concluded with possible locations for park and ride sites, including Rapid Transit based Park and Ride at Otley A660 corridor on the Outer Ring Road, and Five Towns/Wakefield M621 corridor at Junction 7²¹⁰⁸. The Bodington Park and Ride site would accommodate up to 850 car parking spaces²¹⁰⁹.

City Centre Parking

- 8.232 A Report to LCC Executive Board on Informal City Centre Commuter Car Parking on 7 September 2011 recommended the Board to approve informal interim policy to deal with commuter car parking sites in the City Centre as a material consideration in planning decisions. The total number of commuter car parking spaces permitted by this policy should not exceed 3,200 for Leeds City Centre Core and Fringe areas only; and permission would be temporary for 5 years from the grant of planning permission. On expiry of the 5 year temporary planning permissions, the City Council would consider whether the delivery of public transport improvements would justify the cessation of the car parking or the granting of further temporary extensions of permission²¹¹⁰.

²¹⁰⁵ Document APP-3-2: Mr Smith PoE paragraphs 5.3.1 and 10.3.1 to 3

²¹⁰⁶ Document APP-5-2: Mr Hanson PoE paragraphs 10.8 to 10.11

²¹⁰⁷ Document C-4-2 pages 21 to 26

²¹⁰⁸ Document APP-2-2: Mr Haskins PoE paragraph 3.10

²¹⁰⁹ Document APP-3-2: Mr Smith PoE paragraph 5.5.2

²¹¹⁰ Document APP/121

Choice of trolley vehicles

- 8.233 The trolley vehicle choice and the proposed specification of the vehicles have been well considered and would be appropriate. The fuel efficiency of trolleybuses is given in the Sub Mode Options Report²¹¹¹. The reductions of 24% for trolleybus and 30% for battery electric are based on the current UK grid mix (164 gCO₂eq/MJ). These figures could be improved significantly through the use of electricity from renewables or future decarbonisation of the UK grid.
- 8.234 Alternative mode options were fully considered in the development of the Scheme²¹¹². This process included consideration of alternative mode options²¹¹³ which draws upon a range of currently available data and studies to compare the relative current and potential future performance of different modes across a range of parameters, including efficiency and emissions. In addition, the actual power demand for NGT would be dependent on the specific trolleybus vehicle selected and would be highly likely to be significantly less than stated in the ES and Sub Mode Options Report. It is likely that energy efficient criteria would be used in the procurement process for the trolley vehicles²¹¹⁴.
- 8.235 The following sub-modes were rejected on the grounds as set out below²¹¹⁵:
- a) Fuel cell hybrid bus (powered by hydrogen) is an immature application of this technology (in particular in respect of the hydrogen supply network) that remains uneconomic for commercial use, with a vehicle capital cost of the order of two and a half times that of a comparable trolleybus for limited additional benefit;
 - b) Gas bus (powered by bio-methane from waste) performed best in terms of reducing the 'well to wheel' greenhouse gas emissions of the NGT service but was rejected on the grounds of low energy efficiency and inability to

²¹¹¹ Document C-1-16

²¹¹² Document APP-15-2: Mr Leather PoE section 3.27

²¹¹³ Document C-1-16

²¹¹⁴ Document REB-1 OBJ1810 paragraph 2.5

²¹¹⁵ Document C-1-1 paragraph 3.24 page 16

operate 'adverse emission free' over any part of the NGT corridors.

Electricity generation is a more energy efficient use of biomethane; and

- c) Battery electric bus vehicles would require charging at depot and are deemed as unsuitable for NGT due to the insufficient range and capacity of the current generation of production vehicles and the performance and technology risks involved in the use of currently unavailable battery powered 18m articulated buses and fast charging technology²¹¹⁶.

8.236 The overall findings of the Alternative Technology Review assessment are summarised as:

- a) Light Rail Transit: It would contribute to meeting the Scheme objectives, but the cost would exceed the funding that is available for NGT and is considered could possibly be made available from other sources. LRT is not an affordable option;
- b) Ultra-Light Rail Transit: There is no proven system at the scale of NGT and this option cannot meet the Scheme objectives on deliverability grounds;
- c) Trolleybus: It performed joint best against the objectives for the Scheme and has been demonstrated to meet the affordability constraint and best meet the deliverability constraints;
- d) Catenary-free electric bus: Should a single articulated catenary-free electric bus be commercially available it would have the potential to meet required NGT outputs. However, no such vehicle is currently available and there is currently no prospect of such a vehicle coming to market in the foreseeable future. The implementation risk of this alternative therefore cannot be accepted by the Promoters; and
- e) Bus: Buses with hybrid engines are becoming commonplace, although their introduction to commercial operation is currently only viable through grant support. 'Plug-in' diesel-electric hybrid bus²¹¹⁷ with top-up fast charging stations installed at each route terminus has the capability to operate on electric power for distances of up to 7 km, enabling operation without any adverse on-street emissions in sensitive areas. Leading

²¹¹⁶ Document APP-2-2: Mr Haskins PoE paragraph 3.28

manufacturers either currently have or are anticipated soon to have single articulated hybrid vehicles as part of their product range. While such vehicles would have similar capacity to NGT, their reliance on diesel traction for the majority of their operation means they cannot deliver the required quality uplift. Also, as they would operate under diesel power for much of the NGT route there would be consequent CO₂, air quality and noise impacts. Double-decker hybrid vehicles are in operation within Leeds. Such vehicles have a passenger carrying capacity somewhat less than a single articulated vehicle and therefore are not suitable for NGT²¹¹⁸.

Other Alternatives

8.237 To a degree, existing and future congestion in Leeds could be ameliorated through investment in the highway network. In particular, there is potential to invest to improve orbital movement by road, especially if this is linked with land use development proposals for housing and/or employment purposes. There is also scope for some targeted enhancements to address pinch points or hotspots. However, there is no prospect of significant car traffic capacity enhancement to ease congestion on radial routes as such improvements will be both unaffordable and unacceptable in terms of their environmental impacts²¹¹⁹.

8.238 With regard to congestion charging, LCC currently has no policies or plans to support the development of a road user charging scheme in the City. Whilst such schemes introduced in the right circumstances and locations can have a beneficial effect, currently in the UK the only significant scheme is in London which has an extensive high quality and integrated transport system. Any road user charging package needs to be accompanied by an extensive transport investment package, particularly in public transport, to provide good alternatives to road users not willing to pay the charges and to offset the otherwise detrimental economic impacts that could arise from a charge.

²¹¹⁷ Document C-1-1 paragraphs 3.21 to 3.22

²¹¹⁸ Document APP-2-2: Mr Haskins PoE paragraph 3.39

²¹¹⁹ Document APP-1-2: Mr Farrington PoE paragraph 6.18

Therefore, the development of high quality public transport options, such as NGT, will remain an essential component of travel choice in the City for which any charging scheme on its own could not provide a simple substitute²¹²⁰.

- 8.239 There are many aspects of the current transport system that fulfil the requirement for demand management, including the quantum of City Centre car parking and associated charging regime, bus lane camera enforcement which is in place in Leeds City Centre, traffic signals controlled by LCC's UTMC team, current bus priority measures etc²¹²¹.
- 8.240 With regard to a suggested tidal flow system, very few cities in the UK have such systems. Where they are employed they are used on highways much wider than any of those along the NGT route. Logistically (and in terms of local environmental impacts) it would be incredibly challenging to deliver a tidal flow scheme along all or even part of this route. To do so would mean the erection of large gantries along the route at regular intervals. Not only this, but given the number of access roads which adjoin the A660 (for example), new signs would be required at frequent intervals and at every single junction where it is in operation. Although a tidal flow system could theoretically help improve journey times for all traffic it would not deliver against the objectives of the NGT project, and therefore it has not been taken forward through the Scheme design process²¹²².
- 8.241 With regard to an underground system, it would have widely spaced stops and relatively long access times to get from the surface to platforms. Even if there were benefits, they would not justify the very significant cost of such a system, at potentially over £220 million per km²¹²³.

Ticketing

- 8.242 Unlike commercial bus services, where the Promoters do not have the legal powers to set fares, for NGT the Local Transport Authority would take revenue

²¹²⁰ Document APP-2-2: Mr Haskins PoE paragraphs 11.10 to 11

²¹²¹ Document APP-2-2: Mr Haskins PoE paragraphs 11.12

²¹²² Document REB-1 OBJ1810 paragraphs 2.1.1 to 2.1.3

risk. This means that the Promoters would be responsible for setting NGT fares. The revenue collected from fares would be set against the cost of delivering the service. The NGT operator would be required to participate in the West Yorkshire Ticketing Company and accept the company's multi-operator bus ticketing products and all relevant multi-operator bus, and bus and rail, tickets would be accepted²¹²⁴.

Choice of corridor

8.243 Work to comprehensively consider all transport corridors in Leeds has been carried out²¹²⁵ and this has led to the finding that identified the two NGT corridors as suitable and appropriate for rapid transit treatment. Technical work that underpins the WYTP package has considered the investment needed to enhance links between Leeds and other towns and cities in West Yorkshire, as well as other principal travel corridors in West Yorkshire. This has led to a multi-modal package of interventions, including a package of measures targeted at bus. Work is underway looking at how these measures can be implemented on the Leeds to Bradford corridor²¹²⁶.

8.244 The analysis has demonstrated that the A660 Otley Road and A61/M621 corridors have the demand characteristics necessary, and fulfil the criteria, to support a rapid transit scheme (which includes park and ride as an integral element) as well as present the opportunity to implement one. Such a scheme needs high capacity vehicles and an appropriate level of associated infrastructure to provide the step change in public transport journey times, capacity and quality that the City needs²¹²⁷.

Effect on traffic

8.245 Congestion in general would not increase. Analysis of capacity and queues on a junction by junction basis has shown that in many places there would be an

²¹²³ Document REB-1 OBJ/1624 paragraph 2.11.1

²¹²⁴ Document APP-4-2: Mr Henkel PoE paragraphs 4.12 to 4.19

²¹²⁵ Document C-4-2

²¹²⁶ Document REB-1 OBJ/923 paragraph 2.27

²¹²⁷ Document APP-2-2: Mr Haskins PoE paragraph 3.41

increase in capacity, with some reduction in queuing. In other places, local re-routing would lead to an increase in traffic flow, because there would be the capacity in the junctions to handle it. There remain pinch points on the route where there would be no improvement in capacity (but no worsening either). Traffic in a congested situation would generally re-route to find what the driver considers an optimal route²¹²⁸.

Costs and funding

- 8.246 There is now no process where promoters can bid directly to the DfT for major schemes. Should the Promoters' application for TWA Order powers be rejected by the DfT, or for any reason the Department's funding be withdrawn, then the DfT's £173.5 million contribution would be lost to Leeds. The two broad options available locally would be to re-allocate funding from other schemes currently earmarked for funding from the WYTF or to extend the WYTF. Decisions on the size of the fund and how this is financed are a matter for the elected members of the Combined Authority and its constituent council and cannot be prejudged²¹²⁹.
- 8.247 The funding would be the following outturn amounts and percentages: DfT £173.5 million (69%), Metro Capital Reserves/LTP3 £4.9 million (2%), LCC Capital Programme/LTP3 £25.5 million (10%), Prudential Borrowing £35 million (14%) and land already in Metro/LCC ownership £11.6 million (5%), giving a total of £250.5 million²¹³⁰. Based on the information presented, the costs associated with the construction, operation, maintenance and renewing NGT are affordable and financially sustainable²¹³¹.
- 8.248 A 'Quantified Risk' estimate has been included within the overall estimate of the Scheme costs. This provides for any costs which would be incurred as a consequence of risks materialising, and is standard practice for any project.

²¹²⁸ Document APP-6-2: Mr Robertson PoE paragraphs 8.2 to 8.4

²¹²⁹ Document REB-1 OBJ/923 paragraphs 2.52 to 2.54

²¹³⁰ Document C-1

²¹³¹ Document APP-2-2: Mr Haskins PoE paragraphs 8.1 to 8.13

- 8.249 A Gateway Review has been undertaken. The Office of Government Commerce (OGC) Gateway Process (now Local Partnerships) is designed to provide independent guidance to Senior Responsible Owners (SROs), programme and project teams and to the departments who commission their work, on how best to ensure that their programmes and projects are successful. Independent practitioners from outside the programme/project use their experience and expertise to examine the progress and likelihood of successful delivery of the programme or project.
- 8.250 The Review provides support to SROs in the discharge of their responsibilities to achieve their business aims, by helping the SRO to ensure the best available skills and experience are deployed on the programme or project; all the stakeholders covered by the programme/project fully understand the programme/project status and the issues involved; there is assurance that the programme/project can progress to the next stage of development or implementation and that any procurement is well managed in order to provide value for money on a whole life basis; achievement of more realistic time and cost targets for programmes and projects; improvement of knowledge and skills among Government staff through participation in Reviews; and provision of advice and guidance to programme and project teams by fellow practitioners²¹³².

Impact on character and appearance and loss of trees

- 8.251 Of the 29 character areas on the north route only 5 areas would potentially have to be subject to significant adverse effects to the visual amenity. This can be countered by 6 areas that would potentially experience non-significant beneficial visual effects. Of the 15 character areas on the south route no character areas would be likely to be subject to significant adverse visual effects and 6 areas would have potentially non-significant beneficial effects on the visual amenity. Improved pedestrian facilities, strategies to minimise

²¹³² Document APP-2-2: Mr Haskins PoE paragraphs 11.52 to 11.61

street clutter and new tree planting all would assist to mitigate against any adverse impact of the NGT²¹³³.

- 8.252 CAVAT is one of a number of evaluation techniques, primarily developed to assess value of trees in monetary terms using various criteria. There is no national guidance to suggest that the CAVAT method should be used for valuing trees on developments, instead of a BS5837 survey which NGT has used. CAVAT is useful in ascribing monetary values to trees when they may be causing damage to buildings as it helps to justify their retention and the cost of building remedial work, rather than simply felling the trees. A large number of replacement trees would be planted as part of the Scheme but the CAVAT commissioned by the objector only assesses these at the time they are planted. Therefore, the method does not account for the impact and value of the replacement trees as they become more mature. The Scheme would increase the number of trees along the route which would eventually lead to a net gain to the overall environment due to the increased number of trees and them replacing some of the existing aging tree stock²¹³⁴.

Impact on recreation and green space

- 8.253 The proposed land and green space to be used for NGT has been assessed under the LQP standard which is consistent with the national Green Flag standard. The majority of this land currently falls below the standard. The NGT proposals would improve many of these sites so that they would meet the standard. Nine sites which contain green space and are intended to be used as temporary construction compounds have been assessed. It is considered that none of these sites would suffer long term detrimental impact and mitigation would improve the amenity of numerous sites²¹³⁵.
- 8.254 At Woodhouse Moor, due to traffic flow difficulties, it would be necessary to widen the road at the north east if the NGT was to run on the highway. Running the NGT over Woodhouse Moor would prevent road widening and

²¹³³ Document APP-10-2: Mr Walker PoE paragraphs 5.8 to 50, and 10.7 to 11

²¹³⁴ Document APP-10-2: Mr Walker PoE paragraphs 8.35 to 8.37

would keep the verge more intact. To mitigate for this, extensive tree and hedge planting and improvement works to the existing steps, paths and settings to the monument would be provided²¹³⁶.

8.255 The route across Belle Isle Circus is driven by potential conflicts with HS2 and would have the benefit of providing a better connection for NGT to the Belle Isle community via existing road infrastructure. The site fails to meet the LQP standards, as there is no formal access point, limited facilities, no signage and low conservation value. NGT proposes to improve the site so it would meet the standard by tree planting, the provision of a central seating area, signage and additional landscape features²¹³⁷.

8.256 With regard to the loss of playing fields that would be required for Bodington Park and Ride, consultation with Leeds University and Sport England led to the conclusion that existing pitches could be upgraded and new pitches provided on existing facilities at Bodington, Lawnswood and Weetwood playing fields. The solution arrived at would provide more programmable sports time and with the replacement facilities much closer than the pitches being lost to the existing University facilities and community that also use them²¹³⁸.

Employment and economic benefits

8.257 The Urban Dynamic Model (UDM) for West Yorkshire has been developed for Metro and has been used for the last decade or so to support the development of transport policy and investment programmes. Analysis from the UDM has helped the Leeds City Region develop and prioritise its WYTF programme of investment. The UDM has been used to assess the 'Wider Economic Impacts' of NGT²¹³⁹. The UDM forecasts that NGT would lead to an increase of 3,687

²¹³⁵ Document APP-11-2: Mr Flesher PoE paragraphs 2.13 to 18, 4.1 and 5.4 to 9

²¹³⁶ Documents APP-3-2: Mr Smith PoE Section 6.7 and APP-11-2: Mr Flesher PoE Table 2.2 references 5 and 6

²¹³⁷ Documents APP-3-2: Mr Smith PoE Section 6.10 and APP-11-2: Mr Flesher PoE Table 2.2 reference 12 and Table 2.4 reference 19 (temporary use)

²¹³⁸ Documents APP-3-2: Mr Smith PoE Section 6.3 and APP-11-2: Mr Flesher PoE paragraphs 2.14 to 2.16 and 5.7

²¹³⁹ Document C-1-18

jobs in Leeds District by 2031 and result in Wider Economic Impacts of £115 million Present Value (in 2010 prices).

- 8.258 Well specified rapid transit schemes can support regeneration and redevelopment. The NGT Scheme would serve south Leeds, and in particular areas that are designated in the Leeds Local Development Framework for regeneration and redevelopment, including the Aire Valley Action Plan area and the area covered by the South Bank Planning Statement. NGT would support the realisation of these initiatives and the permanence of the system would be a notable contribution to this²¹⁴⁰.
- 8.259 It is not the purpose of NGT to support each and every regeneration initiative in Leeds and serve each and every deprived area, although NGT would serve a number of areas earmarked for regeneration, as well as some areas that experience the highest deprivation seen in Leeds. NGT is part of a complementary package of enhancements to bus and rail networks, as well as targeted enhancement to the City's road network, which together would support regeneration and address deprivation across the City²¹⁴¹.
- 8.260 During the construction of the NGT Scheme, potential socio-economic benefits include the following:
- a) temporary employment through construction, with a forecast of about 170 staff and operatives employed at the peak, although this would be largely dependent on the nature of the primary construction contract; and
 - b) short-term increase in economic activity due to the construction process, as a result of the construction workers employed to deliver the NGT Scheme utilising local goods and services²¹⁴².

Construction Impacts

- 8.261 With regard to access to properties, appropriate provision would be made through the proposed construction methodology and traffic management

²¹⁴⁰ Document APP-7-2: Mr Chadwick PoE paragraphs 3.125 to 3.128

²¹⁴¹ Document REB-1 OBJ/923 paragraph 2.22

²¹⁴² Document APP-15-2: Mr Leather PoE paragraph 4.51

arrangements²¹⁴³. During the construction works there could be some temporary disruption to local businesses and access to businesses. Various plans would be implemented to mitigate the impact of construction on local communities, for example set hours of work and establishing local liaison groups to ensure a clear line of communication²¹⁴⁴.

8.262 There would be construction impacts but these would not be exceptional and would be managed through the CoCP²¹⁴⁵. Construction traffic would have an effect on all sections of the route. However, a CTMP would be implemented to mitigate the impact of construction traffic, for example construction traffic to only use specific routes to sites. The effect of dust nuisance from construction is considered to be minor adverse, the CoCP would set out ways to mitigate for this effect²¹⁴⁶.

8.263 During the construction period mitigation measures would be used to minimise the environmental effects of the works. The CoCP states that local liaison groups would be established including the representatives of frontages of properties or other people affected by the relevant section of the construction works, together with representatives of the highway authority, police, emergency services, bus operators and other such bodies. Local liaison groups would represent the views, concerns and comments of the larger community along the proposed route and provide communities with regular progress updates and methods of communication²¹⁴⁷.

Impact on existing bus services

8.264 Bus journey times are anticipated to be faster as a result of the NGT proposals because buses would be able to use the NGT infrastructure wherever such usage would be feasible²¹⁴⁸.

²¹⁴³ Document APP-3-2: Mr Smith PoE chapters 8 and 10

²¹⁴⁴ Document APP-15-2: Mr Leather PoE paragraphs 4.26 to 33, 4.50 to 51 and 8.39 to 40

²¹⁴⁵ Document A-08g-2

²¹⁴⁶ Document REB-1 OBJ/923 paragraphs 2.36 to 2.45

²¹⁴⁷ Document APP-3-2: Mr Smith PoE paragraphs 8.3.1 to 10

²¹⁴⁸ Document APP-4-2: Mr Henkel PoE paragraphs 8.25 and 8.30

- 8.265 The Promoters have formed a judgment as to the likely provision of bus services following implementation of NGT and the benefits and disbenefits associated with these changes are explicitly considered in the Business Case. Should FWY or any other bus operator choose to compete with NGT, the Promoters would give consideration to introducing a Quality Contract Scheme as in such circumstances there would be a prima facie case that the 5 public interest tests for such a scheme would be met²¹⁴⁹.
- 8.266 With regard to bus stops, at key locations such as in the City Centre, park and ride sites, Holt Park and elsewhere, NGT and non NGT bus stops have been located in close proximity to provide convenient interchange between conventional bus services and NGT services. Where the opportunity exists, without unduly impacting on third parties, bus stops for non NGT services would be relocated into lay-bys clear of the NGT route. In areas with moderate traffic flows, such as Holt Park, neither lay-by nor relocation of bus stops would be required. The location of new NGT stops has been chosen on the basis of alignment and layout factors and likely demand²¹⁵⁰.

Use of Articulated trolley vehicles

- 8.267 There is no substantial evidence to show that articulated buses were removed from London for safety reasons. NGT proposals include for design changes to the highway layout along the 14.8 km route, including alterations to the curvature of the road to improve ride quality and lines of sight for the drivers at most of the junctions, and 64 new pedestrian crossings, encouraging people to cross the road safely.
- 8.268 Along 65% of the route between the two Park and Rides, NGT vehicles would be travelling in lanes segregated from general traffic. These lanes would be enforced 24 hours a day, 7 days a week. This would reduce the likelihood of vehicles crossing the path of NGT vehicles or vice versa. As part of the Scheme many right/left turns across the NGT lanes would be banned.

²¹⁴⁹ Document REB-1 OBJ/923 paragraphs 2.17 and 2.48

²¹⁵⁰ Document APP-3-2: Mr Smith PoE paragraphs 5.3.1 to 4 and 5.4.1 to 2

Alternative routes would be provided at safer locations. All of the junctions along the route would be reconstructed to offer priority for NGT vehicles. An example of which being Lawnswood roundabout where NGT vehicles would travel straight across the roundabout without interacting with general traffic.

- 8.269 The particular route lends itself to long vehicles and the A660 currently has articulated buses operating along its length. The Supertram proposals included for over 30m long vehicles (trams) running along the same corridor with similar levels of segregation and priority. These proposals were granted the powers associated with the TWA Order in 2004. Vehicles of the type proposed as part of NGT operate successfully around the world.
- 8.270 Where NGT services would share road space with cyclists, lanes would be at least 4.2m wide. This is a generous provision in comparison to most cycle/bus lanes across the City and the UK where lanes can be as narrow as 3.3m wide. The Promoters will be considering the latest technology to ensure cyclist safety. This could include sensors on board the vehicles to alert drivers when cyclists are close to the vehicle and also alerting cyclists when the vehicle is turning left/right²¹⁵¹.
- 8.271 With modern trolleybus systems, conductors are not required to attach/detach the trolleybus booms from the OLE (as had been the case many decades ago). The driver can do this from the safety of the vehicle. The length of time required to do this depends on the make and model of vehicle used, however it is often in the region of 10 to 15 seconds, usually while stopped at a junction or a bus stop, and therefore having no impact on journey times. Conductors may be used as part of the NGT Scheme to reduce the amount of patronage lost through fare evasion, to discourage anti-social behaviour and promote an increased sense of security to passengers, to offer a level of customer service on-board the vehicles and to aid in any emergency situations²¹⁵².

²¹⁵¹ Document REB-1 OBJ1810 Argument 4 paragraph 2.4

²¹⁵² Document REB-1 OBJ1810 Argument 2 paragraph 2.2

8.272 With regard to passenger safety, trolleybuses of the same vehicle type and of the same broad standing/seating ratios that NGT propose are in operation in many locations around the world, and without any of the issues arising that have been asserted. Tram vehicles, which are in operation in UK cities, such as Nottingham, Sheffield and Birmingham, have similar if not higher standing/seating ratios than is being proposed for NGT. Equally, none of these problems have been reported by the operators of these systems. Although there would be fewer seats than a standard double decker bus (for example), the more open layout would have advantages in terms of easier access to these seats and improved wheelchair access. The vast majority of passengers travelling in inter-peak and off-peak times would have a seat available should they wish to use one²¹⁵³.

Noise and Vibration

8.273 Operational noise could potentially have a short-term slight or moderate adverse effect on some parts of the line. However, this should reduce over time. Some parts of the line would experience a large/very large beneficial effect from the Scheme²¹⁵⁴. With regard to St Columba's Church, noise effects across the majority of the rear façade would be best described by being of slight or slight/moderate adverse effects in the long term. The area reported as having short term large or very large adverse effects is a very small section of the rear façade which in turn could also be better described by the long term significance of moderate or large adverse effects²¹⁵⁵.

8.274 Construction vibration could affect some who are within 8m of the works with slight or moderate adverse effects. However, any vibration impacts would be transient and unlikely to occur for one hour or more. Once operational the NGT Scheme would be unlikely to generate significant levels of vibration²¹⁵⁶.

²¹⁵³ Document REB-1 OBJ1810 Argument 3 paragraph 2.3

²¹⁵⁴ Document APP-13-2: Mr Forni PoE paragraphs 4.5 to 4.48, 5.1 to 5.39, 7.1 to 7.16, 7.19 to 7.23 and 8.3 to 8.16

²¹⁵⁵ Document REB-1 OBJ0320 paragraphs 2.6 to 2.9

Modifications to the Order

FWY OBJ 923

- 8.275 The proposed modifications to the Order²¹⁵⁷ seek to change the mode from a trolley vehicle system²¹⁵⁸ to road based with side guidance²¹⁵⁹. No assessment has been undertaken as to its likely impacts²¹⁶⁰ and no weight can fairly and properly be given to FWY's evidence on this issue. The modifications are substantial and unfunded. They do not represent a realistic or practical alternative, and it is highly doubtful that the SofS would be empowered to make such substantial changes as to change the mode from trolley vehicle system to a side guided road based system in exercising his power under section 13(1)(b) of the TWA 1992. Section 6 of the TWA 1992 provides that the SofS may not make an order except on application made to him. No such application has been made for a guided busway order. In any event, making such a substantial change would be inconsistent with the guidance²¹⁶¹.
- 8.276 The fact that, under the powers to be conferred by Article 51 of the draft Order, buses might temporarily be used to provide a replacement service, does not support the contention made on behalf of FWY²¹⁶² that the Order could be modified to change the permitted mode. It is a temporary power to overcome temporary difficulties with operating a trolley vehicle system, not a general power to operate buses on the NGT route.
- 8.277 With regard to proposed changes to Article 3 to add further provisions relating to consultation and compensation, the SofS should not, without some clear and convincing reasons as to why in this case there should be a departure from the general practice relating to compensation, extend provision. No such reason has been advanced. The consultation and enforcement provisions in

²¹⁵⁶ Document APP-13-2: Mr Forni PoE paragraphs 4.55 to 4.59, 5.40 to 5.42 and 7.18

²¹⁵⁷ Document OBJ 923 FWY/158

²¹⁵⁸ Document E-1-15 section 1(1)(c) Transport and Works Act 1992

²¹⁵⁹ The Transport and Works (Guided Transport Modes) Order 1992 Article 2(g)

²¹⁶⁰ OBJ 923 Ms Lightbody cross examination and in re-examination, despite having expressly confirmed in cross-examination that she knew nothing of the detail of the scheme

²¹⁶¹ Document E-4-14: A Guide to TWA Procedures paragraph 5.6

the proposed Article 3(4A) and (4B) would place bus operators in a special position compared to other users of the highway and there is no justification for putting one group of highway users in a different position to others. Consultation would take place under the construction management plan arrangements. There is also no reason to create a different regime when the New Roads and Street Works Act 1991 would apply, and which has governed every urban transit scheme and major highway scheme in the country and is tried and tested. The proposed compensation provisions would extend beyond the provisions contained in the compensation code.

- 8.278 Other modifications that are requested²¹⁶³, such as the provisions in Article 12 relating to liability, and other detailed provisions were addressed in the session on the draft Order. Most of the points taken related to provisions which are well precedented for these types of transport system. The power to run a substitute system (Article 51) is found in The Cambridgeshire Guided Busway Order 2005²¹⁶⁴ and almost every other similar order and such provisions are essential in order to provide continuity of service for the travelling public. Article 51 is a standard temporary power which allows replacement services to be run to ensure continuity of service and would not, as appears to be contended by FWY²¹⁶⁵, allow the Promoters to run conventional buses permanently along the busway in place of trolley vehicles. In addition, if the Promoters permanently ceased to operate the trolley vehicle system, the provisions of Article 14 of the draft Order would apply, requiring restoration of the streets. Article 66 (Defence to proceedings in respect of statutory nuisance) is another example of a well precedent provision²¹⁶⁶.

²¹⁶² Document OBJ 923 FWY/159: FWY Closing Submissions paragraph 98

²¹⁶³ Document OBJ 923 FWY/159: FWY Closing Submissions paragraph 513

²¹⁶⁴ The Cambridgeshire Guided Busway Order 2005 SI 2005/3523 Article 37

²¹⁶⁵ Document OBJ 923 FWY/923: FWY Closing Submissions paragraphs 513(f) and 98

²¹⁶⁶ For example it is precedented in Article 78 of the Nottingham Express Transit System Order 2009; and provisions relating to defences for proceedings in nuisance are to be expected

NWLTF OBJ 1719

8.279 The two main modifications proposed to the Order²¹⁶⁷ by NWLTF are a requirement that NGT should share stops with conventional buses, or that the RTI system should relate to buses and NGT, and that the NGT lane should not be in operation 24 hours a day. It is not practical or appropriate to require NGT stops to also accommodate buses. The TWA Order does not itself make provision for the location of NGT stops or siting of RTI equipment (or the content of that information). There is a power to execute street works (Articles 7 and 8²¹⁶⁸), and as a result there is no need to modify the Order. The NGT/bus lane provision is a matter to be dealt with by the TROs. 24 hour operation for bus lanes is to be preferred in order to achieve clear and consistent priority for public transport. As a result there is no need to modify the Order.

Flooding and Water Contamination

8.280 Pollution would be controlled by reference to the relevant laws and guidelines and appropriate provision would be made during construction. The installation of appropriate interceptors in drainage systems at the park and ride sites should prevent water contamination. The Stourton Park and Ride site would be designed to have a low flow channel with a wider floodplain, which would form part of the drainage design to prevent flooding²¹⁶⁹.

in orders such as this giving statutory powers

²¹⁶⁷ Document OBJ 1719 NWLTF/128: Revised Closing Submissions paragraphs 100 to 102

²¹⁶⁸ Document APP/205

²¹⁶⁹ Document APP-15-2: Mr Leather PoE paragraphs 4.65 to 4.71, 8.2 to 8.7 and 8.37 to 8.38

9 INSPECTOR'S CONCLUSIONS²¹⁷⁰

- 9.1 The considerations arising from the proposed Transport and Works Act (TWA) Order, and the applications for deemed planning permission, Listed Building Consents (LBCs) and Conservation Area Consents (CACs) overlap to a considerable degree. I have considered all the evidence presented at the Inquiry, together with the findings from a separate report on the LBCs and CACs in reaching these conclusions.
- 9.2 At the Inquiry, I was presented with no other firm proposals for public transport projects along the NGT corridor that would offer a feasible alternative to the NGT Scheme or have the same level of Government funding approval as that Scheme. However, this alone does not necessarily provide a justified reason why the Order should be made.
- 9.3 I have based my conclusions on the matters about which the Secretaries of State have indicated that they particularly wish to be informed and have used these to determine whether the evidence is sufficient to show that the benefits of the NGT Scheme would outweigh the harm that it would be likely to cause. I have also looked at the objections from those whose interests would be directly affected by the Scheme. Taking account of these matters, together with the fact that the Scheme has been given DfT 'Programme Entry' funding approval and is supported by policies within the recently adopted Core Strategy, I have arrived at my overall conclusions.

The proposed Order and application for deemed planning permission

Aims, Objectives and Need (Matter 1)

- 9.4 Most of the parties that appeared at the Inquiry accepted that public transport provision generally in Leeds needs improving in order to attract a modal shift, primarily from private motor vehicles to public transport. They also agreed that much of the proposed corridor for the NGT is congested during peak times, particularly between Leeds City Centre and Lawnswood roundabout at

²¹⁷⁰ In these conclusions, references thus [] are to previous paragraphs in this report

University and School term times. **[4.1, 6.74, 6.313, 6.314, 6.475, 6.518, 6.683, 6.702, 7.1, 7.3, 8.1]**

- 9.5 I am satisfied that the Applicants have established a strong case for the need for public transport improvements in Leeds, and that a need has been identified to improve public transport on the A660 corridor. However, I am not convinced that the NGT Scheme would be a cost effective way of meeting that need, as it would require significant expenditure on the infrastructure for a limited number of vehicles serving park and ride sites, which may not prove to be attractive to car users, and would only be offered on a restricted corridor across Leeds. **[4.7 to 4.21, 6.40, 6.70, 6.75, 6.514, 6.657, 6.693, 6.720, 6.779, 6.790, 6.874, 6.904, 6.929, 6.1078]**
- 9.6 In terms of the aims and objectives, they are set out in the documentation for the Scheme and are based on the relevant planning, economic and transport policies for Leeds and the region. None of the objections have put forward strong arguments against these aims and objectives. I am satisfied that they are appropriate aims and objectives to ensure continuing economic growth and prosperity for Leeds, which appears to me to have managed to have a thriving economy even without a rapid transit system that other large centres, such as Nottingham, Sheffield, Manchester and Birmingham, already have provided. **[4.4 to 4.6, 4.11, 4.21, 6.227, 6.750, 6.767, 8.272]**
- 9.7 The first objective is to support and facilitate the sustainable growth of Leeds, by recognising the importance of its City Centre. In this respect, the Promoters have referred to a link that has been established between economic growth and transport infrastructure. The NGT would represent a considerable investment in new infrastructure to benefit public transport. However, the improvements that it would provide would be on a relatively small part of the Leeds transport network and could result in poorer public transport services in other parts of the City, due to a resulting reduction in available funding, existing bus services being reduced and delays to other transport routes. **[4.4 to 4.7, 4.12, 6.76, 6.228, 6.475, 6.1062]**

- 9.8 In terms of Objective 2, which is to maximise growth of the Leeds economy, I have been given very little substantive evidence to show that the Scheme would serve those areas of the City that are most deprived or improve connectivity between the City Centre and those areas with highest unemployment. With regard to its connections with new areas of development, many areas that it would serve are already well connected, such as at Holt Park, or the developments have already been committed, including those at the former Leeds Girls' High School site and New Dock. One of the developers that has offered support for the Scheme has indicated that at New Dock, due to the operation date of the NGT, the success of the regeneration projects would be helped by interim services provided by bus operators. **[4.25 to 4.27, 5.17, 6.75i), 6.77, 6.337d), 6.750, 6.1060]**
- 9.9 The Applicants have identified some employment, educational, commercial, retail and leisure facilities that would be served by the NGT. The facilities at Holt Park that have been identified are currently served by frequent buses that stop at a terminus. The leisure facilities at Headingley Cricket Ground and Rugby Stadium are also served by buses and NGT would have difficulty in providing the level of additional service that would be required for special events. Furthermore, many of the theatres and entertainment attractions in the City Centre would be better served by a 'City Loop' extension, which had been put forward but I have not seen any plans or details to show that such a trolley vehicle scheme would be likely to be progressed in the foreseeable future. In terms of access to educational facilities, some of the educational establishments had objected to the Scheme, albeit Leeds College of Art withdrew its objection towards the end of the Inquiry. **[4.25 to 4.27, 5.24, 5.25, 6.228 to 6.233, 6.407]**
- 9.10 I accept that NGT would improve access by public transport to sites on its southern corridor but none of these appear to have placed any reliance upon the implementation of the Scheme, which would be likely to be operational after 2020. The evidence provided shows that none of the sites that have been identified for future development would rely upon the NGT for access

prior to any commitment being made on that development. Therefore, I am not convinced that the NGT Scheme would make a significant contribution to facilitating future employment and population growth in order to maximize the growth of the Leeds economy.

- 9.11 Objective 3, to improve the efficiency of the City's public transport and road networks, would only be partially met by the NGT in that it would be likely to provide a quicker alternative to the existing bus services on the corridor that it would serve. However, some of the punctuality benefits that it would provide would be able to be achieved by modern hybrid buses on the route, due to quicker boarding from different ticketing and door arrangements, and changing signal priorities for buses. The Promoters have not shown that the NGT would result in any significant improvements in congestion on the corridor or any increase in active modes of transport such as cycling. The objectors have referred to analysis which suggests that up to 48% of existing public transport users would experience an increase in 'Generalised Journey Time' as a result of the introduction of NGT. **[4.23, 6.78, 6.79, 6.91d), 6.310b), 6.325, 6.722, 6.750]**
- 9.12 Whilst the Applicants have identified that buses have suffered a perception problem, the SP survey has identified that trolley vehicles are not considered to be preferable to buses, indicating that they would also have a perception problem which could act as a barrier to their use. Furthermore, there is evidence to indicate that articulated vehicles, such as those proposed for the NGT, are not very popular. This evidence includes the articulated ftr, which was introduced onto one route in Leeds but was later moved to another route and not extended to any of the other 10 originally proposed, and the SP survey, which shows a stronger preference for very new double-decker buses than the articulated ftr and trolleybus. **[4.23, 4.38, 6.73, 6.120, 6.160, 8.13, 8.96, 8.228]**
- 9.13 Objective 4, to support and facilitate targeted regeneration initiatives and economic growth in the more deprived areas of Leeds, would be more likely to be achieved by improving public transport on the eastern corridor that was not

pursued and does not form part of the current proposal. The Aire Valley Leeds Enterprise Zone and St James' Hospital and Seacroft area would not be directly served by the NGT Scheme. The NGT southern corridor has been significantly changed from that which would have been served by the Supertram project and it would be on the periphery of the areas covered by the South Bank Planning Statement and Aire Valley Area Action Plan. Although the WYTF could be used to fund an expansion of the NGT network to the Aire Valley, which has been identified as an important growth area, I have not seen any plans or details to show that there would be any realistic prospects that it would be included in the NGT network in the foreseeable future should the TWA Order be made. As such, there is very little evidence to show that the Scheme would provide significant improvements in public transport access to any 'Regeneration Priority Areas' or areas covered by 'Action Plans' in Leeds. **[4.20, 5.19, 5.23, 5.25, 6.80, 6.118, 6.228, 6.232, 6.315a), 6.319, 6.355, 6.488, 6.597, 6.653, 6.704, 6.721, 6.722, 6.724, 6.748, 6.760, 6.1076, 8.258, 8.259]**

- 9.14 Objective 5, to reduce transport's emissions of CO₂ and other greenhouse gases, would directly be achieved by the use of electric power for the trolley vehicles. However, the generation of electric power, the resulting increase in vehicle waiting times where NGT would be given junction priority at localised hotspots along the route, together with some of those currently using public transport changing to park and ride journeys have been predicted to result in an overall increase in these emissions. Whilst the Applicants have relied upon improvements in the generation of electric power to reduce these emissions in the future, there is no guarantee that it would be likely to have a significant effect. There would also be improvements in the emissions from other vehicles that could achieve a similar effect in the future, such as from the use of electric, or improved hybrid, buses. **[4.69, 6.81, 6.136, 6.377, 6.481, 6.649, 6.938, 6.1059, 8.37]**

- 9.15 Objective 6, to promote quality of life through a safe and healthy built and natural environment, would be harmed by the OLE that would be required for

the trolley vehicles, together with the widening of the roads, loss of mature trees and green spaces and additional street clutter that would be associated with pedestrian crossings, signing, NGT stops and shelters. Also, any improvements to the public transport system from the Scheme would be likely to only benefit a relatively small proportion of the population of Leeds. **[4.12, 6.82, 6.356, 6.357, 6.482, 6.485, 6.486, 6.915]**

- 9.16 Objective 7 is to contribute to enhanced quality of life by improving access for all to jobs and services. In this respect, I accept that an improved public transport system could well result in benefits to the public due to better access to jobs. Whilst the NGT would be likely to provide a faster means of transport than the existing bus services along the corridor that it would serve, its use would be limited by the fewer number of stops, the restricted locations that it would serve, and the relatively poor integration with other public transport, particularly with the buses. I have been given very little evidence to demonstrate that the NGT would provide an acceptable service to many of the main employment locations outside the City Centre. The access that it would provide to some of the universities and the South Bank Development Area would mainly duplicate services that are, or would be, provided by bus. **[4.25, 6.83, 6.223, 6.358, 6.759, 6.887]**

- 9.17 Those who have made statements of support for the NGT through the programme of consultation include the Civic Trust and Leeds Chamber of Commerce, but these organisations appear to me to be supporting general improvements to public transport and not just the provision of a trolley vehicle system. The Leeds City Region LEP board has offered support for a package of schemes that include the NGT as meeting the requirement for a form of rapid transit public transport system to replace Leeds Supertram. I am not aware of any letters of support submitted to the SofS from these parties. **[4.2, 6.402e), 6.641, 6.645, 6.1082, 7.14]**

- 9.18 Those that have submitted letters of support include the University of Leeds, Leeds Teaching Hospitals NHS Trust and Opera North, which was submitted towards the end of the Inquiry. They offer general support for a modern,

accessible, high quality and reliable form of transport to provide access to the City and their sites. This does not have to be provided by the proposed trolley vehicles, and could well be better provided in some cases by a different form of public transport. **[5.16 to 5.26]**

- 9.19 In conclusion on this matter, I am satisfied that a need has been identified for improvements to public transport in Leeds in general and on the A660 corridor in particular. I find that the aims and objectives that have been set out for the proposals are appropriate for the future of public transport in Leeds, and are strongly embedded in established Government and local policies. However, they are very broad and the expenditure that would be required on the trolley vehicle system may well not be the best way to meet them.

Justification for the particular proposals (Matter 2)

- 9.20 The Applicants have emphasised that the principles of the Scheme have been supported in the UDP and draft Core Strategy (CS), the approvals given to the previous Leeds Supertram Scheme and by the DfT granting 'Programme Entry' funding approval. I accept that the decision made by the Inquiry Inspector into the Leeds Supertram and that of the SofS that the TWA Order should be made, the subsequent protection of the Supertram corridor in the UDP Review and the inclusion of the NGT in the draft CS are important considerations. However, following the withdrawal of the necessary funding for the Supertram, the Applicants seem to me to have based the LTVS on a similar route without carrying out a thorough up-to-date re-assessment of the route options. Furthermore, the DfT has suggested in its letter of November 2005, following a report by WS Atkins, a more flexible bus based option as an alternative to the tram and not necessarily a trolley vehicle system. **[4.29, 6.156 to 6.161, 6.590, 6.661 to 6.663, 6.851]**
- 9.21 Supertram was more extensive than the LTVS, having a link to east Leeds and the bus station. The eastern section appears to me to have been considered to be the most important part of the tram route in terms of regeneration potential. The Supertram route ran further away from Headingley Castle and the trams would have had fewer overhead cables than the proposed trolley

vehicles. The evidence provided indicates that the design of the Supertram gave it a greater level of segregation from other transport than the proposed trolley vehicle and a capability of operating with longer vehicles. I have also been made aware that the Supertram would have resulted in a reduced land take from that of the NGT Scheme on the northern route, such as at Monument Moor and along the A660. As such, the environmental impact would probably have been less. **[4.73, 5.28, 6.85, 6.165, 6.166, 6.364a) and d), 6.449, 6.748, 6.763, 6.854, 6.875, 6.948, 8.269]**

- 9.22 With regard to the development plan support that the Applicants have relied upon, the UDP Inspector indicated that the detailed proposals would be subject to the requirements of the TWA Order and judged on its own merits at a public inquiry. Also, the proposals under consideration at that time involved the Supertram and more extensive corridors, including in east Leeds. Furthermore, circumstances have significantly changed since the UDP Inquiry, which would most probably have taken place in 1998, prior to the February 1999 UDP Inquiry Report. Therefore, the weight that can be attached to this support for the current NGT Scheme in the UDP is limited. **[4.29, 4.49, 4.51, 6.166 to 6.169, 6.364c)]**
- 9.23 The draft CS refers to the NGT corridors and Scheme, including a reference to it being a trolley vehicle system. The Examination Inspector, in his report, stated that the principle and route of the NGT had been determined and was not a matter for the examination. This indicates to me that he had not carried out any investigation into the merits of the NGT Scheme as a trolley vehicle system. Whilst I have not been made aware of any substantive objections, including from bus operators, to the inclusion in the CS of the NGT corridor operated with trolley vehicles, this matter does not reduce the level of scrutiny that should be given to the NGT proposals at this TWA Order Inquiry. **[4.15, 4.55, 4.58, 6.179, 6.366, 8.4c), 8.28]**
- 9.24 The Applicants have relied upon their forecast improvements in reliability and punctuality compared to the existing bus services to justify the Scheme. In this respect, NGT would share significant sections of its route with other

traffic, and this would include shared lanes with bicycles and buses and junctions shared with general traffic. Even with signal priority, it would still be vulnerable to congestion caused by traffic related incidents, which could make it less reliable than predicted. **[4.30, 4.231, 5.1, 6.54, 6.113a), 6.535, 6.784, 8.106 to 8.108]**

- 9.25 Insufficient allowance could well have been made for delays, such as from being behind a bus, reduced priority when there are more than 10 tph, and reduced speeds in shared space and the shared lanes. Delays could result from buses stopped in the lanes, the need to safely pass cyclists in shared lanes, particularly where the lanes would be relatively narrow, and the merging with general traffic at signal junctions. Although they would individually be likely to be relatively small, they could build up to result in significant delays to the journey. I am not convinced that all these potential delays have been fully taken into account when arriving at journey times for the NGT. Furthermore, no adjustment has been made in the speed to allow for the proposed running of additional vehicles in 2031, which would have to have reduced priority, and any increases in congestion over time. **[4.198, 6.54, 6.113a), 6.535]**
- 9.26 The Promoters have allowed for the initial leasing of 20 trolley vehicles in the costs. Such vehicles would need to be specially made to suit the required specifications and the need to be right hand drive. I have been given the names of only a limited number of producers of trolley vehicles to demonstrate that such vehicles would be readily available without significant costs and delays. Furthermore, with up to 18 vehicles being required at peak times, and possibly more to cater for events, there could be problems with maintaining this level of service, due to required maintenance, accidents or faults in the vehicles. These factors could also have a significant effect on the reliability of the proposed NGT service. **[6.100, 6.101, 6.233, 6.289k), 6.292b), 6.320, 6.397a), 6.439, 6.684, 6.709, 6.735, 6.777, 6.848, 6.852, 6.891, 6.920, 6.930, 6.945, 6.948, 6.1078, 8.87, 8.116, 8.233, 8.234]**

- 9.27 The objectors have expressed concerns about the ratio of seating to standing for passengers using the trolley vehicles. It is one of the most valued characteristics by passengers, with Passenger Focus' research indicating that it is the third-most commonly required attribute and the 2009 AECOM report for the DfT on 'The Role of Soft Measures in Influencing Patronage Growth and Modal Split in the Bus Market in England' concluding that seat availability has the highest value in every study in which it appears. **[6.120, 6.324]**
- 9.28 It is likely that the type of trolley vehicle that would be used would provide 40 seats to enable a maximum capacity of 160 passengers. This would be a relatively low ratio of seating to standing, even compared with other similar types of public transport, and particularly to buses. Furthermore, the maximum capacity is a notional figure from potential manufacturers and could result in passengers having to stand in uncomfortably close conditions, making the theoretical maximum capacity impracticable. The predicted passenger usage indicates that it is likely that a significant number of passengers would have to stand on the trolley vehicles, particularly during the peak times, and this would act as a deterrent to their use and a potential safety risk on the articulated vehicles. **[4.70, 6.119 to 6.122, 6.151a), 6.231, 6.289i), 6.317, 6.318c), 6.383, 6.469, 6.726, 6.868, 6.899, 6.941, 6.947, 6.1096, 8.272]**
- 9.29 The SP survey shows a strong preference for a very new bus, a smaller preference for an advanced bus, like the ftr, and a statistically insignificant result for a trolleybus. The survey used images of double decker buses to compare very new buses with old buses, which makes the relationship between the preference shown for very new buses to that of the improved quality of a trolley vehicle a very tenuous one. The image of the ftr shows that of an articulated vehicle, which would be similar in appearance to the proposed trolley vehicles, but the Applicants have suggested that it would not reflect the difference in quality as the ftr is already a known vehicle. However, I find it difficult to see how the quality of a trolley vehicle, which would probably have a limited number of seats and require passengers to stand in

peak times, would be significantly better than that of the proposed NBFWY, or NBFL, which was demonstrated to me and is similar to the London 'Routemaster' buses. **[1.24, 4.195, 6.87, 8.11]**

- 9.30 With regard to the Applicants' suggested benefits to cyclists, they have indicated that there would be a net increase of 3.89 km of cycle track provision along the route alignment and the width of most of the sections of combined cycle and NGT lane would exceed the 4m minimum referred to in the guidance LTN 02/08. However, more could have been done to incorporate facilities to cater for these important modes of transport in the initial design. It appears to me that changes have been made to the design following discussions with the particular user groups, but these had been made after the route and junction designs had been arrived at rather than having been incorporated into the initial design. I share some of the safety concerns expressed by objectors about the limited additional segregation that would be provided for cyclists and the width of the lanes that would be shared between bicycles, trolley vehicles and buses, considering the proposed scale of the articulated trolley vehicles. I consider that the proposed design would do very little to make the route more attractive for cyclists, on what is claimed to be the most widely used route by cyclists into Leeds City Centre. **[4.30, 4.31, 4.124, 5.3, 6.264, 6.382b), 6.442, 6.460, 6.531 to 6.537, 6.563, 6.846, 6.922, 6.1085 to 6.1088, 8.56]**
- 9.31 The Applicants have suggested that there would be benefits to pedestrians in that the Scheme would provide a greater number of formal signalised crossings across the route than at present and would make improvements to some footways. However, the additional pedestrian crossings would be necessary to control pedestrians crossing the NGT route in order to give priority to the trolley vehicles. Delays to pedestrians, especially children, at these signals could frustrate them, leading to them crossing at other locations and resulting in a risk to their safety. This could result in serious harm to pedestrian safety, as some of the junctions and carriageways would be widened and the plans indicate that there would be very limited use of

pedestrian barriers, which I understand is to reduce street clutter. Also, some of the existing footways would be narrowed to allow space for the trolley vehicles. In addition, pedestrianised areas, such as in Millennium Square and Hunslet district centre, would be shared with trolley vehicles, and the segregated footpath at the rear of the Arndale Centre would be secluded with limited overlooking, making it less attractive for pedestrians than the A660 through the shopping area. Therefore, I find that the proposals would result in insufficient improvements in pedestrian facilities and safety to encourage increased walking. **[4.31, 4.120, 5.3, 5.7, 6.47, 6.264, 6.382a), 6.432, 6.442, 6.459, 6.538, 6.566, 6.591, 6.656, 6.697, 6.802, 6.827 to 6.831, 6.923, 6.1089, 7.10, 8.52, 8.53, 8.167]**

9.32 One of the main aims to provide an integrated form of public transport may not be fully met. This is partly due to the NGT not using the same stops as buses, with some of the existing stops being moved some distance away to accommodate the new NGT stops, and it is questionable whether the proposal would be integrated with other public transport. I accept that, due to the number of vehicles that would need to use stops and the type of stop that would be required for the trolley vehicles, it would not be a realistic option to share stops. However, the NGT would not access the bus station and its stops would generally be a significant walking distance away from bus stops. The only interchange with rail would be at Leeds Station, where the distance of the stops from the station entrance would be similar to that of the existing bus stops, and there are insufficient details of the proposed HS2 station to determine whether NGT would provide an acceptable service to that future destination. **[4.32, 5.18, 6.95 to 6.99, 6.232, 6.476, 6.650, 6.663, 6.892, 6.1107]**

9.33 The advantages of the NGT due to lack of kerb side emissions and relatively quiet operation would be countered by an increase in vehicle mileage. Although the transport model has identified that some walkers and cyclists would transfer to using the NGT, this is a theoretical shift in mode of travel that could well not materialise unless these forms of active modes were made

less attractive by the Scheme. Furthermore, by the time that the NGT would be operational, it would be highly likely that there would be advances in transport to further reduce emissions without the need for overhead wires.

[4.33, 6.81, 6.285, 6.357, 7.6, 8.2]

- 9.34 The Applicants have demonstrated that the proposed LTVS would satisfy the 'Bronze' category in the BRT standard. This correlates with that calculated by Anzir Boodoo. However, only about 44% of the NGT route would be segregated, with about 1.6 km of the 10 km northern route fully separated from all other traffic, and evidence has been provided that indicates that trolleybuses are 10% slower than other buses in mixed traffic. Although this evidence may not be directly related to the proposed modern LTVS, I have not seen any other substantive evidence to show that trolley vehicles would not be slower than buses when sharing with other traffic, particularly as they would be connected to the OLE. The standard suggests that to qualify as 'BRT' most of the route would have to be segregated from other traffic. Whether or not the NGT would meet the BRT standard, the journey time savings would be an important attribute and these would be affected by the extent of segregation from other traffic. **[4.34, 6.436, 6.470, 6.555, 6.862, 6.925, 6.933, 7.2, 7.4]**

- 9.35 The changes to highway layout would be necessary because NGT would introduce a new and distinct public transport system which could only be accommodated in such a tight corridor by widening existing carriageways or providing new stretches of carriageway, increasing parking and waiting restrictions and preventing some vehicle movements from adjoining roads. The additional road space that would be constructed would represent an under-use of the highway, as the trolley vehicles would generally run at 10 per hour each way and would stop running altogether over night. This road space would be in a relatively dense urban environment that includes CAs and listed buildings, making every encroachment into the green space and surrounding built environment in these areas that much more harmful. It would not only represent an inefficient use of new transport infrastructure but the modelling

indicates that it would also abstract patronage from the existing buses, which would compromise the commercial sustainability and efficient use of the existing network of services. **[4.34, 5.21, 6.307, 6.310b), 6.316, 6.419]**

- 9.36 With regard to the claimed benefits to the economy, the UDM prediction of nearly 3,687 new jobs in Leeds District by 2031 due to the NGT is using the LTM and other inputs to calculate the effect of forecast improvements in time, punctuality and quality of the NGT over other forms of transport. Whilst the DfT has approved of the use of UDM and this prediction could result in further benefits from those calculated in the BCR, it is dependent upon the reliability of the data that was input into the UDM. This data has been based on a number of assumptions regarding the improvements in time, punctuality and quality of the service. **[4.35, 6.334, 6.337d), 6.340g), 8.8, 8.117, 8.257]**
- 9.37 In terms of these assumptions, the use of the car relies upon the availability and cost of car parking in Leeds City Centre, as indicated by the SP survey. This is difficult to control, with a number of new developments having been permitted that include car parking provision and a significant number of privately operated car parks. A report to LCC Executive Board on Informal City Centre Commuter Car Parking on 7 September 2011 recommended the Board to approve informal interim policy to deal with commuter car parking sites in the City Centre as a material consideration in planning decisions. However, I have not been provided with any information on the implementation of this interim policy and it does not appear to me to be linked in any way to the implementation of the NGT Scheme. Furthermore, it is difficult to determine how the proposed reduction in temporary car parking in the City Centre would affect the use of the NGT, given the uncertainty over the number of car parking spaces that are available in the City Centre and LCC's lack of control over most of them. **[6.126e), 6.253c), 6.853, 6.873, 8.232, 8.239]**
- 9.38 The predicted usage of the NGT is dependent upon the SP work that was carried out, of which a number of significant weaknesses have been identified at the Inquiry. The SP survey work to assess the preference given for a

trolleybus has not been used. The reason given by the Applicants for this is that a statistically significant trolley vehicle constant could not be derived from the SP work but it is known that trip makers do place a value on the quality of a vehicle. This is not sufficient, in my opinion, to justify the use of an entirely inappropriate preference for the NGT. Whilst the DfT appears to be aware of the use of the preference for very new bus over old bus and not using the SP survey results for trolleybus, I have not been given sufficient evidence to show that the use of these preferences is a true reflection of a preference for the proposed NGT Scheme. Furthermore, given the importance of this survey work to the predicted viability of the Scheme, it is hard to justify on the grounds of 'proportionality' not carrying out further survey work to verify the results. **[6.87, 6.336, 6.396a), 6.408, 8.95, 8.97]**

- 9.39 The estimate for generalised journey times includes quality factors and penalties as time savings and these rely upon attributes such as CCTV, lighting and shelter at stops. The Applicants have based their assessment on the assumption that the difference in perceived quality would average out as a relatively high factor throughout the 60 year appraisal period. I have not seen sufficient evidence to support this assumption, considering that the Business Plan would allow for replacement vehicles at 12 year periods, and FWY, the main bus operator on the route, has suggested that it would use its most modern vehicles on its most heavily used routes, which includes the A660. Furthermore, since the initial survey work in 2008 there have been significant improvements in technology and the quality of conventional buses, such as the wide use of hybrid buses, including the London Routemasters. **[6.86, 6.289d), 6.324, 6.325, 8.80, 8.81, 8.102]**
- 9.40 The SP survey results were fed into the LTM which was used to model public transport passenger flows and traffic flows. Although the DfT advised on the use of the LTM for an input to arrive at the BCR, it was not designed to be used to predict flows at individual junctions, side roads or roads parallel to the main corridor. The capacity of trolley vehicles and the effect that it would have on passengers, particularly with regard to the level of standing, was not

modelled since the vehicles had not been specified. Furthermore, confidence levels of the outputs of the model have not been established in relation to this use of the LTM. **[6.88, 6.201, 6.289n), 6.310d), 8.32, 8.76]**

- 9.41 There is nothing to show that the SP survey results, which are now relatively old with the work having been undertaken in 2008, were rescaled once finalised using RP (revealed preference) data, as recommended. This would ensure that account would be taken of anomalies due to the willingness to pay to use new modes. With regard to the effect of seating and the distance between stops, the over 65s were excluded from the SP survey work and their patronage is most likely to be affected by these factors. There is no evidence to show that further work was carried out on the SP to allow for the effect at different times of year or to take account of a wider cross section of potential users of public transport. I have not been referred to any other instances where the SP for a different mode of transport has been used and this gives me very little confidence in the use of the SP survey results to support the NGT patronage forecasts. **[4.195, 6.86, 6.289d), 6.296e), 6.329, 6.330]**
- 9.42 Whilst the SP survey work has been used in the LTM to support the Programme Entry funding bid to the DfT, I am concerned about the reliance that has been put on it to support the potential usage of a costly project that would have environmental consequences and would be expected to be operational for at least the next 60 years. Any errors in the forecasts could have serious consequences upon the future viability of the NGT Scheme. **[8.92]**
- 9.43 Some objectors have claimed that the Applicants' SP has given higher values than other research and exaggerated values for shelter, CCTV and lighting. The lighting factor could have been influenced by the survey having been carried out in the winter and the drawings used showing complete darkness for the lighting, when the NGT would not be run through the night. The preference for a shelter could also be exaggerated by the poorer winter weather conditions. No other survey work was carried out at other times of the year as a comparison. **[6.86, 6.289d), 6.327, 6.328]**

- 9.44 The Applicants have justified the penalties used by suggesting that the quality factor for the boarding penalty of 5.55 minutes derived from SP work is broadly comparable with that produced from the AECOM research (now included in WebTAG) of 5.63 minutes. In this regard, the comparison does not appear to me to have been done on a like-for-like basis and that, if it were, the penalties that were applied to bus stops would be shown to be excessively high. It would potentially be higher than that for a tram system. Furthermore, they do not allow for any changes, being kept constant throughout the life of the NGT, which I would consider to be unrealistic. **[6.86, 6.289d), 6.327, 6.328, 8.81, 8.102, 8.103]**
- 9.45 The penalties at boarding points used to represent the absence of such desirable features, including lighting, shelter with seating, and real time information, are 1.3 for NGT, 7.1 for buses and 9.4 for rail. The net penalties of 11.3 minutes for bus and 13.6 minutes for rail are applied in the LTM. Whilst I have found that the one for buses is not realistic, that given to rail is even more so. I accept that as a result of these penalties the shift from rail to NGT is predicted as being relatively small but it still represents part of the patronage which is relied upon in justifying the revenue that would be generated to support the Scheme. The penalties that have been used are greater than the in-vehicle journey time for some journeys. This is one of the main reasons why there is a predicted shift from bus and rail to trolley vehicle. **[6.84, 6.325 to 6.328, 8.79, 8.94, 8.99]**
- 9.46 With regard to the demand for the proposed park and ride sites, I have not been given sufficient justification for using the negative ASCs in the park and ride model. These have the potential to result in an overestimation of the demand for park and ride. The Applicants have indicated that they have been derived from existing rail park and ride sites at Pudsey and Garforth. I consider that they are not directly comparable with the proposed park and ride sites, due to journey times, numbers of stops and mode of transport of trips to and from them. The existing bus based park and ride sites, such as at King Lane, have not been used to derive the ASCs. As such, the demand for the

sites appears to me to have been overestimated. **[4.193, 6.41, 6.253b), 6.330, 6.337c), 6.791, 6.882, 8.110]**

- 9.47 In terms of the impact of the NGT on employment, an appraisal by NWLTF which omitted the benefit from assumed reductions in penalties and allowed for an increase in highway trip costs has shown that the introduction of NGT would increase the average generalised cost of travel. This could result in a reduction in the predictions of NGT usage to such an extent that the Applicants' UDM would predict that it would depress employment, thereby conflicting with the employment growth objective. Whilst I do not necessarily agree that this would be likely to happen, it does show the sensitivity of the assumptions made when justifying the NGT Scheme. **[4.35, 6.334, 6.373, 8.117]**
- 9.48 The Applicants have not disputed the claim that the NGT route would only have 2 stops in areas with unemployment levels above the national average of 7%. Evidence has been provided that demonstrates that most of the route along the A660 corridor has unemployment levels well below the national average. As such, it is difficult to believe that the introduction of the NGT would have a significant effect on employment, and hence economic activity, in those areas. **[6.91b), 6.223, 6.224, 6.228, 6.641, 6.721, 6.748, 6.851]**
- 9.49 Potential development sites identified in the South Bank Planning Statement would be served by the NGT, but due to the timescale for completion of the Scheme, they would need to be served by an alternative means of public transport as an interim. The HS2 proposals would not necessarily be adequately served by the NGT, due to the uncertainties over the station location and design, and a bus service would give greater flexibility over the route in order to give good access to the station. I do not have sufficient evidence of the location of development sites within Belle Isle and Middleton Neighbourhood Framework to show that they would be enhanced by the provision of the NGT. Whilst the former Leeds Girls' High School site, Headingley, Bodington Hall residential development site, and Holt Park would

be accessed by the NGT, they already are served by buses and there is nothing to show that development would not proceed on them without the NGT. NGT would not serve the airport, and there do not appear to be any plans for further extensions of any network to provide such a service. Also, there would be no stops within a convenient walking distance of the bus station, which is an important link to coaches, many City Centre facilities and the bus network. Many of the main areas designated for economic regeneration, major retail and cultural attractions in the eastern part of the City Centre or other major centres of employment and public use would be missed by the NGT. **[4.36, 6.222, 6.228, 6.319, 6.556, 6.787]**

- 9.50 Evidence has been provided by the Applicants regarding the benefits of providing what is perceived by the public as a permanent public transport network. However, I am not convinced that the perceived permanence of the system could not be satisfactorily achieved by the construction of more permanent and substantial stops and signing, without the need for the OLE. Any potential advantages of the perceived permanence of the OLE would be outweighed by the disadvantages due to it not easily providing the necessary flexibility to change the route in order to avoid disruption, the risk of failure and its susceptibility to weather conditions, which all could affect the reliability of the service. There is insufficient evidence to show that the withdrawal of the ftr on route No 4 has demonstrated that a bus based service would not be able to provide a similar level of permanence as the trolley vehicle system. The use of trolley vehicles would require a greater level of initial expenditure with regard to the installation of the OLE and associated substations, which would result in a greater loss should it fail. **[4.37, 4.38, 6.124, 6.125, 6.159, 6.226, 8.258]**

- 9.51 To conclude on the justification for the Scheme, the improvements to transportation that it would bring due to the provision of park and ride services, shorter journey times and better punctuality, would be offset to some degree by less convenient journeys by car and possible reductions in bus frequencies to areas that would not be accessed by the NGT. Furthermore,

the assumptions that have been made to arrive at the scale of the transportation benefits are highly sensitive to the reliability of the data that has been used, which I consider has not been adequately tested. The regeneration benefits from the Scheme have not been justified in terms of the sites that it would link up along its route. The Scheme would cause environmental harm due to the OLE and loss of trees and green spaces in CAs. The forecast socio-economic benefits are reliant upon the models used, which depend upon the assumptions made. As such, I find that the justification for the Scheme is not as strong as made out by the Applicants.

Main alternative options considered (Matter 3)

- 9.52 The Next Best Alternative (NBA) and the Low Cost Alternative (LCA) have been considered against the Preferred Option in the evaluation for the Business Case. This is in accordance with the guidance in order to confirm that any specific impacts of the Preferred Option are justified relative to other ways of delivering the project benefits, and that the scale of the proposed costs is justified. I am satisfied that hybrid vehicles were considered as alternatives in the NBA and in the LCA. The NBA was assessed on the basis of similar stops, numbers of priority vehicles per hour, frequencies, delays to bus services and capital costs as the Preferred Option but was specified to have 'quality factors' at half of those for trolley vehicles. In order to make a comparison as to whether such alternatives would be preferable options, hybrid buses could have included additional benefits, including shared stops with buses, greater flexibility on the number and frequency of services and priority given and a lower capital cost. **[4.39, 4.40, 6.138, 6.140, 6.342, 6.343]**
- 9.53 The LCA was specified as providing smaller park and ride sites than the Preferred Option and predominantly running on the existing highway network. The buses were specified as double decker hybrid buses with having on average no perceived improvement compared to the Preferred Option for the next 60 years. It would only benefit from limited improvements due to bus priorities and bus stop facilities and it was assumed that there would be no improvement over the boarding times in 2012. The LCA considered by the

Promoters would not be likely to attract significantly greater use of public transport. However, had consideration been given to future improvements to bus stop facilities and boarding times, by multi-door entry, smart ticketing and simpler fare structures, which would be cost effective, together with provision for more express services or more frequent services, such a low cost alternative could well have been more attractive. **[4.40, 6.130, 6.141, 6.344, 8.10, 8.86]**

9.54 The consideration of the alternative options appears to me to have been based on justifying the use of trolley vehicle technology as the Preferred Option when there is evidence that other forms of technology are progressing and this form of technology has not been widely adopted in recent years, with some systems being closed. Furthermore, the environmental harm that the trolley vehicle system would cause to the CAs and heritage assets in comparison with other modes of propulsion due to its OLE has not been given significant weight in the choice of option. Whilst there is insufficient evidence to demonstrate that the main reason for selecting the trolley vehicle technology was because it allows use of a TWA Order procedure to give the Promoters control over the implemented system, it would be one of the main factors that would make it attractive to the Promoters compared to more conventional buses. **[6.128 to 6.132, 6.144, 6.145, 6.497, 6.734, 6.735, 8.7]**

9.55 The ES deals with project alternatives and summarises the main technology alternatives to a trolley bus system, presenting the comparative strengths and weaknesses of each. The four alternative modes identified as being suitable in the north and south corridors are light rail (tram), ultra-light rapid transit, trolleybus, and bus. I am satisfied that each of these options has been fully assessed against the Scheme objectives and delivery constraints, but the assessment is now dated as there have been significant developments in new technology since it was carried out. The ES also identifies the route options selection process that took place to develop the NGT proposals, including an iterative process to reach a 'Design Freeze'. This has been progressed to the current DF7 proposals. In this process, alternative options have been

assessed, including at Hunslet district centre, Bodington Park and Ride site, Woodhouse Moor and Headingley Lane widening. Although some objectors have been critical of the option that has been selected, the Promoters have given reasonable justification for their choice, backed up by detailed assessments. **[4.41, 4.46, 6.345, 6.446, 6.486, 6.836, 6.855, 7.7, 8.9, 8.17, 8.190, 8.234]**

- 9.56 The Alternative Technology Review assessed the different options against the Scheme objectives and identifies that light rail, ultra light rapid transit and catenary free electric buses fail in terms of delivery constraints. However, it seems to me to be an assessment of alternatives for the proposed route, alignment and set of stops with the aim of justifying Government funding rather than a comparison of the merits of the different options. **[4.42, 6.133, 6.144, 6.497, 6.647, 6.648, 8.16, 8.236]**
- 9.57 The Sub-Modes Options Report has assessed the options since the 2009 study. It has rejected fuel cell hybrid, battery electric and compressed natural gas bus and catenary free electric bus for various reasons, including the technology risk. It does not include any allowance for the higher infrastructure costs of trolley vehicles compared with buses, does not test double decker buses, higher seating capacity vehicles, changes in route, service frequency, level of segregation and level of priority. It also fails to take account of issues concerning integration with the public transport network and the economies that could be achieved by using the same type of vehicle for all services. **[6.141, 6.768, 6.781, 6.823, 6.1110, 8.235]**
- 9.58 The findings of a review, published in 2009, selected north, south and east corridors as the most suitable routes for a rapid transit system due to them being the busiest and most crowded bus corridors and the most congested highway corridors, giving scope for journey time and punctuality improvements. The Strategic Fit Review examines how the NGT would fit in with the overall transport strategy for Leeds. It shows that NGT would be just one of a complementary package of enhancements to public transport in order to support future economic growth. However, it fails to justify, by means of

traffic modelling and environmental and economic analysis, the choice of the A660 corridor instead of other radial routes identified in 2009. **[4.43, 6.135, 6.142, 6.345, 6.443]**

9.59 No detailed alternative proposals have been submitted by any of the objectors to guarantee that the Scheme objectives would be achieved by other means. However, since the Supertram project, the Promoters do not appear to me to have provided any detailed assessment of different schemes or corridors to show that they would not be feasible or would not meet the Scheme objectives. I have not been provided with any detailed examination by the Promoters of potential savings in time that could be made to existing buses by changing junction priorities or layouts, improvements that could be made to ticketing, boarding and bus stops to improve journey times or improvements to the quality of bus stops and buses, which could be considered as cheaper and less environmentally damaging interim measures. **[4.47, 6.133, 6.134, 6.145, 6.146, 8.16]**

9.60 I can understand that, given the level of expenditure, time and resources that have already been spent on the existing northern corridor, particularly with respect to the Supertram, and the use of trolley vehicles, the Applicants would be reluctant to commit themselves to other corridors or forms of public transport. I also accept that there has to be a level of proportionality in terms of the extent that other options and corridors should be examined. However, I am concerned that the more recent re-examination of other options has been undertaken in order to justify the choice of the trolley vehicle on the previously chosen corridors rather than to seriously examine fully whether there are more suitable corridors to accommodate the rapid transit system and better and more cost effective options that are now available.

Consistency with the National Planning Policy Framework, national transport policy, and local transport, environmental and planning policies (Matter 4)

9.61 The evidence before me indicates that the section 38(6) of the Planning and Compulsory Purchase Act 2004 requirement that planning applications be determined in accordance with the development plan unless material

considerations indicate otherwise, does not apply when making a direction under section 90 of the Town and Country Planning Act 1990. However, policy considerations are still very important in the determination of deemed planning permission and the TWA Order. In this respect, there is strong support in the UDP (policies T12 and T13) and LTP3 for the protection of corridors for the introduction of modern forms of public transport, having not received the necessary funding to proceed with the Leeds Supertram. Also, there is support for park and ride sites at Bodington and Stourton (policy T17).

[4.53, 4.56, 6.162 to 6.164, 6.176, 6.364, 6.365, 8.27]

- 9.62 The UDP Inquiry Inspector accepted that the Supertram proposals had the potential to overcome congestion on the A660 corridor. The Inspector also considered the potential impact on heritage assets, including that which would arise from the installation of OLE. He recognised that detailed consideration would fall to a TWA Order Inquiry and that the lines, masts and stations would have an impact on the local townscape. However, the processes for the inclusion of the policies at that time were different from the present and the policies related to the provision of a tram, even though they were retained following the decision not to pursue that option. **[4.51, 4.52, 6.166 to 6.168, 6.364, 6.498]**

- 9.63 With regard to the transport related policies in the UDP, I accept that the relevant ones that have been referred to are more associated with a tram than the proposed trolley vehicle. However, I am satisfied that they are generally supportive of the provision of park and ride sites and the protection of the northern corridor for a modern public transport system. The questions of whether the NGT Scheme would fulfill the objectives of the park and ride policies and would represent a modern public transport system have been examined at this Inquiry. **[4.53, 6.169 to 6.175, 6.365]**

- 9.64 The draft CS has policies supporting the NGT Scheme. Spatial Policy 11 (SP11) is regarding transport infrastructure investment priorities in accordance with the objectives of LTP3 and the Leeds City Region Transport Strategy (2009). It includes in spatial priority (i) *investment in a rapid transit system*

to increase radial route capacity to the city and town centres and to improve reliability together with investment in the provision of Park and Ride facilities’.

Draft CS policy CC3 is regarding improving connectivity between the City Centre and neighbouring communities and the supporting text makes reference to the NGT (trolleybus) proposal, the NGT route is shown on a plan (Map 9) and the glossary identifies that it would be a trolley vehicle. However, there is nothing to show that the merits of a trolley vehicle system had been examined by the Inspector and the policy objectives could potentially be met by other public transport measures. As with the UDP, there are policies in the draft CS that would be contravened by the NGT proposals, including policy P12, regarding its impact on landscape and townscape. I am aware that the CS has been adopted on 12 November 2014, following the close of this Inquiry. **[4.54, 4.55, 6.177, 6.179 to 6.187, 6.361 to 6.363, 8.20, 8.28]**

- 9.65 The Applicants do not dispute that the proposals would be contrary to a number of UDP policies. I find that there would be conflict with regard to those policies that seek to protect green spaces, heritage assets, the character and appearance of CAs and biodiversity. Whilst the Applicants have suggested that policies which support the NGT Scheme have taken account of the potential harm that it could cause in terms of its conflict with other policies, the scale of that harm needs to be weighed in the balance when determining whether the supporting policies should prevail. **[6.169 to 6.177, 6.360, 6.365, 6.449, 6.498, 8.20 to 8.22, 8.24 to 8.29]**
- 9.66 Government planning policies in the NPPF and the objectives in the LTP are other material considerations in this case. The conflict with NPPF policies, including that associated with the loss of green space and the harm to heritage assets, needs to be balanced against the support that the NGT Scheme would provide towards meeting other NPPF policy objectives. The conflict with the NPPF with regard to heritage assets is given in Appendix D to this report. **[4.50, 6.164, 6.391, 6.449, 8.21, 8.30, 8.31, Appendix D]**
- 9.67 LTP3 refers to the NGT Scheme. It also establishes the key objectives of improving the quality of life, making substantial progress towards a

sustainable low carbon future, maximising growth, supporting regeneration and promoting a safe and healthy environment. The extent to which the NGT Scheme would meet these objectives has been examined at this Inquiry. Whilst the weight to be given to the LTP is limited by its lack of external scrutiny or examination, the objectives are generally reflected in the UDP and draft CS policies. **[4.56, 6.178, 6.181, 6.351 to 6.359, 6.366, 6.528, 8.28, 8.59]**

- 9.68 LCC has shown its support for the NGT Scheme in its policies in the UDP, which should carry significant weight as they have been subject to the statutory procedures that include public consultation, and the draft CS, which at the time of the Inquiry was close to adoption and so should also carry significant weight. However, this support, together with that given in LTP3 and other planning documents should be weighed against the harm that the Scheme would cause to such things as the environment and heritage assets when deciding upon the making of the TWA Order and the grant of deemed planning permission, which would follow from the Order. The harm to the heritage assets and the character and appearance of the CAs is assessed in Appendix D²¹⁷¹ to this report, in order to carry out the balancing exercise. **[4.49, 4.57, 4.58, 6.162, 6.163, 6.188, 6.189, 6.366 to 6.373, Appendix D]**

The likely impact on the public, businesses and the environment of constructing and operating the Scheme (Matter 5)

Noise, dust, vibration and disturbance

- 9.69 A significant number of objectors have expressed concerns about the impact of additional noise resulting from the construction and operational phase of the Scheme on their living conditions at residential properties and working environment at educational and commercial premises. Whilst there have been criticisms about the use of traffic figures from the LTM to predict noise levels,

²¹⁷¹ Appendix D: Report on the LBCs and CACs

the use of traffic models is an acceptable method and very little evidence has been provided to show that any inaccuracies in these predictions would be sufficient to make a material difference to the noise impacts. **[4.59, 6.27, 6.33, 6.89, 6.193, 6.567, 6.715, 6.893, 6.965, 6.966, 6.999, 6.1002, 6.1009, 6.1010, 6.1033, 6.1034, 6.1035, 8.32]**

- 9.70 The Applicants have accepted that there would be adverse impacts due to additional noise and dust associated with the construction of the Scheme, but that this would be managed in order to accord with relevant legislation, standards and guidelines. Mitigation measures to prevent excessive vibration, dust and noise during construction would be included in a CoCP, which would include restrictions on working during unsocial hours. In this regard, there is no detailed construction programme on which to assess the impact, which has been predicted to be considerable at some important and potentially sensitive locations, including on Cookridge Street. The assessment has also been the subject of criticism from objectors, as has the CoCP, which would require resources to police it. However, the measures included in the CoCP are generally those that have been successfully applied to other construction schemes and enforced, and there is nothing to show that the NGT Scheme would present any exceptional difficulties in terms of construction management and enforcement. **[4.60, 4.63, 4.133, 6.191, 6.192, 6.193, 8.33, 8.134, 8.170, 8.197]**

- 9.71 The draft Order contains Article 66 to remove the right for people to obtain an order regarding statutory nuisance. This would therefore make it important to ensure that noise levels during the operation of the Scheme would be kept to acceptable levels. The impact from noise during the operation of the Scheme, including from substations, has been assessed for the year of opening and after 15 years using traffic figures from the LTM. This assessment has indicated that some receptors would experience a reduction in noise and that others would experience an increase due to traffic either increasing or being closer to them, such as at the segregated section in Headingley and the park and ride sites. Of those that would be likely to experience an increase, there

would be a large number of residential properties that are predicted to suffer significant adverse effects from noise, and there would also be some educational premises and businesses, which could have their use adversely affected. **[4.61, 6.5, 6.62, 6.190, 6.194, 6.570, 6.717, 6.858, 6.990, 6.993, 6.1102, 8.32, 8.33, 8.139, 8.154, 8.164, 8.273]**

- 9.72 The reduced noise levels are partly due to the smooth running of the trolley vehicles, as a result of the proposed resurfacing of the vehicle running areas and their ongoing maintenance, as well as from the vehicles themselves being quiet. The silent running of the vehicles would require them to make additional warning noises as a safety measure, particularly in areas shared with pedestrians, which could cause some noise problems in residential areas. However, the relatively low frequency of the trolley vehicles and the times that they would operate should ensure that it would not be a significant nuisance to residents. **[4.62, 4.118, 6.438, 6.459, 6.858, 8.146]**
- 9.73 In terms of vibration, that from vehicles and plant during the construction would be controlled by the CoCP and I am satisfied that noise from operations such as drilling for OLE fixings to buildings could be appropriately managed. With regard to the operational phase of the Scheme, there is no substantial evidence to show that modern trolley vehicles would create excessive levels of vibration while they are running. Furthermore, the commitment to maintain the highway surface to a high quality would ensure that any adverse effects due to vibration would be kept to a minimum. **[4.62, 6.858, 8.173, 8.274]**
- 9.74 I consider that the extent of the operational noise is difficult to assess, particularly as the LTM does not accurately reflect the change in vehicle behaviour on residential streets within the network. However, even allowing for these inaccuracies, there is insufficient evidence to show that there would be any situations where noise level increases would not be able to be mitigated, including at substations, to ensure that they would be kept to acceptable levels. Therefore, I do not envisage that there should be any significant problems due to noise, dust, vibration and disturbance during the

construction and operational phases of the Scheme that could not be adequately mitigated. **[4.61, 4.105, 6.89, 6.193, 8.32, 8.33]**

Impacts on air quality

- 9.75 The air quality, including carbon emissions, during construction would be controlled by legislation and the use of the CoCP. I am therefore satisfied that there would not be any significant concerns above that from normal construction activities. **[4.66, 4.69]**
- 9.76 During the operation of the Scheme, the Promoters' predictions using the LTM indicate that the overall impact would not be significant but, if anything, the proposal would result in an increase in carbon due to vehicle emissions. Whilst the method used for the assessment has been criticised, the impact of the Scheme on some of the pollutants that have been referred to by objectors would not be required to be assessed or would not be significant. There is insufficient evidence to demonstrate that the impact upon air quality at individual properties would be significantly greater than predicted, and nothing has been presented to show that the emissions that would result from brakes, tyre wear and road surface erosion would be significantly greater than would occur with other forms of road transport. **[4.64, 4.65, 4.67, 4.68, 4.70, 6.736, 6.1046, 6.1047, 6.1051 to 6.1055, 8.34 to 8.36]**
- 9.77 I am satisfied that the trolley vehicles would provide a carbon efficient means of transport per journey which would be better than a hybrid bus in this respect. However, the means of generating that electricity would add to carbon emissions and there is no substantive evidence to show that grid energy mix would improve to be more carbon efficient than would be achieved by improvements in vehicle technology, encouraged by changes in legislation. I am therefore concerned that the impact of the NGT on the overall air quality, including carbon emissions, would be negative, as predicted by the LTM, due to the impact on other traffic and the use of grid generated electricity. This is of a particular concern, considering that the Headingley area already has a record of having poor air quality and that one of the objectives of the Scheme

was to reduce greenhouse gases. **[5.8, 6.481, 6.631, 6.727, 6.730 to 6.733, 6.825, 6.1056 to 6.1059, 8.37, 8.38, 8.233]**

Impacts on water resources and water quality

- 9.78 The EA has indicated that it is satisfied with the FRA which was prepared by Mott MacDonald, dated September 2013, as addressing any risks of flooding due to the Scheme. Based on this, I have been given insufficient substantive evidence to show that the Scheme would cause a flood problem, due to such things as creating additional hard surfacing, which could not be satisfactorily addressed. Condition 23 in Appendix C to this report would ensure that the development would be carried out in accordance with this FRA. I am satisfied that water pollution would be able to be adequately prevented by suitable measures secured by planning conditions, which I have included as conditions 3(f) and 15 in Appendix C to this report. **[4.71, 6.104 to 6.106, 6.1114, 8.280, Appendix C]**

Impacts on landscape, townscape and visual amenity, including proposals for the removal and replacement of trees, the effects on the character and appearance of the conservation areas and on listed buildings

- 9.79 The majority of the objectors have raised the issue of the effect of the NGT on landscape, townscape and visual amenity as one of their main concerns, particularly in relation to the 6 CAs that it would pass through and the 3 CAs that it would be adjacent to in the north and City Centre. This impact has been assessed by the Promoters in the ES, based on the GVLIA2. I am satisfied that it is an appropriate method of assessment, even though the methodology has been adapted for use in the ES. As the assessment was started using GVLIA2, it is accepted practice to continue to use that methodology instead of that in the later published GVLIA3. However, it appears to me that the adapted methodology has not been applied consistently to all the potential effects of the NGT on the environment. **[4.72 to 4.74, 6.310f), 6.431, 6.577 to 6.581, 6.1092, 7.12]**

- 9.80 The scale of the loss of trees, particularly those at prominent locations in the CAs, would be significant and I am concerned that the overall impact has been underestimated. Whilst additional new trees would be planted as mitigation, there is no guarantee that they would all survive long enough to reach the same maturity. Also, there is no exact measure of all those that would be lost, as some are grouped together, to demonstrate that there would be an adequate level of replacement. In addition, there have been insufficient investigations to determine whether the replanting could be achieved at the proposed locations due to the presence of obstacles such as statutory undertaker's plant. Furthermore, much of this additional planting would be at locations, such as at Stourton Park and Ride, which would be a significant distance away from where the trees would have been lost. **[4.76, 6.4, 6.24, 6.60, 6.68, 6.206, 6.208, 6.215, 6.216, 6.273, 6.376, 6.384, 6.392, 6.441, 6.580, 6.581, 6.582, 6.584 to 6.587, 6.605, 6.619, 6.670, 6.671, 6.870, 6.894, 6.901, 6.906, 6.987, 8.252]**
- 9.81 Harm would be caused to the character and appearance of the CAs due to the loss of trees, reduction in the size and extent of verges, the widening of carriageways, additional street furniture, and the introduction of OLE. The full extent of this harm is not known, as much of the detail has been left to a later stage. This means that the number of supporting poles, the scale and appearance of the shelters, the extent of pedestrian barriers and new signing, the amount of new planting that could be provided and the level of the re-use of materials are all subject to detailed design. **[4.77, 6.204, 6.205, 6.376, 6.501, 6.583, 6.619, 6.630, 6.669, 6.680, 6.712, 6.737, 6.764, 6.871, 8.45, 8.251]**
- 9.82 The Promoters have used photomontages to attempt to illustrate the potential effect of the NGT on the environment. However, it has been made clear at the Inquiry that they have not been done in accordance with the recommended procedure, as the 'before' image has generally been less favourably portrayed than the 'after' images, and some of the most sensitive locations have not been illustrated. **[4.72, 6.208 to 6.211, 8.40, Appendix D171 to D172]**

- 9.83 The Applicants have suggested that there have been no other comparable analyses carried out of the impacts on the landscape and townscape to that undertaken for the ES. However, the methodology used and how it has been applied to the assessment of the impacts of the Scheme have been criticised by objectors' witnesses with experience or expertise in this area. I accept that some of the determination of the level of harm is a matter of judgment, but I am concerned that this judgment has not been consistently applied and not sufficiently supported by the evidence, particularly the impact of measures that have been suggested as being mitigation. As such, it appears to me that the adverse impact of the NGT on areas within the CAs, such as at Woodhouse Moor, and on the listed buildings should have been assessed as being greater than given under the methodology applied. **[6.207, 6.390, 6.393, 6.447, 6.450, 6.453, 8.39, 8.49, Appendix D147 to D278]**
- 9.84 Overall, the evidence provided at the Inquiry and that I have gained from my site visits, indicates to me that the NGT Scheme would result in significant harm to much of the route, and in particular to those areas that are within, or close to, CAs or include listed buildings, substantial areas of public open space and/or areas of vegetation. These would include the loss of trees in the vicinity of Lawnswood roundabout and along Otley Road, the taking of trees and open fields at the rear of Headingley, the loss of public open space at Woodhouse Moor and Belle Isle Circus, together with a general increase in street clutter due to shelters, poles, traffic signals, signs and OLE. Any benefits that the Scheme would provide to the character and appearance of some areas to the south of the route would not compensate for the severe harm that would be caused to the character and appearance of the CAs and the many listed buildings that would be adversely affected in the north and City Centre. **[6.450, 6.453, 6.710, 6.946, 6.976, 8.49, 8.50, Appendix D263 to D278]**

Impacts on archaeology

- 9.85 Whilst there has been limited archaeological investigation work carried out on the route, I accept the advice given by WYAAS that suitable measures could

be secured by a planning condition, included as Condition 14 in Appendix C to this report, to ensure that the archaeological interests in any sites found following investigations would be adequately protected. Furthermore, the likelihood of any major archaeological remains being found appears to me to be small considering that most of the route would be following existing roads and previously built up areas and that much of the construction would involve minimal excavation. However, due to the limited investigation work that has been carried out, there is a risk that archaeological remains could be discovered, which could delay work being carried out and have financial implications on the Scheme. **[4.79, 6.378, 6.588, 7.17, Appendix C, Appendix D279 to D284]**

Impacts of attaching overhead line equipment to buildings

- 9.86 The design and precise location of the OLE has been left to the design stage and therefore are unknown at this Inquiry. It is proposed that, where possible, the OLE would be attached to buildings but no surveys have been undertaken of any of the buildings to which they would be attached to determine the feasibility and impact of these attachments. Furthermore, the scale of the overhead wires and their supports is uncertain and this could be extensive and intrusive, particularly where there are wide gaps between buildings on either side of the highway or at sharp corners or junctions, as illustrated for other trolleybus systems in the world. The level of OLE would be more extensive than that for a tram. **[4.77, 4.80, 6.217, 6.218]**
- 9.87 There have been a significant number of objections to the attachment of OLE to buildings. In this regard the Promoters have drafted agreements to be signed by the owners of some of the affected properties that deal with the responsibilities for, and maintenance of, the OLE. However, as there have not been any structural surveys of the buildings to which OLE would need to be attached, the feasibility of such an attachment or the design of them if they were to be feasible are uncertain. Therefore, the effect of the OLE on the character, appearance, structure and maintenance of the relevant buildings cannot be determined. However, whatever the outcome after a structural

survey, there would be likely to be an adverse effect on the character and appearance of the buildings and their setting, due mainly to the presence of the wires around the building, and it would make it more inconvenient to maintain the outside of that building. **[6.51, 6.219, 6.958, 6.960, 6.969, 6.970, 6.980, 6.990, 6.985, 6.993, 6.997, 6.1002, 6.1010, 6.1011, 6.1014, 6.1019, 6.1022, 6.1025, 6.1032, 6.1034, 6.1036, 6.1037, 6.1039, 8.164 to 8.166, 8.173, 8.184, 8.207, Appendix D153 to D173]**

Impacts on land use, including effects on commercial property and the viability of businesses, and community facilities

9.88 The land that would be used for the Scheme would include sections of public open space that have been appropriated at Woodhouse Moor and Belle Isle Circus, together with sections of private property, particularly in the Headingley area where it would be necessary to widen the highway and improve the junctions. Whilst this part of the route had been included in the Supertram corridor, it seems to me that the landtake would be significantly greater for the proposed trolley vehicle system. This would affect the design and timing of new development at the former Leeds Girls' High School site and other potential development sites in Headingley. There have also been concerns expressed about the effect of the restrictions to access and parking upon businesses, particularly in the Headingley and the West Park area, due to parking on the A660 no longer being permitted in off-peak hours. **[4.81, 4.82, 6.33, 6.37, 6.437, 6.516, 6.574, 6.575, 6.601, 6.614, 6.687 to 6.690, 6.796, 6.802, 6.809, 6.953, 6.957, 6.962, 6.980, 6.986, 6.1060, 6.1061, 6.1108, 6.1109, 8.41 to 8.43, 8.63, 8.119]**

9.89 The effect on land during construction would include for temporary compounds and working space, which could be for considerable periods of time. These areas would need to be remediated after their use has finished. However, the effect on businesses has not been properly considered. This includes the effect of delays to, and re-routing of, the bus services and disruption to businesses due to roadworks. The Promoters' assessment of the level of disruption does not appear to me to be backed up by any substantive

evidence, given the level of disruption that has been shown to have taken place in Oldham and Edinburgh for tram based schemes. There is potential for job losses during the construction, due to the effects on access to and from businesses, and after the operation of the NGT, due to a reduction in bus services, which have not been assessed. **[4.87, 6.221, 6.236, 6.239, 6.374, 6.499, 6.513, 6.652, 6.920, 8.261]**

9.90 Other concerns are regarding the uncertainty over the funding and the political commitment to progress the Scheme should the Order be made, which could adversely affect future investment in businesses along the route. There would also be the loss of some businesses in the area of Victoria Road and Hyde Park Corner where their premises would be demolished and this could potentially affect the economic activity in that area. Whilst these properties have been in the ownership of the Promoters and let to the businesses, having been acquired for the Supertram scheme, some of the businesses appear to me to be established and their loss could have a significant impact on the other businesses in the area. **[6.220, 6.426, 6.953, 8.120]**

9.91 With regard to concerns about the effect of the lighting on the living conditions of residents that would be occupying property near to the Scheme, I have not been provided with details of the proposed lighting. However, there would be ways of lighting the park and ride sites and the off road sections at Headingley to ensure that there would be limited light pollution, including reducing the level of lighting when the NGT would not be running during the night. The detailed design of the lighting would be subject to a planning condition, as suggested in Condition 12 in Appendix C to this report. **[6.500, 6.997, 8.154, Appendix C]**

9.92 In conclusion, the main impact on land use would be on businesses. In this respect, there are concerns over their continued viability, mainly due to parking and access restrictions, during the construction and operation of the Scheme. Whilst some premises would benefit from improved access after completion due to the close proximity of an NGT stop, more could suffer from poorer access due to the frequency of buses being reduced and the relocation

of bus stops, as well as increased restrictions on vehicle movements and on-street parking. In my opinion, the construction effects of the Scheme would have a significant effect on land use, due to the disruption from road closures, diversions, construction traffic, noise and construction compounds in areas where there are high levels of commercial, educational and leisure activity over what would be likely to be a considerable period of time. As a result, I conclude that the viability of some businesses would be likely to be harmed by the Scheme. **[6.222 to 6.233]**

The effects of the Scheme on open space and recreational facilities

- 9.93 In terms of the use of the public open space that has been appropriated, an assessment has been made using the Leeds Quality Park (LQP) standard. Whilst it appears to me to be a reasonable method to determine how acceptable public open space and recreational facilities would be for use by the public, I am concerned about how it has been applied in the case of the NGT Scheme, particularly with regard to Belle Isle Circus and Woodhouse Moor. The Applicants have suggested that these areas of open space would be improved by the introduction of such things as public signs, seating and a formal recreational area to mitigate for the permanent loss of part of the area to the NGT, the removal of mature trees and alterations to some of the remaining area. **[4.82 to 4.85, 6.454, 6.484, 6.485, 8.46, 8.50, 8.255]**
- 9.94 The Applicants have indicated that the NGT proposals would improve Woodhouse Moor by the restoration of an area of hard surfacing to the north of the Marsden statue to amenity grassland, the greening of the lower part of the Moor with a reinforced grass surface, tree planting, the provision of a new children's playground, the introduction of signage and the refurbishment of the access points. The assessment in the ES of the effect of the NGT on the character and appearance of Woodhouse Moor does not appear to me to take account of its location within a CA and fails to place those walking on the Meanwood Valley Trail and Dales Way Link, which start at Monument Moor, into the most sensitive category of receptor. Therefore, I am concerned that

the harm that the NGT would cause to this area has been undervalued.

[6.389, 6.390, 6.878, 8.46, 8.49, 8.254]

9.95 Although the NGT would provide funding for mitigation to raise the level of the LQP standard, some of the measures, such as signing and seating, would not be very costly and could potentially be provided by other means. Other measures would only succeed in addressing the deterioration in the facilities, such as the formal play area at Little Moor, and appearance of some of the areas of open space due to neglect, which could have been partly brought about by the uncertainty caused by the cancellation of the Supertram scheme. I find it difficult to accept that the loss of significant areas of park, that would be fenced off from the public for safety and therefore result in severance of the open space and a potential safety hazard to those wishing to use the park for recreation, could result in an improved LQP rating. The proposal to formalise the use of part of Monument Moor for a car park would seem to me to diminish its attractiveness as a public open space, even though the surfacing would be designed to be sympathetic to its generally green appearance. **[6.447 to 6.453, 6.455]**

9.96 I am satisfied that the resulting 'pocket park' in Headingley would be large enough to be of some community benefit, particularly given the deficiencies in such areas that have been identified. However, the justification for the compulsory acquisition of land for such a park has been contested and its other functions as mitigation for the ecological effects of the NGT and land that would be surplus as being surrounded by the NGT track and highways would limit its use for recreational purposes. **[4.85, 6.447, 6.483]**

9.97 In terms of the use of the open space at Woodhouse Moor, there is conflicting evidence regarding whether there is a deficit of 'amenity green space' in that area. There are also legal representations regarding the appropriation of the public open space for the NGT Scheme. I have referred to the legal submissions separately from these conclusions. However, the need for the use of the public open space for the NGT Scheme has to be justified on its own merits. **[4.82, 6.454]**

- 9.98 The additional open space at Stourton would be at the expense of open fields and would be to mitigate the large area of land that would be used for car parking and a trolley vehicle depot. The new 3G pitches to replace those that would be lost at Bodington would be less than the number of grass pitches that would be needed, but I accept that their use would be able to be more intensive. **[4.86, 8.256]**
- 9.99 The area of open space that would be used at the rear of the Arndale Centre and St Columba's Church is currently private land, over which there is no guaranteed public access, even though the public have been given some access over part of it. However, it does offer a significant area of greenery within a relatively dense built up area with limited public open space within it. The length and width of the proposed NGT route, with a footpath and cycleway alongside, would cause significant harm to the appearance of this area of land and would involve the removal of large groups of mature trees that provide an attractive backdrop to some of the buildings in the area. Whilst it would be difficult to protect some of this area from future development, due partly to its private use and potential as a bypass to Headingley Lane, the limited use that would be put to the proposed almost 1 km long new segregated off-street section of the route, with generally a maximum of 20 tph in both directions using the NGT track, would be difficult to justify against the resulting harm that it would cause to the character and appearance of the CA. It would do little to relieve the traffic congestion along that section of the A660. **[6.17, 6.482, 6.666, 6.737, 6.764, 6.838, 8.47, 8.139]**
- 9.100 I conclude that, even though the LQP standard would be improved at some of the public open space that would be affected by the NGT route, this would be at the expense of a reduction in the overall area of the open space, possible severance of parts of it and limitations on its use due to the trolley vehicles passing through it.

***Effects of the Scheme on statutory undertakers and other utility providers
(Matter 6)***

- 9.101 I am satisfied that the draft Order makes the necessary provisions to protect the interests of the statutory undertakers and that these are similar to the provisions that have successfully been previously applied. An indication that the provisions would be satisfactory is that most of the statutory undertakers have withdrawn their objections to the Scheme. **[4.89, 4.91, 4.92]**
- 9.102 The Applicants have stated that they have been in discussions with the statutory undertakers regarding the necessary works. However, the design of the proposals has not been detailed and I have not been provided with any plans or estimates from statutory undertakers to verify the scale of the works that would be necessary. I accept that allowance has been made in the overall costs of the Scheme for contingency sums, but insufficient information has been provided to show that these sums would cover the uncertainties, considering that there would be 10 substations that would require a supply and that there would be extensive realignments to the carriageways and changes to many of the junction arrangements. **[4.88, 4.90, 6.216, 6.221, 6.237, 6.282a)]**

Likely impact on motorists, cyclists and pedestrians of constructing and operating the Scheme (Matter 7)

The effects of the proposed trolley vehicle system on other public transport services, highway capacity, traffic flow, vehicle parking, pedestrian and cyclists' movement and road safety (a)

- 9.103 The construction of the Scheme would cause disruption of bus services and delays to traffic using the corridor and side roads, as well as disruption to those walking and cycling. The degree of disruption and the cost in time, money and patronage has not been quantified. It would make buses less convenient to use, with the possibility that stops would need to be temporarily relocated or closed, and they would suffer from a reduction in punctuality and longer journey times. FWY have suggested that from its experience on other

similar schemes, including the tram in Oldham, this would result in fewer passengers and that this could have a long term effect on the use of public transport following the end of the construction period, which is given as being about 2.5 years. I have not been given any substantive evidence to quantify this effect, but I do accept that the likely delays and disruption to bus services could have an adverse impact on their patronage during construction, and no indicative programme has been provided to show the likely extent or time of such works. **[4.146, 4.159, 6.235, 6.236, 6.239, 6.380]**

- 9.104 With regard to public transport, the Applicants have claimed that the Scheme would provide additional services to those wishing to travel on the route corridors, and many of the 27 new dedicated stops would be within 100m of bus stops. However, this would generally be too great a distance to be able to switch at the last minute between buses and trolley vehicles. Whilst I am satisfied that it would not be practical or feasible to share the stops with existing bus services, due to restrictions on the number able to use them, their design and layout and the brand identity, the distance between stops would make it less convenient for the public to use public transport. The inconvenience to the public would be exacerbated by the relocation of bus stops to accommodate the NGT stops. The NGT stops, which would be larger and more elaborate, would only be used by about 10 vehicles an hour whereas many of the existing bus stops along the route are used by at least 20 vehicles an hour. Furthermore, they would generally be further apart than the bus stops, resulting in longer average walks to and from stops. **[4.93 to 4.96, 4.109, 6.240 to 6.250, 6.738]**

- 9.105 The Scheme would result in an increase in the length of bus lanes and they would generally be wider and operated for longer times. It would also give additional priority at junctions. Although these factors have been shown by the Promoters to reduce bus run times overall compared to a 'Do Minimum' scenario, most of these improvements are too small to be noticeable and are dependent upon the assumptions that have been made to arrive at the

journey times. Also, some bus journeys have been predicted as being slower with the NGT. **[4.97, 4.98, 4.108, 6.251, 6.254, 6.925]**

9.106 There is uncertainty about the level of bus service that would be maintained following the introduction of the NGT. Whilst the southern route would open up a new transport corridor for significant parts, the northern route, which would cover a much longer distance, would generally duplicate the corridor that is currently served by existing bus routes and would therefore be in direct competition with the operators of those bus services. The Business Case has assumed a halving of service Nos 1 and 6 along the northern route, but has also tested the impact on the BCR of the level of these services staying the same. FWY has suggested that these scenarios would be unlikely and that a reduction in bus patronage could result in other services being cut on less profitable routes, together with less investment in new buses on existing routes, to the detriment of the public transport service overall. **[2.4 to 2.7, 4.99 to 4.101, 6.260]**

9.107 NGT is not planned to run at night. Existing bus services already provide such a service and could continue to do so, but this is by no means certain. Any cut backs to the bus services that would be greater than predicted could result in the combined frequency of NGT and buses on the northern route being less than at present, including the loss of a night time service. The future ticketing of the NGT and buses, both of which are uncertain, could result in practical difficulties in using both the NGT and bus services with the same tickets. This could make it inconvenient and unattractive to make use of both forms of transport, resulting in one or both of them suffering from lack of the required patronage to maintain the level of service. **[4.102, 4.103, 6.261, 6.263]**

9.108 The level of priority that can be given depends upon the frequency of the service, the consistency of the service to keep to the times and the relative location of stops to the signals. As such, it would be difficult to give anywhere near the same level of priority for buses as for the NGT, which would result in delays not only to those services along the corridor but those that would cross it or interact with the junctions. The total number of bus services that could

be affected would be considerable, and it seems to me that these have not been allowed for in the modelling and predictions. **[4.108, 4.109, 6.251, 6.262, 6.741]**

- 9.109 The overall effect of the Scheme on public transport users would be that the NGT is predicted to take much of its patronage from existing public transport on the corridor, which could result in a reduction in the service to maintain the viability, including some that go to different destinations. Journey times could increase for some of the existing bus services, making them less attractive. This could lead to a reduction in the level of public transport services along parts of the NGT route which access places not served by NGT stops, due to their viability being threatened. Should the bus operators compete with the NGT along the corridor by increasing bus frequency, use of express services and lowering fares, different ticketing and other ways, this could have an adverse effect on the NGT patronage, which could result in it no longer being able to sustain its level of service. **[6.240, 6.241, 6.255 to 6.259]**
- 9.110 Whilst there is no certainty about how the bus operators would respond to the introduction of the NGT, it seems to me that reduced patronage would result in a reduction of services, either those directly on the NGT route or those affected by the route. Should the bus operators compete successfully with the NGT, it could result in a threat to the viability of the system, which could then again result in a reduction in public transport on the corridor. Therefore, although there could be some benefits to existing bus services from improvements to the infrastructure and signal priorities, these would be offset by the harm that would be likely to be caused due to the competition and changes in bus stops. **[6.261, 6.263]**
- 9.111 In terms of general traffic, although the carriageway widths would be increased and additional carriageway would be constructed, the modelling forecasts that the level of congestion would not be improved, with some junctions showing less queuing and others having greater queue lengths. This is due to the priority being given to the NGT at signalised junctions at the expense of other traffic, the additional carriageway being mainly devoted

either exclusively to NGT or shared with cyclists and buses, and the local re-routing of vehicles resulting in additional traffic at some of the junctions and a predicted increase in the overall distance travelled annually in private cars.

[4.104 to 4.107, 4.111, 4.112, 6.287, 6.382c)]

9.112 The Promoters have shown that, using the LTM supplemented by additional traffic survey data from traffic counts updated to 2020, the forecast demand at most of the junctions would not exceed their calculated capacity. However, the capacity at some of the junctions is shown to be above the acceptable 'Degree of Saturation', which could cause some problems with queuing if they are found not to function as well as predicted or flows are greater than forecast. I am particularly concerned about the Shaw Lane/Alma Road junction, which could also be affected by a build up of traffic at the critical Otley Road/North Lane junction that would remain largely unchanged by the proposals. Whilst detectors would be used to try to ensure that any impact from queuing at the North Lane junction would not result in any delay to the NGT at Alma Road, the queues could result in general traffic being held up at the Alma Road junction, which could have a knock-on effect upon the buses and NGT at that junction. **[4.111, 4.112, 6.322b), 6.333, 6.665, 6.754, 8.1]**

9.113 I am satisfied that the junction capacities have been assessed using appropriate computer programs and methodology. However, a significant number of inconsistencies have been found in the traffic figures arrived at in the modelling, and the LTM was designed to model the wider area of Leeds rather than the traffic behaviour at individual junctions. Whilst this has been corrected to some degree by additional data, I am concerned about the accuracy of the modelling in predicting the overall effect on the traffic of the changes in priority, the junction layouts and allowable turning movements, including the closure of some junctions. **[4.104 to 4.107, 4.111, 4.112, 6.382c), 6.739 to 6.742]**

9.114 The model indicates that a relatively small amount of the predicted demand for NGT would be from car trips, which are shown to have a slight reduction.

The use of NGT by previous car users depends upon the accuracy of the measured traffic flows that were taken a significant time ago, and more recent figures have shown that they may have reduced. Also, I am not convinced that the predicted use of the park and ride sites has been accurately modelled. This is because its use is difficult to model, given the past use of other park and ride sites, the capacity of the parking that would be provided and their attractiveness to motorists. It would also be dependent upon the cost of the fares, which has not been set, and the amount and cost of City Centre parking, which are difficult to control. **[6.252, 6.253, 6.529, 6.743, 6.744]**

- 9.115 Parking in the City Centre would not be materially changed by the proposals. However, parking along the NGT corridor would be reduced in number and the times of day that it would be able to be used, in the interests of the punctuality of the NGT. This erosion of local parking, although shown to be relatively small, would inconvenience those wishing to access facilities. It could also have a knock-on effect by increasing the demand for parking in residential side roads and reducing the viability of businesses that rely upon the availability of nearby on-street parking, even though I am satisfied that sufficient easily accessible spaces would be able to be provided for the disabled. In addition to this inconvenience to local people and businesses along the route, there would be inconvenience caused by the need for a significant volume of local traffic having to take longer routes to reach their destination due to the banning of turns and the closure of roads. **[4.110, 4.114, 4.115, 6.253c), 6.382d), 6.383]**

- 9.116 The effect on pedestrians would be mixed, as in some places there would be wider and improved footways and in other places footways would be narrowed and carriageways widened and there would be some parts of the route where space would be shared between pedestrians and the NGT. Pedestrian facilities would include an increase in controlled crossings along the route, but this is an indication of the need to maintain connectivity across wider carriageways and junctions. Some of these crossings would be staggered due to the additional width, which would not be as attractive for pedestrian use. There are limited

details of pedestrian barriers being provided at any locations along the route to ensure that those wishing to cross the road would make use of the formal crossings. Also, at many of these crossings pedestrians would be held up to give priority to the NGT and possibly to bus services. **[4.116, 4.119, 6.264, 6.382a), 6.567, 6.598, 6.1089, 6.1090]**

- 9.117 With regard to the parts of the route that would be space shared by pedestrians and trolley vehicles, the design speeds in these areas would be higher than that advised by the safety audit. The use as shared space of the existing pedestrianised areas at Whitfield Way/Whitfield Square and Millennium Square could result in problems with trolley vehicles interacting with children and, in the case of Millennium Square, relatively large volumes of pedestrians. This could either result in the trolley vehicles not being able to travel at the design speeds, and hence being delayed, or a risk to pedestrian safety. The improvements in the pedestrian environment due to restrictions on traffic using Woodhouse Lane near to Leeds University would not be significant, as it would still be used for vehicular access, buses and the NGT. **[4.117, 4.118, 4.120, 6.49, 6.432, 6.486, 6.938, 6.939, 8.52 to 8.55]**
- 9.118 In terms of cycling, the Applicants have not disputed that the A660 corridor is the most widely used route by cyclists in Leeds. Leeds Cycling Campaign has expressed concerns about the design of some of the junctions, including that at St Anne's Road/Otley Road. These concerns have not been picked up by the safety audit. Although the Applicants have identified that there would be a net increase in the length of dedicated cycle lanes and those shared by buses and NGT and that their design would meet recognised standards, there would not be a fully segregated cycle lane along the length of the Scheme, as considered appropriate by a number of cyclists and Leeds Cycling Campaign, and the lane widths that would be provided may not be sufficient to improve the perception of safety by cyclists and encourage a greater level of cycling. Furthermore, there is a predicted decrease in active modes of travel, which include cycling and walking, as a result of the NGT. **[4.113, 4.121 to 4.124,**

6.264, 6.382b), 6.525, 6.537, 6.563, 6.591, 6.598, 6.1073, 6.1085 to 6.1088, 7.10, 8.56 to 8.59]

- 9.119 Cycling facilities have not been one of the main priorities in the design of the NGT. It appears to me that those measures that have been incorporated to try to improve the safety and attractiveness of cycling along the route have been after the design had been drawn up. Whilst some of them would result in improvements, there would be limited future scope for making further improvements during the 60 year period that the NGT has been designed to operate, given the tightness of the corridor. This seems to me to be very short sighted, given the increasing emphasis on promoting cycling. Also, I am concerned that some of the design standards have been compromised in favour of motor vehicles and NGT, such as the widths of the combined cycle/bus/NGT lanes, which would put the safety of cyclists at risk, as they would have to share with large articulated vehicles, and could result in the NGT and buses being delayed behind cyclists. **[6.530 to 6.537, 6.542, 6.543, 6.798, 6.915, 6.922, 6.937 to 6.939]**
- 9.120 Road safety would not necessarily deteriorate due to the resulting increase in vehicle km travelled, although the model has used this figure to show that there would be an increase in accidents. A Stage 1 safety audit has been undertaken on the most recent design, which has identified very few safety concerns that would not be remedied in the detailed design. A reduction in potential vehicle conflict by closing junctions or stopping turning movements and an increase in signalised junctions and pedestrian crossings should potentially assist in improving road safety along the A660, even though I consider that the evidence is inconclusive that the closure of Weetwood Lane at its junction would improve road safety overall. Many of the proposed measures to improve road safety should be feasible without the NGT. However, in my opinion, there is a significant level of uncertainty about the full effect on road safety of re-routing traffic and pedestrians, and changing the location of bus stops and the priority and the allowable vehicle movements at junctions, given the considerable number of changes that are proposed.

[4.104, 4.125, 4.126, 6.340b), 6.442, 6.460, 6.566, 6.600, 6.605, 6.615, 6.667, 6.696, 6.1029, 8.60 to 8.62]

- 9.121 Some of the junction designs and road layouts have resulted in them being more complicated for cyclists and pedestrians to negotiate. Opportunities to incorporate facilities to improve the safety of cyclists and pedestrians do not appear to me to have been taken, as the priority has been given to the NGT. I am concerned that some areas have been identified where there would be potential conflicts between the NGT and pedestrians and cyclists that could compromise the safety of these vulnerable road users, given the size, quietness and possible problems with the manoeuvrability of the articulated trolley vehicles. **[6.538 to 6.541, 6.667, 6.806, 6.924]**
- 9.122 The use of articulated trolley vehicles would require extensive works to the highway infrastructure to ensure that they would be able to be accommodated and run on the NGT corridor. Whilst there are a limited number of articulated buses using the A660, I have not been given any details of their size, manoeuvrability, route and frequency to make any direct comparisons with the proposed articulated trolley vehicles, particularly as their design has not been finalised. I do not accept the Applicants' claim that the A660 corridor would be particularly suitable for running articulated vehicles, due to the many junctions and businesses along it, the bends in the road, reductions in widths at pinch points and the resulting interaction between pedestrians, cyclists and vehicles along it. **[6.460, 6.503, 6.534, 6.788, 6.846, 6.1069, 8.267 to 8.270]**
- 9.123 The likely scale of standing on the trolley vehicles would be a safety concern, given that for part of the route the NGT would share the highway with other traffic, including cyclists and buses. Whilst the Applicants have indicated that trolleybuses and trams with similar seating to standing ratios as that proposed have been safely operated in other cities, I have not been given sufficient details to make any direct comparisons with the NGT Scheme. It would seem to me that there is a strong possibility of some conflict occurring which could result in the drivers of the vehicles having to take emergency action to avoid

any collisions, putting at risk the safety of those standing and/or the pedestrians or cyclists. **[6.340b), 6.788, 6.793, 6.843, 6.845, 6.846, 8.272]**

- 9.124 I am satisfied that the NGT Scheme would bring some benefits to other road users in terms of improved provisions, but these would be very limited considering the scale of the proposed changes to the road widths and layouts and the increase in restrictions to parking and other traffic. There would also be some parts of the route where the safety and convenience of other road users, including bus users, cyclists and pedestrians, would be likely to be compromised, and I am concerned that the modelling that has been used is not able to accurately forecast the full extent of any likely harm.

The effects of closing, diverting or altering the layout of the streets (b)

- 9.125 With regard to closing, diverting or altering the layout of the streets, as detailed in Schedules 3, 4 and 5 to the draft Order, I am satisfied that alternatives would not be required. The closure of Weetwood Lane is the most controversial. This, and other alterations, diversions and closures, could adversely affect the route and timetable of bus services that cross or join the NGT corridor, as well as residents and school children due to dwellings, residential homes and schools being on side roads that could experience increased traffic as a result of 'rat running'. They would also lead to access to properties being made more difficult with longer and more complicated journeys, including those near to the junction of Otley Old Road with Otley Road from where right turns would be restricted. Although the implications of most of the closures, diversions and alterations would individually be slight, the combination of the effects of all of them could be considerable. I consider that the traffic modelling is not precise enough, and the changes proposed are too extensive, to accurately determine their full effect. **[4.127 to 4.129, 5.3, 6.64, 6.285, 6.556, 6.561, 6.570, 6.600, 6.629, 6.656, 6.716, 6.742, 6.755, 6.770, 6.809, 6.811, 6.946, 6.1083, 6.1089, 6.1091, 8.60, 8.61, 8.199]**

The effects of the traffic regulation measures specified in Schedule 10 to the draft TWA Order, including the proposed restrictions on parking, loading and access (c)

9.126 It seems to me that the main traffic regulation measures that would affect businesses and residents along the corridor are the parking and loading restrictions. The TROs that would extend the no waiting restrictions in the bus lanes on the A660 to all of the time would prevent the current parking that is permitted along sections of the A660 outside the peak hours. The reason that the Applicants have given is to facilitate the public transport. Whilst the use of these lanes by buses and cyclists would be improved due to these waiting restrictions, the trolley vehicles would not use them during the night and would have to share them with the additional vehicles during the day when they would be most likely to be used by cyclists. Also these restrictions could be harmful to local businesses, some of which have suggested that customers have parked on the A660 to use them. **[4.110, 4.130, 6.28, 6.395b), 6.652, 6.796, 8.63, 8.64]**

9.127 The waiting restrictions would be most important to the trolley vehicles to ensure that their route would be unimpeded, due to the OLE, but would also benefit buses and cyclists. However, these benefits would be during the less busy times on the route, as restrictions are already in place during peak times, and could be at the expense of the viability of local businesses, whose trade could be harmed. Therefore, the necessity of the TROs brings about further uncertainties about the long term effects of the Scheme on the local economy.

Complementary traffic management or other measures proposed by the Promoters to mitigate the effects of the Scheme on road users (including cyclists and pedestrians) (d)

9.128 I am satisfied that Article 43(2) of the draft Order giving the Promoters the necessary power to regulate traffic would be sufficiently controlled by the need to obtain consent from the traffic authority and for it to be advertised to ensure that it would not be abused over the 12 month period that it would apply. It would also allow the Promoters to remedy any problems that could result from the TROs. **[4.131, 6.1023, 8.209]**

The likely impacts of the Scheme on ecological interests (Matter 8)

- 9.129 Based on the surveys that have been carried out, which would need to be updated from the most recent one in 2013, the only significant ecological impacts would be to nesting birds and bats. I have been given insufficient evidence to demonstrate that the methodology that had been used by the Promoters is not appropriate. The Promoters have put forward compensatory measures for the loss of habitat and foraging areas, including the installation of bird and bat boxes and the acquisition of land to provide a 'pocket park' in the Headingley off-highway section of the Scheme. This should be sufficient to adequately compensate for the ecological impact of the Scheme on the open space in the Headingley area, which is the area that has had the greatest number of objections to its use on ecological grounds. **[4.132, 4.133, 6.19, 6.265, 6.266, 6.745, 6.1101, 8.65, 8.191]**
- 9.130 The impact on bats would be due to the loss of transient roosts and foraging grounds. There would be some disruption during the construction period, which I accept would be at least moderate adverse, on a significant population of bats, amounting to more than local significance. Whilst there is some uncertainty over the level of harm to the bats and the effectiveness of the proposed measures, given that there could be significant effects at the proposed sites for park and ride facilities as well as the off-road section in Headingley, NE has not objected. The compensatory and mitigation measures, secured by a planning condition similar to that suggested by NE, should ensure that the NGT Scheme would not be likely to offend the Article 12(1) prohibition of the deterioration or destruction of breeding sites or resting place. Therefore, there seems to me to be no valid reason why a licence would not be granted under the Regulations. **[4.136 to 4.144, 6.267 to 6.272, 7.12, 8.66 to 8.69]**
- 9.131 As the Scheme would involve the removal of a significant number of mature trees and loss of green space, there is bound to be some disruption to habitats and foraging sites for birds and bats. Whilst I accept that there is nothing before me to prove that the NGT Scheme would have any serious ecological

consequences, there is a need to carry out further more detailed and up-to-date survey work to determine the effectiveness of the proposed compensation and mitigation measures. Until such surveys have been carried out, the full effects of the Scheme on ecological interests and the level of compensation and mitigation that would be required cannot be fully determined.

Measures proposed by the Promoters for mitigating any adverse impacts of the Scheme (Matter 9)

9.132 The mitigation measures for the construction and operational phases of the Scheme have been listed by the Promoters. For the construction phase, the 'Construction Implementation Strategy' is to be read in conjunction with the CoCP. The CoCP would be implemented by the construction contractor and would include the setting up of local liaison groups in order to help co-ordinate the works. Whilst there are some provisions that could be difficult to enforce, it is a tried and tested method to control works during construction and there are sufficient safeguards within it to overcome any shortfalls. However, there are limited details available of the extent of the works, such as the scale of the necessary diversions to utilities and bus services, or a construction programme, which would indicate the type, duration and frequency of any construction works, to accurately assess the level of the likely disruption and hence the effectiveness of the CoCP in successfully managing the construction works. **[4.133, 4.146, 4.159, 6.191, 6.193, 6.234, 6.235, 6.893, 6.977, 7.8, 8.164, 8.166, 8.170, 8.197, 8.198, 8.261 to 8.263]**

9.133 The CEMP would deal with the environmental mitigation measures to be implemented during the construction period, to be monitored by the Promoters and contractor. The traffic management measures that would be necessary to construct the Scheme would be covered by the CTMP, which would be a requirement of the CoCP to be prepared by the construction contractor. Whilst concerns have been expressed about the suggested measures in the management plans, including the imprecision of the use of the 'best practicable means' as mitigation against noise, there have been very few

criticisms of the use of such plans. However, no details of the measures are currently available as they would need to be drawn up at a later date to suit the construction contract. **[4.133, 4.145, 4.147, 4.148, 6.273 to 6.279, 6.513, 6.901, 8.262]**

- 9.134 With regard to mitigation of the operational effects of the Scheme, the plans identify areas of mitigation, and some areas that have been shown as areas of 'opportunity' for improvement, including Belle Isle Circus, adjacent to the substation at the Red Lion pub, adjacent to the Leeds University Parkinson Building, the Arena and at West Park centre. These areas of 'opportunity' would therefore require additional funding, which has not been allowed for, to provide that improvement to the street scene. Furthermore, much of the mitigation for the impact on the historic environment, landscape and townscape has not been fully detailed to arrive at whether it would be feasible or affordable. **[6.339, 6.385, 6.395c), 6.580, 6.870]**
- 9.135 The new tree planting would be a compensation for those trees that would be lost. The details of planting and maintenance have not been finalised and so there have been insufficient investigations to ensure that trees would be able to be planted at all the proposed locations or that they would survive. Furthermore, much of the proposed additional tree planting, such as that at the park and ride sites, would be a significant distance away from where the existing trees would be removed and would take a considerable time to reach the same level of maturity. As such, it would not represent a like-for-like compensation for the loss of the mature trees along the route. **[5.11, 6.273, 6.384, 6.580]**
- 9.136 The mitigation measures that have been proposed to compensate for the loss of open space, particularly at Woodhouse Moor and Belle Isle Circus, would not replace the areas that would be taken by the NGT or address the impact of the trolley vehicles on the remaining open space, even though the Promoters have demonstrated that the measures would result in the LQP standard being improved. The 'pocket park', which has been suggested as mitigation for the loss of the green space and trees near to St Columba's Church and Headingley

Castle, would be used to compensate for the ecological impact as well as the visual and recreational impact. This could result in a conflict of interests as to how it would be used, and its effectiveness for these purposes and the justification for its compulsory acquisition have been questioned by objectors.

[6.452 to 6.455, 6.483 to 6.485]

- 9.137 In terms of the remaining adverse environmental impacts after mitigation, even though more trees would be planted than would be lost and care would be taken over the selection of the materials that would be used in the replacement paving and walls, I consider that the loss of trees and green space and the impact on the historic environment would not be adequately mitigated. This is because of the resulting permanent changes to the character and appearance of the CAs, due to the OLE, the widening of roads, the relocation of walls and features of listed buildings and the loss of mature trees. Other proposed mitigation measures, including those against disruption to sensitive measuring equipment at the University of Leeds and the loss of ecological sites, have not been detailed or proven to be effective. **[4.151, 6.272, 6.275]**

Adequacy of the Environmental Statement submitted with the application for the TWA Order (Matter 10)

- 9.138 At the Inquiry a significant number of errors and omissions were identified in the ES, including not taking account of the location of the Dales Way Link when identifying the significance of views of Monument Moor, and the need to issue a supplementary Document B-13 to address the impact of the NGT on the setting of listed buildings. Whilst the addition of Document B-13 and amendments to the ES to take account of mistakes and inaccuracies have addressed some of these matters that were raised, they call into question the findings and conclusions that have been made in the ES that was submitted with the application. **[4.158, 6.214, 6.388 to 6.393, 6.580, 8.39, Appendix D133 to D146]**

- 9.139 The air quality and noise assessments and the assessments of the effect on bats and birds in the ES have been criticised. However, I find that these

criticisms have not been shown to make the ES inadequate in these respects, as appropriate methodology has been used for these assessments and insufficient information has been provided to show that the inaccuracies would make a material difference to the overall findings. **[4.160, 6.197, 8.34, 8.35, 8.38, 8.66, 8.69]**

- 9.140 The ES omits any detailed assessment of some relevant potential environmental impacts of the Scheme. These include the construction impacts on buses, which are considered to be low in magnitude; the statutory undertakers' plant, which do not identify the supplies to the substations to show that they would not be outside the Order limits; and the impact on the River Aire, as the draft Order seeks permission for works even though the Promoters have indicated that such works would be unlikely. These are matters that require further work and could result in the need for additional environmental assessments but, in my opinion, do not make the ES inadequate for its current purpose. **[4.159, 4.161, 4.162, 4.164, 6.238, 6.282, 6.1019]**
- 9.141 I am satisfied that the other potential environmental impacts of the NGT raised by objectors that have not been included in the ES are not necessary to be assessed at this stage. These include the impact of diversions of the NGT, which would be difficult to be assessed as it is not known when it would be necessary to temporarily divert it; the impact of decommissioning works, which the Applicants have suggested is unnecessary as they do not seek such powers; and the impact of the changes to the Scheme proposals made in March 2014, which is not required as they would be within the range of the scope of 'Limits of Deviation' and should be insufficient to materially change the environmental impact of the Scheme. However, as no assessment has been made, it could be that these other impacts would need to be assessed at a later stage. **[4.155, 4.163, 4.165, 6.282d), g) and h)]**
- 9.142 Rule 11 of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 lists the information that an ES should include and refers to Schedule 1 for further information to be included, if

relevant. In terms of this information, I am satisfied that the Promoters have provided an outline of the main alternatives studied and an indication of the main reasons for their choice, taking into account the environmental effects, even though I am concerned that the reasons may not be fully justified. Also, descriptions of the measures envisaged to prevent, reduce or remedy any significant adverse effects on the environment have been given, and their effectiveness in doing this has been examined at this Inquiry. **[4.152 to 4.157]**

9.143 In terms of the aspects of the environment likely to be significantly affected by the Scheme, the ES appears to me to have included all of them and given reasons why others have not been included, such as the structural settlement and electromagnetic radiation, but has omitted the impact on the setting of listed buildings. The report from my assistant Inspector, in Appendix D to this report, suggests that the Promoters have not provided all the information in the ES that they were '*reasonably able*' to and the detail necessary to undertake a proper assessment of the Scheme is lacking. In this respect, she has found that the ES Heritage chapter is not as complete as it should be for the purpose of judging the full impact of the proposals in respect of the heritage assets. She has also been critical of the level of detail given in supplementary Document B-13 and inconsistencies between the findings of that document and those in the ES Heritage chapter. However, if it is accepted that the less stringent requirements for the submission of detailed information on the Scheme as set out in the Transport and Works Applications (Listed Buildings, Conservation Areas and Ancient Monuments Procedure) Regulations 1992 have been met, Document B-13 would address the inadequacies of the ES. Therefore, whilst the information provided in the ES may well have been sufficient to meet the requirements of the DfT's Scoping Opinion, it is not adequate without Document B-13. **[4.152 to 4.157, Appendix D]**

9.144 In conclusion on this matter, I am satisfied that the ES, with the addition of Document B-13 meets the requirements of Directive 85/337/EEC as amended

and consolidated in 2011/92/EU and those of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006. However, Document B-13 was not included with the application for the Order but was prepared after the opening of the Inquiry and the examination of the Applicants' heritage witness, being submitted in July 2014. Also, the details of the design in relation to heritage assets are insufficient to make any conclusive assessment of the impact on these assets. Without the information given in Document B-13, the ES would not adequately assess the impact of the Scheme on the settings of heritage assets. As Document B-13 was not submitted with the application for the TWA Order, I conclude that on this matter that the ES that was submitted was inadequate. **[4.152 to 4.158, 4.166, 4.167, 6.280, 6.387, Appendix D]**

Conditions proposed to be attached to deemed planning permission for the Scheme (Matter 11)

9.145 I have examined the conditions that have been suggested by the Applicants to be attached to the deemed planning permission in the light of the advice given in the national Planning Practice Guidance (PPG), following discussions with the Applicants and some of the objectors. As a result, I have attached a list of conditions in Appendix C to this Report, which I am satisfied are reasonable and necessary and meet the tests in the PPG. I therefore recommend that these conditions be attached to the grant of any planning permission for the following reasons. **[4.168, 4.175, 6.283]**

9.146 In Condition 1, a time limit of 5 years for commencement of development should be sufficient to ensure that the development would be commenced within a reasonable period of time. Condition 2, regarding the phasing of the development, is necessary to ensure its orderly execution. Condition 3 dealing with the construction management process, including the consultation with affected persons, is necessary in the interests of public amenity, together with the continued operation of the bus services, and highway safety. **[4.147, 4.170]**

9.147 As the detailed design of the Scheme would be at a later stage, Condition 4 regarding a 'Design Statement' is necessary to ensure that the development would be designed in accordance with those principles that have been set out in the Urban Design and Access Statement and have been subject to public consultation. Also, Condition 5 is necessary to ensure that there would be adequate control by the local planning authority over those details of the design that would be completed at the later stage. I do not consider that it would be necessary or possible to cost them under a condition, as requested by an objector. The Applicants have included an informative regarding the design of the proposed new sports facilities, as requested by Sport England.
[4.173, 6.395c)]

9.148 Condition 6 to secure the soft and hard landscaping in accordance with those details that have been subject to public scrutiny at the Inquiry is necessary to compensate for any harm that the development would cause to the character and appearance of the surrounding area, including the CAs. Conditions 7 and 8, regarding the protection, replacement and maintenance of trees, are necessary to compensate for any harm that the development would cause to trees. I am satisfied that a 5 year maintenance period for the trees, rather than the 10 years suggested by an objector, would be sufficient to ensure that the new planting would be properly maintained, given that this is the normal requirement. **[4.174, 6.675]**

9.149 Condition 9 to ensure the erection and retention of the appropriate boundary treatment is necessary in the interests of the amenity of local residents and the surrounding area. In CAs, Condition 10 is necessary to reduce the harm to their character and appearance. I am satisfied that it would not be necessary to be applied outside the CAs as Condition 9 would be adequate. Condition 11 is necessary to ensure the protection and re-use of topsoil.
[6.675]

9.150 Condition 12 is necessary to ensure that any lighting that would be provided would minimise light pollution in the interests of public amenity and safety. Condition 13, regarding the use of the park and ride sites, is necessary to

reduce the likelihood of pollution and flooding and prevent unauthorised use in order to protect the amenity of the surrounding area.

- 9.151 Whilst other archaeological conditions or modifications to that proposed by the Applicants have been suggested by objectors, Condition 14 follows that agreed with the WYAAS. As such, I am satisfied that it is the appropriate condition to use and is necessary to ensure the adequate protection and recording of archaeological remains. Condition 15 is necessary to provide a safeguard against the pollution of watercourses and groundwaters during and after the construction process. Condition 16, regarding any public address systems, is necessary to protect the public from noise disturbance. Conditions 17, 18 and 19 are necessary to identify any contamination and ensure that the appropriate remediation is carried out in the interests of health and safety.

[4.79, 6.589, 7.17, 8.280, Appendix D281, D284 and D304]

- 9.152 Condition 20 is necessary to ensure that the environmental mitigation would be implemented in the interests of the character and appearance of the surrounding area and public amenity. Condition 21 is necessary to ensure that acceptable sports facilities would be provided as a replacement for those at Bodington during the construction and after completion of the development. Condition 22 is necessary to secure appropriate training and employment opportunities in accordance with development plan policy. **[4.145, 4.150, 7.15]**

- 9.153 Condition 23, to ensure that the development would be carried out in accordance with the FRA that has been approved by the EA, and Condition 24 to control work in areas with a high risk of flooding are necessary to reduce the risks from flooding to the proposed development and future users. Condition 25, regarding a waste management plan, is necessary to ensure that the development would be carried out sustainably. Condition 26 is necessary to ensure that appropriate measures would be used to protect bats, as agreed with NE. **[4.71, 4.136, 4.142, 7.12]**

- 9.154 A suggested condition regarding the sharing of bus stops would be impracticable and not necessary for the implementation of the proposed

Scheme. A condition to reduce the times of the proposed parking restrictions in the bus lanes would not be appropriate, as it would require an alteration to the proposed TRO in the Order. Other conditions that have been suggested would not meet the tests in the PPG, and the use of 'tailpieces' would not be necessary for the effective implementation of the conditions. **[4.169, 4.172, 4.173, 6.283, 6.395a) and b)]**

Whether the Scheme is reasonably capable of attracting the necessary funding (Matter 12)

- 9.155 I have not examined whether the DfT were right to grant Programme Entry, but I have looked at the basis on which the Business Case has been put together to justify the level of funding that has been sought. **[4.201]**
- 9.156 The estimated cost of the Scheme has been given as £250.5 million, of which £173.5 million would come from Government funding. A Business Case has been compiled to support the bid for Government funding. Programme Entry has been granted by the DfT for the Government funding, and the conditional and full approvals are subject to a number of criteria which need to be met. In summary, these are affordability, obtaining the necessary statutory powers, and there being no significant changes to costs, design or expected benefits, together with other conditions specific to the Scheme. Approval was given based on the DfT's assessment of the BCR of 2.7:1. **[4.176 to 4.185, 8.247]**
- 9.157 Since the DfT approval of funding, the Business Case Review has updated the analysis to arrive at a BCR of 2.9:1. This Review has been carried out on an amended version of the Scheme that was granted Programme Entry. It has relied upon inputs from the LTM, as requested by the DfT, the Quality Factors Report and the Runtime Assessment, all of which were used for the PEBC. **[4.186, 4.190, 6.284]**
- 9.158 The Business Case has not produced monetised estimates of such things as the construction phase impacts, and the impacts on the landscape, noise, air quality and health, as well as the potential impact of dismantling the Scheme. Although there appears to be no requirement in the guidance to include

monetised estimates for most of these impacts, many of them have been shown to be negative. **[6.285, 6.294 to 6.296, 8.104, 8.105]**

- 9.159 The reason given for not including construction impacts is that the Promoters considered them not to be significant. Although this is a matter of judgment and the disruption would probably be less than that caused by the construction of a tram route, I am surprised at this finding. The Scheme would be extensive, running through residential and commercial areas and past schools and universities, and would involve many alterations to the layout and widths of some of the most heavily trafficked roads and junctions in Leeds. Based on this, and the level of disruption that has been encountered on other similar schemes in British cities, I would suggest that its construction impact would be likely to be significant. As such, it would be necessary to include a monetised estimate in the Business Case. Without an assessment, it is not possible to accurately evaluate the overall impact of the necessary traffic and utilities diversionary works in order to determine whether it would be significant or not. **[6.294a), 6.221, 6.236, 6.340i), 6.399c), 6.1103, 7.8, 8.104]**
- 9.160 The purposes for which the LTM has been used include deriving public transport patronage forecasts, assessing traffic totals and changes along the corridor and providing an input to the Business Case assessments. In terms of the patronage forecasts, the Promoters have indicated that the LTM demand forecast for the new service has a tolerance of plus or minus 30% and that for the park and ride services has a tolerance of plus or minus 50%. These are relatively wide ranges and could result in inaccurate forecasts. **[4.192, 4.193, 6.88, 6.252, 6.337c), 8.90]**
- 9.161 It is not clear whether the above tolerances have allowed for the inaccuracies in the model that have been drawn to my attention during the Inquiry. These include the accuracy of the modelling zones and centroid connectors used to forecast the demand, and inaccuracies in the modelling of traffic congestion at a junction along or close to the corridor or travel within the zones. Also, the ACSs associated with the park and ride sites that have been used could well overestimate the demand for the proposed sites, as the calibrated sites used

are for rail transport. Whilst I accept that it is not necessary to represent traffic growth in the model to determine the demand, as this would be related to the differential between journey times of bus and NGT, the validation of the LTM has been limited and the surveys that it was validated against are now dated. As such, very little evidence has been provided to prove its reliability in forecasting the demand. **[4.193, 4.194, 6.254d), 6.289n), 6.296g), 6.330, 6.337c), 8.109 to 8.112]**

9.162 About half of the claimed 'generalised journey time savings' in the economic case are directly from the 'quality factors'. The Quality Factors Report shows that they have been arrived at on the basis of SP research. Although many of the objectors have questioned whether the DfT had been made aware of the methods used in arriving at the quality factors, I am satisfied that there has been sufficient evidence provided to show that it probably was aware at the time of granting conditional approval. However, the quality factors are dependent upon assumptions that have been made about vehicle penalties, and the effects of bus stop improvements, standing and overcrowding that, if wrong, could make a significant difference to the level of patronage that would be taken from buses. **[4.195 to 4.197, 6.289c) to f), 6.294, 8.91]**

9.163 The reliance upon the SP research on the willingness to pay to travel on a 'very new bus' rather than on an 'old bus' has not been sufficiently tested to show that it has any reliable relationship with a preference to use NGT over a bus. Whilst it has been used as a basis for the Business Case to the DfT, who subsequently gave Programme Entry approval, it appears to me to be a weakness in the evidence supporting the forecast level of patronage. The quality factors have been applied to rail as well as bus journeys. Although the level of transfer of patronage from rail to NGT is predicted as being relatively small, NGT has artificially been made more favourable than rail, which has resulted in patronage being transferred even when the rail journey times are better and it is more convenient. I have found that the Applicants' claim that the figures are consistent with those in the AECOM report on soft factors is not

based on a like-for-like comparison. **[6.84, 6.89, 6.289f), 6.326, 6.327, 6.330, 6.396a), 8.81, 8.86 to 8.88, 8.92 to 8.94, 8.99, 8.102, 8.103]**

- 9.164 The SP work for a trolley vehicle preference was found not to be statistically significant and the preference for an ftr over a bus was considered to not represent the level of improvements to the service, so these results were not used. However, it must be questioned why these parameters were sought in the first place. It is difficult to determine whether the trolley vehicle parameter would have been used instead of the one actually applied had it been found to be statistically significant and, if so, what difference that would have made. Also, the fact that the image used for the ftr resembled the outward appearance of the trolley vehicles in that it was a single deck articulated vehicle has been disregarded. **[6.87, 6.337e), 8.95 to 8.97]**
- 9.165 With regard to the assumed journey times, the Runtime Assessment report has split the route into sections and determined NGT running times for each section, based on assumed speeds, acceleration and deceleration and allowing for junction delays and dwell times. However, I am concerned that not enough time has been allowed for delays due to the bunching of vehicles, reduced speeds in sections shared with pedestrians, cyclists, buses and/or general road traffic and delays due to boarding and alighting the vehicles when they are crowded. Whilst the NGT would be given priority by use of 'bus gates' at either end of the segregated section in Headingley and detectors would be used to take account of queuing at junctions, it could still be delayed by the general traffic that it would have to share the road space with due to queuing at the Alma Road/Shaw Lane junction and a 'knock-on' effect from queuing at the Otley Road/North Lane junction. Based on the above, the run times seem to me to be optimistic, and insufficient evidence has been provided to justify the figures that have been used to arrive at them. **[4.198, 6.254, 6.289h), 6.322, 6.333, 8.106, 8.107]**
- 9.166 The Government contribution towards the cost of the Scheme is on the basis that the balance of the capital costs would be from local sources. The Applicants have indicated that this would be likely to be made up of £30.4

million from reserves and capital programme, £11.6 million as land that is already in the Promoters' ownership and the remaining £35 million to be raised through prudential borrowing, using other sources if they become available. The objectors have suggested that the provision of local funding could be affected by public opinion, which has been shown to include a significant level of opposition to the Scheme; local Government finance, which is under pressure; support from businesses, which has not been strong at the Inquiry; the Business Case; and any uncertainty to obtain DfT approval of funding. The funding could also be affected by the possibility of any legal challenge, which is most likely to be made in relation to competition law, as discussed in Section 3 of this report. As such, the element of local funding is by no means certain to be made available, particularly if the costs of the Scheme were to escalate. **[Section 3, 4.187, 6.402, 6.403, 8.116]**

9.167 In terms of the cost estimates for constructing and operating the Scheme, the estimate for the overall cost of the Scheme has not been significantly altered since the 2009 estimate. The only relatively detailed breakdown of these cost estimates that has been provided is given in a table that the Applicants have suggested is not up-to-date. The Applicants have indicated that the capital costs have been reduced by making changes to the design, including to the stop specification, the Stourton Park and Ride site and the road alignment over Leeds Bridge. However, I have not seen any up-to-date details of the costs, other than the broad estimates given in the Estimate of Costs document, which gives insufficient detail to provide me with an assurance that the costs would be unlikely to be exceeded. **[6.101, 6.291, 6.292, 6.507]**

9.168 Sums have been included in the capital cost to take account of risk and inflation, but limited justification has been given as to how these sums have been calculated. The costs have allowed for infrastructure renewal and the cost of operating the service. Within these costs, there are figures that have been used for the statutory undertakers' works in order to supply the power to the substations and, if necessary divert their plant. However, I have not been given any detailed breakdown of how these broad costs have been arrived at

or details of where services would need to be diverted or laid. The extent of such works could result in significant costs which may not have been fully taken into account. **[4.176, 6.291d), 6.293, 6.822]**

- 9.169 I have not been provided with any details of a possible construction programme to show how the Scheme could be completed within the estimated 2.5 year period of construction or the possible level of disruption that would be caused by the works. Also, most of the details, such as the specification of the vehicles and stops and the OLE infrastructure have been left to the design stage. As such, it is difficult for me to identify what costs could be associated with the construction period or any temporary works that could be required. Considering that the Scheme would be taken through or adjacent to 9 CAs, I have not been given sufficient details to show how any additional costs in mitigation have been arrived at, including the preservation and re-use of materials to minimise the impact upon listed buildings. There would also be additional costs associated with the maintenance of the trees, planting, open space, and recreational facilities that would be used as mitigation. Whilst the overall costs of the Scheme would not be fully apparent until tenders have been received for the contract, I have not seen any verification of the cost estimates against actual contracts that have previously been tendered.

[4.146, 6.291, 6.506]

- 9.170 In addition to the uncertainties over the cost estimates, the allowance for inflation at 11% of the capital budget could be insufficient, due to potential delays as a result of the decision making process for the Secretaries of State in making the Order, possible legal challenges, or unforeseen circumstances when starting construction. The allowance for risk of about 10% of the construction cost may not therefore cover the additional costs due to delays.

[6.291a)]

- 9.171 With regard to the costs during the operation of the NGT, the Promoters have estimated that it would not operate at a surplus until the third year and to not be able to fund the repayment of the initial operating deficit until the eighth year. This is dependent upon the costs of running the NGT, which include the

cost of the staff and the energy required to run the vehicles, the maintenance and leasing costs of the vehicles, the maintenance of the infrastructure and the revenue that would be collected. I have not been given any comparative figures to show that the sums allowed for these costs are realistic. **[4.189, 6.292]**

- 9.172 The amount of revenue that would be produced by the NGT relies upon the level of patronage, the fares that would be paid by the users of the service, taking account of the concessions to the elderly and disabled, and the efficiency of the collection and enforcement of the fares. The Applicants have indicated that the assumed level of revenue collection includes a revenue risk reduction of 20% in the financial case assessment and a 5% reduction has been allowed for revenue loss in the economic assessment, but this risk does not appear to me to have been substantiated. The collection of fares would be affected by the number of staff that would be employed on security and fare evasion, taking account of the higher risk of non-payment due to the vehicles having multiple doors and the number of passengers that could be standing. This level of risk is difficult to assess, given that the vehicle design and operation have yet to be finalised. **[6.113c), 6.821, 8.75]**
- 9.173 The conditions of any contract to operate the service have not been finalised, but they should include a financial incentive for any private operator to manage it effectively so as to maximise the profit. Without such an incentive, the level of revenue that would be collected could well be affected. The cost of the Scheme has allowed for the leasing and maintenance of the vehicles from a company. No decision appears to have been made as to whether the company would be the same as that operating the trolley vehicles. However, to ensure that there would be sufficient vehicles available and that they would be properly maintained, the leasing contract would require a financial incentive. **[6.292, 8.82]**
- 9.174 With regard to the patronage forecasts, they would be significantly affected by the quality of the service that would be provided and the level of competition from other public transport providers. The patronage has been assessed

based on a number of assumptions arising from SP surveys which have been applied to the traffic model. I am satisfied that these are appropriate methods to assess the level of patronage, but I am concerned about the way that these methods have been applied. Furthermore, the assumptions made have not been sufficiently tested to ensure the robustness of the predictions. **[6.288, 6.289, 8.118]**

- 9.175 The level of patronage could be affected by many different factors. These include the distance that people would be willing to walk to take the service. This distance would generally have to be further for the NGT than for the bus services, due to there being fewer stops and a limited route. It would also depend upon the attractiveness of the NGT, based on its ability to provide shorter journey times and better quality of stops and vehicles compared to other forms of public transport. I am concerned that the SP work has not managed to give a dependable value to these attributes.
- 9.176 In terms of the quality of the vehicles, I would have thought that the passengers' experience would be affected by whether or not they would be able to be seated, as the SP surveys identified the importance that was put on the ability to have a seat. Whilst the Promoters have carried out a sensitivity analysis on the application of a crowding factor, which resulted in a reduction in the BCR to 2.63, it was based on there being plenty of room to stand, which could fail to represent the peak times when the trolley vehicles have been shown to be travelling at or near capacity. The Promoters have suggested that they have not applied an overcrowding factor as they consider that there would not be a significant effect from it. However, the evidence that has been put before the Inquiry indicates to me that overcrowding could be a significant factor in influencing the level of patronage that the NGT would attract. **[4.196, 6.117, 6.122b), 6.289d), 6.367, 6.406, 6.469, 6.479, 6.861, 8.76 to 8.80]**
- 9.177 The effect of the quality of the stops and vehicles on the patronage would be reliant upon the competition from other forms of transport as to the relative attractiveness of the NGT service. It has been accepted by the Applicants that

the majority of the potential users of the NGT would be those that would use existing bus services. In terms of the level of competition that would be expected from other public transport providers, this does not appear to me to have been fully tested to take account of the effect of significant improvements in the quality of buses, including the ticketing and boarding arrangements, possible fare reductions and a possible increase in bus services.

[6.255 to 6.257, 8.72 to 8.74]

9.178 Whilst the Promoters have tested the scenario where the level of bus services on the A660 would be kept the same, which has been shown to result in a reduction in the revenue from the NGT, they have not tested the effect of a combination of factors taking place. If no mode specific constant were applied to buses and trolley vehicles, no penalty to rail, and bus fares were assumed to be lower than the NGT fares with higher operating costs for NGT, it would seem to me that the BCR would be significantly less attractive. I am concerned that these factors could have serious consequences on the revenue from the NGT, particularly as a level of fares that was similar to that of the bus services prior to them being reduced has been assumed for the NGT. **[6.293, 8.84, 8.89]**

9.179 The Applicants have stressed that the funding of the Scheme would not depend upon the ability of the revenue from the Scheme to support the borrowing or the Promoters to identify at this stage sources of funding should the assessments of costs and revenue be inaccurate. They have given assurances that, if the Order is made, the necessary funding for the Scheme would be available. This statement has been backed up by the declaration made by the section 151 officers that the Promoters have the intention and means to deliver the Scheme. **[4.188, 4.202, 8.85, 8.249, 8.250]**

9.180 The TEE table in the Business Case shows a strong positive balance towards the Scheme. The latest BCR in the Business Case Review has been corrected to 2.90:1 which could be adjusted for optimism bias based on the degree of certainty of the project progressing. The Applicants have accepted that the Business Case for the BAFFB had to be carried out quickly and that

assumptions had to be made at that time, some of which appear to me to have been optimistic. Although the Programme Entry approval is not dependent upon the total cost remaining the same, increases in costs would be the responsibility of the Promoters. In this respect, no sources of additional funding have been identified should the costs escalate. **[6.125a), 6.310a), 6.402, 6.505, 6.632, 6.910, 6.911, 8.71, 8.114 to 8.116]**

- 9.181 I accept that the Business Case to be provided for the DfT would not be comparable with that which would be made for finance by a commercial organisation. However, some of the funding would need to be provided by borrowing, which would be through a commercial provider. As such, there would be a requirement for the appropriate supporting evidence to secure it, which would be likely to be different from that provided to secure Government funding. **[6.609, 8.70]**
- 9.182 I have taken account of the previous Leeds Supertram scheme, which had its Government funding withdrawn and its estimated costs increased dramatically. Whilst I have been given insufficient evidence to compare the costs of the current trolley vehicle with that scheme, I am concerned that the costs of the NGT Scheme could also escalate and insufficient revenue would be generated to maintain its operational viability. Therefore, I conclude on this matter that there is a realistic possibility that the Scheme would not attract the necessary funding to maintain it, even with the commitment that has been made to fund its construction should the TWA Order be made. **[6.297]**

Whether there is a compelling case in the public interest for conferring on the Promoters powers compulsorily to acquire and use land for the purposes of the Scheme (Matter 13)

- 9.183 The proposals would require the compulsory acquisition of interests in, and the rights over, a vast number of parcels of land along the route. Most of these parcels would be relatively small, with many consisting of areas of hardstanding, footway, verge or frontage, and very few would result in the loss of a home. However, the operation of businesses would be affected due to the loss of land, including changes to access and space used for parking and

manoeuvring of vehicles, and some buildings would have to be demolished, including those used as a home or business. Amongst those that NGT would significantly affect are Ford House Nursery, which would lose part of its limited sized play area, the house at 6 Wood Lane and commercial premises at 11 to 25 Headingley Lane and Victoria Road, which would be demolished. As such, the TWA Order would interfere with the human rights of affected landowners, in terms of Article 1 of the First Protocol and in the case of residential properties Article 8 as incorporated by the Human Rights Act. **[4.203 to 4.207, 6.1 to 6.68, 6.952 to 6.1045, 8.119 to 8.208]**

9.184 I have closely studied the schedule and plans setting out the Limits of Deviation and the Land to be Acquired or Used, as modified, and can find no evidence of any proposal to purchase land or rights other than those necessary to implement the Scheme. Whilst objectors that would be affected by the widening of Headingley Lane have argued that the land should not be used for a combined cycle/bus lane, I am satisfied that sufficient justification has been given for the inclusion of such a lane and widening on that side of the road. Also, the acquisition of land for a 'pocket park' to help mitigate the harm to the ecology of the nearby area has been accepted by an expert acting for the objector as being suitable for that purpose. I am therefore satisfied that the Order addresses no more land than would be necessary, and that the Promoters have a clear idea of how the land would be used for the Scheme. **[4.44, 4.45, 4.85, 6.16, 6.19, 8.65]**

9.185 Budgetary provision has been put in place by the Applicants²¹⁷², albeit that I have expressed doubts as to the accuracy of the estimates for the required level of funding and the ability to meet any additional funding that could be required should the costs of the Scheme exceed the estimate or the revenue not support the running costs. If the Order is made, work would be likely to start after 2020, given the delay due to the length of the Inquiry process. I am satisfied that no land is proposed to be acquired ahead of time.

²¹⁷² See also Conclusions on Matter 12 dealing with funding

- 9.186 Many of the objections to the compulsory acquisition of land are regarding the need to enter into formal agreements on the rights to attach OLE to buildings and on the level of compensation or mitigation that would be provided. Whilst it is right that these matters should not necessarily be settled at this stage, I am concerned that there are insufficient details regarding such important matters as to the types of fixing, the structure of the building to which the fixing would be attached, the possible loading on the fixing and the level of maintenance that would be required to accept that a satisfactory agreement would be reached with the property owners. **[4.208, 6.51, 6.219, 6.955, 6.958, 6.960, 6.969, 6.970, 6.993, 6.997, 6.1002, 6.1010, 6.1011, 6.1014, 6.1021, 6.1022, 6.1025, 6.1034, 6.1036, 6.1037, 8.164 to 8.166, 8.173, 8.207]**
- 9.187 The Scheme could be blocked by a legal challenge related to one of the legal submissions that I have previously mentioned in Section 3 of this report. There could particularly be problems in this respect regarding competition law, given the likely effect on bus companies operating in the area and that there is currently no precedent set in this regard, as it would be the first TWA Order that would have been made for a trolley vehicle system in this country. **[Section 3, 6.199, 6.291a), 6.403, 6.416, 6.696]**
- 9.188 In my view a compelling case has not been demonstrated for the Scheme to be implemented, as the evidence does not provide strong enough support for the case for NGT with regard to it improving and helping to integrate public transport, addressing growing traffic congestion, enhancing local accessibility in deprived areas and assisting in boosting physical, social and economic regeneration in the south part of Leeds conurbation. Furthermore, I am not convinced that the evidence has demonstrated that cheaper options that would require less compulsory acquisition of interests in land would not be more effective at addressing the identified aims and objectives, particularly on an interim basis. Therefore, having regard to ODPM Circular 06/2004, I am not satisfied that there is a compelling case for the land's compulsory acquisition in the public interest that justifies interfering with the human rights

of those with an interest in the land, even though loss of any interest could be met by compensation. **[4.203 to 4.208, 6.19, 6.298, 6.404, 6.968, 6.981, 6.1014, 6.1021, , 6.1028, 6.1035, 6.1039]**

Any substantive changes proposed by the Promoters to the draft TWA Order (Matter 14)

9.189 The modifications to the draft Order that are proposed by the Applicants are not substantive and could be made without causing any significant prejudice to any interested party's interests. **[4.209, 4.210, 8.209]**

Any other relevant matters raised at the Inquiry (Matter 15)

9.190 Most of the matters that have been raised by objectors have been covered under the above matters that have been specified. The following are those other relevant matters that have been covered in detail by the objectors and I have not assessed them sufficiently under the matters that I have already dealt with.

Consultation

9.191 A significant number of objectors have raised concerns about the level of consultation with the public, local businesses and bus operators that has been carried out and the notification that they had received about consultation events. Whilst I accept that the Applicants have demonstrated that they have fulfilled their obligations in terms of public consultation and that some objectors may have been mistaken about their concerns, the volume of responses about this matter at the Inquiry, particularly amongst those businesses that would be affected, leads me to believe that the consultation and notification process has not been sufficient to keep the public adequately informed. Furthermore, the evidence that has been put before the Inquiry has demonstrated that some of the information that has been presented has been misleading, particularly with regard to the plans and the photomontages. However, the relatively high level of interest in the Inquiry has meant that I do not consider that any party's interests have been unacceptably prejudiced in this respect. **[4.101, 4.211 to 4.214, 4.216, 6.24, 6.39, 6.46, 6.85,**

6.299 to 6.304, 6.405 to 6.415, 6.421, 6.508 to 6.510, 6.518, 6.545 to 6.552, 6.614, 6.622, 6.646, 6.691, 6.706, 6.746, 6.837, 6.862, 6.876, 6.926, 6.935, 6.1004, 6.1028, 6.1036, 6.1063, 6.1067, 6.1078, 6.1082]

Electromagnetic Effects

- 9.192 The Applicants have considered that the effects of electromagnetic radiation would be insignificant in relation to human health, and I have insufficient evidence to show that there would be any health risks. They have shown that the levels of electromagnetic radiation that would be likely to arise from the trolley vehicle system would be within an acceptable range. **[4.153, 4.223, 6.1027]**
- 9.193 The Promoters have assessed the Electromagnetic Compatibility (EMC) effects, and I am satisfied that those caused by equipment that would be used during the construction would not be exceptional and could successfully be regulated in a similar way to that used on other large schemes. Their assessment of the effects during the operation of the trolley vehicle system has shown that no significant problems would be caused that could not be satisfactorily addressed. However, FWY has questioned the methods used to assess the effects, and in particular the potential effects on equipment at the University of Leeds and Network Rail. Whilst none of the options that have been considered to address the impact on machinery used by the University have been firmed up, the University of Leeds has offered its support for the Scheme. Furthermore, Network Rail, and no other party, has given any indication of electromagnetic compatibility problems that would not be able to be resolved. Therefore, insufficient evidence has been provided to show that this matter would be an unsolvable problem for the Scheme, but it does highlight another uncertainty over its design and overall cost. **[4.224, 6.275 to 6.279, 6.305, 6.306]**

Alternatives suggested by objectors

- 9.194 None of the alternatives that have been suggested have been progressed to anywhere near the stage of the proposed NGT Scheme. Some, such as light rail, tram or underground, are suggestions that have been previously examined and would appear to be more expensive options than the trolley vehicle, including the Leeds Supertram, or their feasibility has not been demonstrated. I have insufficient evidence to show that the main line railways would have the required capacity or convenience to be a viable alternative to the NGT on the proposed corridor. Other proposed alternatives, such as congestion charging, contraflow on the A660 and a gyratory, would be subject to public consultation and have not been developed beyond the ideas stage. Suggested improvements to services to Leeds/Bradford Airport would not necessarily achieve the same aims as those established for the NGT Scheme. **[4.41, 5.19, 6.134, 6.144, 6.315, 6.444, 6.634, 6.864, 6.897, 6.902, 6.949, 6.1075, 8.236 to 8.241]**
- 9.195 The NBFL or NBFY option that has been proposed as an alternative by FWY has not been fully developed or costed. However, if implemented, it would introduce modern hybrid buses that would be more environmentally friendly and would offer a noticeable improvement in the quality of public transport compared to the existing buses, including additional doors to speed up boarding and alighting. It would also give greater flexibility than the proposed NGT, if introduced on the same corridor. The permanence of such a service could be increased by improved bus stops, using better shelters, signing and boarding arrangements, including the use of CCTV and real time information. Whilst it would only be possible to use such buses on the corridor to provide a BRT system by improving signal priorities, junction layouts and bus lanes, including a greater level of segregation, this would be a less costly option than the NGT Scheme to improve the level of public transport service in order to encourage greater use. **[6.148 to 6.155, 8.11, 8.12, 8.16]**
- 9.196 The potential interim solution, should the LTVS not be implemented, would be to develop an improved bus service on the route with the private operators,

using a quality partnership scheme. Such a scheme would use the most up-to-date hybrid buses, improved ticketing and boarding and improved priority to provide a higher quality service. Whilst it is unlikely that this would improve the journey times as much as the NGT Scheme is predicted to do, it would be a significantly cheaper option. This would require a funding commitment from the bus operators, which has not yet been secured but would be worthy of further investigations. Should the necessary funding be made available, this improved service could be supplemented by improvements to the cycle facilities, with a greater level of segregation, and park and ride facilities, which could be served by an express bus service into Leeds City Centre, to encourage less use of the car on the corridor. This would cause significantly less harm to the environment and would be less of a risk to public finances than appears to be the case with the NGT Scheme.

Competition

- 9.197 The legal submissions regarding competition law are dealt with in Section 3 of this report. The FSB has questioned the rights to operate the LTVS in the light of the Transport Act 1985. I have not been provided with the views that the FSB have sought from the Competition and Markets Authority regarding whether the proposed Order would be anti-competitive. However, the Applicants have demonstrated that the Local Transport Act 2008 and the Passenger Transport Executives (Exclusion of Bus Operating Powers) (Revocations) (England) Order 2014 have enabled the WYCA to have the power, so far as is necessary, to operate the trolley vehicle system in the way proposed; and the Localism Act 2011 has prevented any express restriction or right of restriction on LCC in respect of operation of such an undertaking, where this falls within the power of general competency. Furthermore, I am satisfied that the terms of the draft Order would override any constraints to the operation of the LTVS under the Transport Act 1985. **[6.520 to 6.522, 8.212 to 8.218]**
- 9.198 In terms of the funding mechanism, the Promoters intend to let contracts for the construction, maintenance and operation of the LTVS to third parties.

They do not intend to pay any subsidy towards its operation. Therefore, I find that the powers that would be given under the making of the TWA Order, which are similar to those that have been used for tram and guided bus TWA orders, would allow the method of funding to be used. However, as no trolley vehicle TWA orders have been made, it is difficult for me to conclude that no legal action would be taken on competition grounds regarding the proposed funding and operation of the NGT. **[3.1 to 3.57, 8.219 to 8.222]**

Impact on equality

- 9.199 The Promoters have set up an Equality User Group to examine the impact of the NGT on equality issues. Whilst many of the facilities for the disabled would be detailed when the design would be finalised, following the making of the Order, I am satisfied that there would be sufficient scope to ensure that the disabled user would not be unduly discriminated against. The Promoters would have to comply with the Equality Act 2010 when implementing the TWA Order. The spacing of the NGT stops and the design of the vehicles, in terms of such things as the level of seating that would be provided, would not in my opinion amount to discrimination against the disabled or elderly, as they would not be significantly different from that of some of the other services and there would be a choice for them to use that service or another one. Furthermore, the proposal would provide level boarding at stops and should not significantly reduce the number of disabled parking spaces. Therefore, I do not foresee any realistic prospect that a challenge to the Order on equality or discrimination grounds would be successful. **[4.216 to 4.222, 5.32 to 5.34, 6.131a), 6.383, 6.469, 6.571, 6.677 to 6.679, 6.696, 6.1000, 8.171]**

Modifications to the Order

- 9.200 The modifications to the Order suggested by FWY to make the highway infrastructure into a guided busway, as given in its modified draft Order, would amount to a substantial change to the proposals. The SofS would, by making the Order with the proposed amendments, be in effect approving a fundamentally different proposal from the one that had been applied for. Should the SofS agree that the Order could only be put right by these

changes, the proper course would be to turn down the application. **[6.307, 6.308, 8.275]**

- 9.201 Many of the modifications to the Order suggested by FWY should the Order be made with the NGT as a trolley vehicle system would change tried and tested provisions that have been successfully included in previous TWA orders for tram and guided bus schemes. The temporary permitted use of replacement buses under Article 51 should be able to be controlled to ensure that it would not be abused and Article 14 would apply if the trolley vehicles ceased to run. However, it does call into question the reasons for the proposed exclusive use of the infrastructure by trolley vehicles, including the stops. I am not convinced that the modification to allow the integrated use of bus stops, which is also put forward by NWLTF, would be practical given the limitations on the number of vehicles that would be able to use a stop. The additional provision proposed for consultation and compensation would be a departure from the general practice and would unduly favour the bus operators over other highway users. The proposal by NWLTF to not operate the bus lane for the full 24 hours would be able to be carried out under changes to the TROs without the need to modify the Order. **[6.309, 6.417, 8.276 to 8.279]**

Applications for listed building and conservation area consents

- 9.202 I have referred to Appendix D: Report on the Listed Building and Conservation Area Consents in the Statement of Matters 16 to 20 where these matters are dealt with in detail.

The extent to which the proposed works affecting the Listed Buildings and Conservation Areas (the works) would accord with the provisions of the Planning (Listed Buildings and Conservation Areas) Act 1990 and in particular sections 16, 66 and 72 (Matter 16)

- 9.203 I agree with my assistant Inspector that the works would result in permanent harm to the listed buildings, their settings and the CAs. This harm would be as a result of the demolition and relocation of walls to listed buildings and in CAs, the reduction in the sizes of some of the curtilages to listed buildings, the

loss of trees and open space and the increase in street clutter in CAs due to the OLE, any support poles and bus stops. The length of the NGT route and the number of CAs that it would pass through would mean that the cumulative impact of this harm would be extensive and the Scheme would affect a wide range of heritage assets. As such, the proposals would cause harm to many listed buildings and would fail to preserve the character and appearance of a number of CAs. **[4.225, Appendix D133 to D300]**

- 9.204 I accept that in some cases that harm would be significant, if not substantial. The provisions of the LB&CA Act 1990 that require special regard to be had to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses (section 16(2) with regard to the grant of LBC and section 66(1) with regard to the grant of planning permission) and special attention to be paid to the desirability of preserving or enhancing the character or appearance of a CA (section 72(1)) are engaged and carry significant weight against the grant of LBC, CAC and planning permission. Furthermore, I agree with my assistant Inspector that a LBC application would be required for the demolition of part of the wall within the curtilage of Headingley Castle, which has not been submitted. **[4.225, Appendix D4 to D5, D21 to D22 and D133 to D300]**

The extent to which the works are in accordance with the development plan for the area including any 'saved policies'. The weight that should be attached to the development plan, and any emerging plans (Matter 17)

- 9.205 The development plan policies are material considerations to be taken into account when determining the applications for LBC and for CAC. I agree with my assistant Inspector that the identified harm is contrary to the aims and objectives of emerging CS policy P11 and UDP policies N14, N18A, N18B and N20, particularly in respect of the need for full details of replacement proposals for demolitions in CAs, as set out in policy N18B. **[4.226, 6.186, 6.363, Appendix D9 to D13 and D133 to D300]**

- 9.206 With regard to the weight to be attached to the development plan and the emerging CS, those policies that are consistent with the policies in the NPPF

should be given considerable weight, as the emerging CS was at a late stage in its preparation at the time of the Inquiry. Furthermore, I am aware that the CS has since been adopted. Those policies that are inconsistent with the NPPF, which includes UDP heritage policies, should be accorded less weight, but they are supported by the statutory provisions of sections 16, 66 and 72 of the LB&CA Act 1990. Emerging CS policy P11, which seeks to conserve the historic environment and expects new development to demonstrate a full understanding of historic assets affected, is consistent with the NPPF policies.

[4.15, 6.186, Appendix D9 to D11]

The extent to which the works would accord with the NPPF and in particular the desirability of sustaining or enhancing the character or appearance of the heritage assets and Conservation Areas (Matter 18)

9.207 The level of harm to heritage assets has been found by my assistant Inspector to be different for each site and in most of the cases it would be '*less than substantial*' in the terms of the NPPF. However, even in these cases, considerable importance and weight must be given to any harm when considering the impact of the proposals and when undertaking the balancing exercise required by the NPPF. The Applicants have stated that the Scheme's impacts, including the impact on CAs and listed buildings, have been fully assessed in accordance with the policy approach set out in the NPPF. However, I am concerned about the inconsistencies that have been found in those assessments and that they generally appear to me to have underrated the harm that the Scheme would cause to heritage assets and CAs. As such, I do not agree with the Applicants that the Scheme's impacts are clearly outweighed by the public benefits that the Scheme would deliver. **[4.228, Appendix D133 to D300]**

If consent for the works is granted, the need for any conditions to ensure they are carried out in a satisfactory manner (Matter 19)

9.208 The conditions that have been suggested to be imposed on the consents, should they be granted, are given in Appendices E and F and the need for

these conditions is discussed in Appendix D to this report. **[4.229, Appendix D301 to Error! Reference source not found.]**

Any other relevant matters raised at the Inquiry (Matter 20)

9.209 The impacts on the CAs and settings of listed buildings during the construction of the Scheme could be considerable and could last for a significant time. The environmental impacts during construction would be managed by the CoCP and the CEMP, which would cover such things as measures to control air pollution and reduce noise disturbance, protect sensitive ecological features, as well as tree replacement and lighting design. There is no indicative construction programme to show the likely timescale for the disruption to any of the areas of the CAs and the design has not been provided in sufficient detail to show the extent of this disruption during the estimated 2.5 year construction period. However, this impact is likely to be for a relatively short period of time in any one area. Therefore, I find that the main considerations in the balancing exercise for and against the proposals with regard to the impact on heritage assets and the CAs is the residual effects that remain once the NGT system is in operation. **[4.133, 4.146, 4.147, 6.191, 6.221, Appendix D133 to D300]**

Overall conclusions

9.210 In the light of all of the above, I conclude that the Order is not justified on its merits and that there is not a compelling case in the public interest for making it, as any public benefit from public transport improvements and economic development would fail to outweigh the harm that I have identified. Whilst it would generally be in accordance with the UDP, in terms of the provision of a public transport scheme on the protected corridors and park and ride sites, and with the draft CS, in terms of the commitment to a trolley vehicle system on the proposed corridors, it would be contrary to national and development plan policies that seek to protect the environment. Funding has been made available for the proposed Scheme, but I am not convinced that it would be sufficient to cover all the potential costs. Possible impediments to its implementation have been identified and therefore there is uncertainty about

it going ahead without delay. I therefore conclude that the Order should not be made. However, should the Secretary of State disagree with this conclusion and wishes to make the TWA Order, I recommend that it be made subject to modifications as indicated in Document APP/205: Filled up draft Order.

- 9.211 For similar reasons to those given for the TWA Order, I conclude that deemed planning permission should be refused for the works that would be authorised by the Order. However, should the Secretary of State disagree with this conclusion and wishes to grant planning permission, I recommend that it be granted subject to conditions in Appendix C to this Report for the reasons given under Matter 11.
- 9.212 Having particular regard to paragraphs 132 and 134 in the NPPF, I have weighed the identified harm to the various heritage assets against the public benefits. In this case, the works resulting in this harm would be necessary to deliver the NGT Scheme. However, I am not satisfied that the NGT Scheme constitutes clear and substantial public benefits resulting from the work and would be of significant value to the City. As such, the benefits would be insufficient to outweigh the harm identified, some of which would amount to substantial, to heritage assets. Accordingly, I conclude that the 60 LBCs and 17 CACs sought should be refused. However, should the Secretary of State disagree, I recommend that they be granted subject to the suggested modifications in Appendix D Annex to this Report and the conditions in Appendices E and F to this Report.

10. RECOMMENDATIONS

Recommendations to the Secretary of State for Transport

10.1 I RECOMMEND that:

- (a) The Leeds Trolley Vehicle System Order 201[] be not made; and
- (b) A Direction for the grant of deemed planning permission be not made.

Recommendations to the Secretary of State for Communities and Local Government

10.2 I RECOMMEND that:

- (a) Listed Building Consent be refused in accordance with each of the 60 applications for such consent, references inclusive and all dated, full details of which are set out at the beginning of this Report.
- (b) Conservation Area Consent be refused in accordance with each of the 17 applications for such consent, references inclusive and all dated, full details of which are set out at the beginning of this Report.

M J Whitehead

INSPECTOR

APPENDIX A: APPEARANCES

FOR THE APPLICANT – METRO AND LEEDS CITY COUNCIL:

Neil Cameron	Queen's Counsel, and
Robert Walton	Of Counsel,
	Both instructed by Mr Paul Thompson of Bircham Dyson Bell

They called:

Martin Farrington BA(Hons)	Director of City Development, Leeds City Council
Dave Haskins BA(Hons) MSc DIC	NGT Project Director, West Yorkshire Combined Authority
Gordon Robertson BSc	UTMC Manager, Leeds City Council
Jason Smith BEng(Hons) CEng MICE	Associate, Mott Macdonald
John Henkel BSc MSc MCILT TPS	Acting Director General, West Yorkshire Combined Authority
Phil Ward BA(Hons) MA MRTPI MIHBC	Conservation Team Leader, Leeds City Council
Sean Flesher DipMS	Chief Parks & Countryside Officer, Leeds City Council
Paul Hanson BA(Hons) MBA TPS	Regional Director, AECOM
Neil Chadwick BA(Hons) MSc MA	Director, Steer Davies Gleave
Professor Jeremy Pursglove MSc DipLD	Senior Environmentalist, Mott Macdonald
Tom Walker BA(Hons) DipLA MA CMLI	Partner, Gillespies
Steve Speak MA DipTRP	Deputy Chief Planning Officer, Leeds City Council
Max Fiorni BEng(Hons) CEng MIOA	Principal Acoustic Engineer, Mott Macdonald
Kevin Leather BSc(Hons) MSc IEMA CEnv	Regional Manager North of England, Mott Macdonald
Richard Caten BSc(Hons) MRICS	Managing Director, Ardent Land Management

FOR THE OBJECTOR - First West Yorkshire Ltd OBJ 923:

Gregory Jones	Queen's Counsel, and
David Graham	Of Counsel,
	Both instructed by King & Wood Mallesons S J Berwin
<i>They called:</i>	
Christopher Cheek BA(Hons) FCILT MBIM	Director, The TAS Partnership Limited
Paul Turner	Head of Commercial, First West Yorkshire Limited
David Alexander	Managing Director, North Region of First UK Bus
Katy Lightbody MA(Hons)TP, PGDipCHE MTRPI	Associate Director, Turley Heritage
John Brooks BSc(Hons) MRTPI MTP	Office Director, Turley Town Planning Consultancy

FOR THE OBJECTOR - North West Leeds Transport Forum OBJ 1719:

Doug Kemp

Professor Peter Bonsall BA(Hons) DipTRP	Emeritus Professor of Transport Planning at the University of Leeds
Tony Ray	

FOR THE OTHER OBJECTORS:

Mrs Riddell	Chair, Weetwood House Management Committee OBJ 1591 and Mrs Riddell OBJ 797
Mr Riddell	OBJ 1168
Deborah Fahey	OBJ 1558
Eileen Pattison	Chair, Middleton Park Labour Group OBJ 692
Professor Christopher Todd	OBJ 171
Dr Elizabeth Reather	Chair, Leeds Cycle Campaign OBJ 1470
Christine Perry	For Betty Claughton OBJ 726
Doug Kemp	For Margaret Bell OBJ 1817 and Chair, West Park Residents Association OBJ 1720
Emma Stewart DipSocSci DipHumanities	OBJ 1818
Ken Torode	OBJ 798
Louise Howard-Long	OBJ 330
Chris Sheard FCIQB MRICS ACILA MIRM	Chairman, Meanwood Valley Partnership OBJ 510

Stephen Hammond	OBJ 1595
Stuart Archbold OBE	OBJ 1756
Eur. Eng. Malcolm Bell BSc DLC CEng MIMechE	OBJ 1810
Martin Fitzsimons	OBJ 1154
Claire Randall Dip Art Therapy	For Carol Downing OBJ 655, Suzanna Dunn OBJ 1374, Joanna Holland OBJ 1375, Adam Burrows OBJ 1380, Brenda MacKintosh OBJ 341 and herself OBJ 998
Christopher Longley MBE BA MSc	For Federation of Small Businesses OBJ 1721
Grahaeme Lauder	OBJ 555
Susan Sleeman	OBJ 997
Geoff Fawcett	Chair, Adel & Wharfedale Labour Party OBJ 1605
John Crawley	OBJ 863
Janet Matthews	OBJ 365
Lorraine Nelis	OBJ 781
Ian Simpson	OBJ 1798
Alan Haigh	OBJ 168
George Geapin	OBJ 617
Mike Holmes	Practice Manager, High Field Surgery OBJ 1811
Matthew Hill CEng MCIBSE	OBJ 253
Catherine Shuttleworth	For Richmond House School OBJ 1733
Ian Barraclough	For Headingley Castle Management Limited OBJ 461
Sue Buckle	Chair, South Headingley Community Association OBJ 1641
Dawn Carey Jones	South Headingley Community Association OBJ 1641
Helen Pickering	For Drummond & Churchwood Residents' Association OBJ 1727
Stuart Natkus MTP PGDL MRTPI	Planning Associate at Barton Willmore LLP, for Leeds & Yorkshire Housing Association OBJ 1182, Morley House Trust OBJ 1608, Headingley Land Developments OBJ 1611 and Headingley Office Park (Topland Ridgeway/Addington Capital) OBJ 1613
John Reed	OBJ 591

Jenny Phelps	OBJ 381
Mr Nabarro FRICS	Director, Nabarro McAllister & Co Ltd Chartered Surveyors for Suzanne Baskind OBJ 1388
Councillor Anderson	OBJ 527
Geoff Steel	For OBJ 967 Dr Ruth Cunliffe
Councillor Jonathan Bentley	OBJ 1520
Ian Moxon	OBJ 508
Nigel Sleeman	OBJ 1166
Michael Broadbent	OBJ 573
Carole Carey-Campbell	OBJ 823
Dr Dickinson	For Weetwood Residents' Association OBJ 1354
Katie Fabri	OBJ 1797
Professor John Griffiths BSc PhD DSc	OBJ 728
Christopher Foren	Chair A660 Joint Council OBJ 1644
James Buchan	OBJ 1765
Ian Liptrot	OBJ 268
George Jennings	OBJ 1505
Bill McKinnon	For North Hyde Park Neighbourhood Association OBJ 1624, Friends of Woodhouse Moor OBJ 1623 and himself OBJ 1622
REPRESENTATIONS	
Anzir Boodoo BSc MRes MILT	REP 005

APPENDIX B: INQUIRY DOCUMENTS

CORE DOCUMENTS

Category A: Transport and Works Act Order Application Documents

A-01-1	Application Letter
A-01-2	Statement of Aims
A-01-3	Statement of Consultation
A-01-4	Draft Order
A-01-5	Explanatory Memorandum
A-01-6	Planning Statement
A-01-7	Section 90 (2A) Planning Direction application
A-01-8	Declaration as To Status of The Applicants
A-01-9	List of all Consents, Permissions and Licences required under other Enactments
A-01-10	Funding Statement
A-01-11	Estimate of Costs
A-02	Works and Land Plans
A-03	Planning Direction Plans
A-04	Traffic Regulation Order (TRO) Plans (superseded by A13)
A-05	Technical and Landscape Plans
A-06	Combined reduced size Works and Land Plans & Planning Direction Plans
A-07	Book of Reference
A-08a	Environmental Statement – Non-technical Summary
A-08b	Environmental Statement - Volume I - Main Statement
A-08c-1	Technical Appendix A - Air Quality
A-08c-2	Technical Appendix B - Carbon
A-08c-3	Technical Appendix C - Community

A-08c-4	Not used
A-08c-5	Technical Appendix E - Electromagnetic Compatibility
A-08c-6	Technical Appendix F - Geology and Soils
A-08c-7	Technical Appendix G - Historic Environment
A-08d	Technical Appendix D - Ecology
A-08e-1	Technical Appendix H - Landscape, Townscape and Visual Amenity
A-08e-2	Technical Appendix I - Noise and Vibration
A-08e-3	Technical Appendix J - Open Space
A-08e-4	Technical Appendix K - Socio-economics
A-08e-5	Technical Appendix L - Traffic and Access
A-08e-6	Technical Appendix M - Waste Management
A-08e-7	Technical Appendix N - Water Resources
A-08f	Environmental Statement - Volume III - Figures
A-08g-1	Climate Change Management Assessment
A-08g-2	Code of Construction Practice
A-08g-3	Construction/Implementation Strategy
A-08g-4	Flood Risk Assessment
A-08g-5	North Line Geotechnical Investigation Report
A-08g-6	North Line Geotechnical Design Report
A-08g-7	South Line Geotechnical Design Report
A-08g-8	South Line Geotechnical Investigation Report
A-08g-9	Belle Isle Geo-environmental Desk Study
A-08g-10	Playing Fields Geo-environmental Desk Study
A-08h-1	Energy Demand Assessment
A-08h-2	Equality Impact Assessment
A-08h-3	Health Impact Assessment

A-08h-4	Land Use Baseline
A-08h-5	Low Carbon Energy Strategy
A-08h-6	Transport Assessment
A-08i	Arboriculture Assessment
A-08j	Drainage Strategy
A-08k	Urban Design and Access Statement
A-09a-1	LBC001: The Coach House, 184 Otley Road
A-09a-2	LBC002: The Horse Trough opposite 62 Otley Road
A-09a-3	LBC003: 79, 81, 83 and 83A Otley Road
A-09a-4	LBC004: 62 Headingley Lane
A-09a-5	LBC005: Elinor Lupton Centre, Headingley Lane
A-09a-6	LBC006: Buckingham House, Headingley Lane
A-09a-7	LBC007: Ford House, Headingley Lane
A-09a-8	LBC008: The Piers, Rose Court, Headingley Lane
A-09a-9	LBC009: Rose Court, Headingley Lane
A-09a-10	LBC010: Feast and Firkin/The Library Public House, 229 Woodhouse Lane
A-09a-11	LBC011: The Pack Horse Public House, Woodhouse Lane
A-09a-12	LBC012: Kingston Terrace, Woodhouse Lane
A-09a-13	LBC013: Parkinson Building, Woodhouse Lane
A-09a-14	LBC014: Emmanuel Church, Woodhouse Lane
A-09a-15	LBC015: 177-179 Woodhouse Lane
A-09a-16	LBC016: Blenheim Baptist Church, Blackman Lane
A-09a-17	LBC017: Old Broadcasting House, Woodhouse Lane
A-09a-18	LBC018: 55 Cookridge Street
A-09a-19	LBC019: 49-51 Cookridge Street

A-09a-20	LBC020: Leeds Museum, Cookridge Street
A-09b-21	LBC021: 39 Cookridge Street
A-09b-22	LBC022: 4 Great George Street
A-09b-23	LBC023: 23-27 Cookridge Street
A-09b-24	LBC024: St Anne's Roman Catholic Cathedral, 13 Cookridge Street
A-09b-25	LBC025: 44-72 The Headrow
A-09b-26	LBC026: 19-21 Cookridge Street
A-09b-27	LBC027: 11-17 Cookridge Street
A-09b-28	LBC028: Sovereign House, 25 Park Row
A-09b-29	LBC029: 23 Park Row
A-09b-30	LBC030: 21-22 Park Row
A-09b-31	LBC031: 19-20 Park Row
A-09b-32	LBC032: 18 Park Row
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A-09b-35	LBC035: 31-32 Park Row
A-09b-36	LBC036: 33-35 Park Row
A-09b-37	LBC037: 40 Boar Lane
A-09b-38	LBC038: 30-33 Boar Lane
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A-09c-42	LBC042: 59 Boar Lane
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A-09c-44	LBC044: 61-62 Boar Lane
A-09c-45	LBC045: 63 Boar Lane

A-09c-46	LBC046: 3 The Bourse, Boar Lane
A-09c-47	LBC047: 1 The Bourse, Boar Lane
A-09c-48	LBC048: 14-18 Boar Lane
A-09c-49	LBC049: Holy Trinity Church, Boar Lane
A-09c-50	LBC050: 71 Boar Lane
A-09c-51	LBC051: 148-150 Briggate/4 Duncan Street
A-09c-52	LBC052: 1-13 Boar Lane
A-09c-53	LBC053: 24-26 Briggate
A-09c-54	LBC054: 159 Briggate
A-09c-55	LBC055: 165a-169 Queens Court, Briggate
A-09c-56	LBC056: 3-5 Briggate
A-09c-57	LBC057: 17-19 Bridge End
A-09c-58	LBC058: Leeds Bridge House, Hunslet Road
A-09c-59	LBC059: The Adelphi Public House, Hunslet Road
A-09c-60	LBC060: Braime Building, Hunslet Road
A-09c-61	LBC061: Garden Gate Public House
A-09c-62	LBC062: The Old Red Lion Public House
A-10-1	CAC001: 1, 4, 5, 6 and 8 Weetwood House Court
A-10-2	CAC002: 1 and 1A Holly Bank
A-10-3	CAC003: 42/44 Otley Road
A-10-4	CAC004: 40 Otley Road
A-10-5	CAC005: 5 Alma Road
A-10-6	CAC006: Boundary walls in Wood Lane
A-10-7	CAC007: 6 Wood Lane
A-10-8	CAC008: Shire Oak Street
A-10-9	CAC009: Shire Oak Road

A-10-10	CAC010: 35a Headingley Lane
A-10-11	CAC011: Curtilage to the south of 35a Headingley Lane
A-10-12	CAC012: Ruinous lodge to north-east of 35 Headingley Lane
A-10-13	CAC013: 31 Headingley Lane
A-10-14	CAC014: Former Coach House to the north of the Girls' High School
A-10-15	CAC015: 27 Headingley Lane
A-10-16	CAC016: 2 Victoria Road
A-10-17	CAC017: 11-25 Headingley Lane
A-11	Summary of Amendments for Revised Technical Design Drawings (Rev P4)
A-12	Updated Combined Plans Pack (1) Technical and Landscape Drawings
A-13	Updated TRO Plans (replacing A-04)

Category B: Supplementary Environmental Statement and Supporting Documentation

B-1	Leeds NGT Supplement to the Environmental Statement
B-2	Technical Appendix A - Air Quality
B-3	Reference number no longer in use
B-4	Technical Appendix I - Noise and Vibration
B-5	Technical Appendix J - Open Space
B-6	Reference number no longer in use
B-7	Environmental Statement - Volume III – Figures
B-8	Health Impact Assessment
B-9	Transport Assessment
B-10	Sustainability Assessment
B-11	Design Rational
B-12	NGT Design Statement Volume 3 Character Area Regeneration Synergy

B-13 'Supplement to the Environmental Statement Historic Environment Update', July 2014

Category C: Business Case Documentation and Associated Correspondence

C-1 Leeds NGT: Business Case Review - Jan 2014

C-1-1 NGT Alternatives Review Report

C-1-2 Annualisation Report

C-1-3 Leeds Transport Model Update Report

C-1-4 Reference number no longer in use

C-1-5 NGT Belle Isle Strategic Fit Paper

C-1-6 NGT Fares and Ticketing Paper

C-1-7 NGT House Prices Report

C-1-8 Leeds Transport Model Forecasting and NGT Central Case Report

C-1-9 Leeds Transport Model NGT Sensitivity Testing Report

C-1-10 NGT Operating Cost Report

C-1-11 NGT Punctuality Report

C-1-12 NGT Permanence Paper

C-1-13 NGT Runtime Assessment Note

C-1-14 Reference number no longer in use

C-1-15 Strategic Fit Report

C-1-16 Sub Mode Options Report

C-1-17 TUBA Application Report

C-1-18 Wider Economic Impacts Report

C-2 Leeds New Generation Transport: Programme Entry Business Case Submission - March 2012

C-2-1 Appendix 1 - Route Summary

C-2-2 Appendix 2 - NGT Validation Addendum Report

C-2-3 Appendix 3 - Data and Traffic Surveys Report

C-2-4	Appendix 4 - Quality Factors Report
C-2-5	Appendix 5 - NGT BAFFB Submission Main Document
C-2-6	Appendix 6 - Leeds Transport Model Demand Model Validation Report
C-2-7	Appendix 7 - Leeds Transport Model Highway Model Validation Report
C-2-8	Appendix 8 - Leeds Transport Model Public Transport Model Validation Report
C-2-9	Appendix 9 - NGT Model Validation Report
C-2-10	Appendix 10 - Letters of Support - LEP
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C-2-30	Appendix 31 - Social Distribution Impact Update Technical Note
C-2-31	Appendix 32 - NGT Major Scheme Business Case
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C-2-33	Appendix 35 - Modelling NGT and Sensitivity Tests
C-2-34	Appendix 37 - Definition of Preferred Option, Next Best Alternative, Lower Cost Alternative
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C-2-36	Appendix 39 - Sector-to-Sector Demand and Benefit Matrices (supplied to DfT)
C-3	Leeds New Generation Transport: Best and Final Funding Bid - September 2011
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C-3-2	Appendix 2 - Value for Money Report
C-3-3	Appendix 3 - Data and Traffic Surveys Report
C-3-4	Appendix 4 - Quality Factors Report
C-3-5	Appendix 5 - Example OD Pairs Cost Derivation
C-3-6	Appendix 6 - Leeds Transport Model Demand Model Validation Report
C-3-7	Appendix 7 - Leeds Transport Model Highway Model Validation Report
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C-3-9	Appendix 9 - LTM NGT Validation and Forecasting Report
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C-3-12	Appendix 12 - Annualisation Factor Derivation
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C-3-15	Appendix 15 - Economic Appraisal Spreadsheet
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C-3-31	Appendix 31 - SDI Paper
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C-3-33	Appendix 33 - NGT Core Scenario Appraisal Cost
C-4	Leeds New Generation Transport: Major Scheme Business Case October 2009
C-4-1	Appendix 1 - Joint Venture Agreement
C-4-2	Appendix 2 - Investing in Public Transport: A Framework for Leeds
C-4-3	Appendix 3 - Phase 2 Consultation Report
C-4-4	Appendix 4 - Major Scheme Application Checklist
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C-4-58	Appendix 58 - Section 151 sign-off
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C-5-2	Bus Rapid Transport: Initial Business Case Appendices March 2007
C-6-1	Department for Transport Letter to Metro re Withdrawal of funding for Supertram November 2005
C-6-2	Department for Transport Letter to Metro re Initial Business Case March 2007 2 July 2007
C-6-3	Metro Letter to Department for Transport re NGT 3 April 2008
C-6-4	Metro Letter to Department for Transport re NGT 29 August 2008
C-6-5	Metro Letter to Department for Transport re Response to DfT Programme Entry Letter April 2010
C-6-6	Letter from Secretary of State Philip Hammond 4 June 2010
C-6-7	Draft Letter to Secretary of State Philip Hammond re NGT Proposals 13 May 2010
C-6-8	Department for Transport Letter to Metro re Programme Entry 23 March 2010
C-6-9	Department for Transport Letter to Metro re Development Pool 1 November 2010
C-6-10	Metro Letter to Department for Transport re Section 151 Support 5 September 2011
C-6-11	Metro Letter to Department for Transport re BAFFB Submission 8 September 2011
C-6-12	Draft Letter to Secretary of State Justine Greening re Decision on Funding for NGT 24 January 2012
C-6-13	Department for Transport Letter to Metro re Post BAFFB Submission 14 December 2012
C-6-14	Department for Transport Letter to Metro re Confirmation of South Line Change of Alignment (Belle Isle option) 5 August 2012
C-6-15	Department for Transport Letter to Metro re Programme Entry Funding Approval 19 July 2012

C-6-16 Metro Letter to Department for Transport re Growth Deals and LEP 28 August 2013

C-6-17 Reference number no longer in use

Category D: National, Regional, Local Planning And Transport Policy Documents

D-1-1 Leeds City Council Core Strategy - Publication Draft

D-1-2 Leeds City Council Core Strategy - Pre-Submission Changes Part 1

D-1-3 Leeds City Council Core Strategy - Pre-Submission Changes Part 2

D-1-4 Leeds Core Strategy Examination - Schedule of Saved and Deleted UDP Policies

D-1-5 Leeds City Council Core Strategy Inspectors Report

D-2-1 Leeds City Council Draft Unitary Development Plan Volume 1: Written Statement May 1992

D-2-2 Leeds City Council Revised Draft UDP – Report of Publicity and Consultation June 1993

D-2-3 Leeds City Council Revised Draft UDP Proposals Map June 1993

D-2-4 Leeds City Council Revised Draft UDP Volume 1: Written Statement June 1993

D-2-5 Unitary Development Plan Inspectors Report February 1999

D-2-6 Leeds City Council Revised Draft UDP Volume 1: Written Statement Adopted 2001

D-2-7 Leeds City Council UDP Review - Inspector`s Report November 2005

D-2-8 Leeds City Council Unitary Development Plan (Review 2006) Proposal Maps

D-2-9 Leeds City Council Unitary Development Plan (Review 2006) Volume 1: Written Statement

D-2-10 Leeds City Council Unitary Development Plan (Review 2006) Volume 2: Appendices

D-2-11 Leeds City Council Equality and Diversity Policy 2011-2015

D-3-1 Leeds Local Development Framework: Aire Valley Leeds Area Action Plan

D-3-2	Leeds Local Development Framework: Natural Resources and Waste Development Plan
D-3-3	Leeds Local Development Framework: Headingley and Hyde Park Neighbourhood Design Statement
D-3-4	Leeds Local Development Framework: Open Space Sport and Recreation Assessment
D-3-5	Far Headingley Weetwood and West Park Neighbourhood Design Statement - 2005
D-3-6	Far Headingley, Weetwood and West Park Neighbourhood Design Statement (draft)
D-3-7	Aire Valley Leeds Area Action Plan - Preferred Options Main Report
D-4-1	Leeds City Region Development Programme
D-4-2	Leeds City Region Transport Strategy - Executive Summary
D-4-3	Leeds City Region Green Infrastructure Strategy
D-4-4	Leeds City Region Local Enterprise Partnership Plan - Realising the Potential
D-4-5	Leeds City Region Transport Vision
D-5-1	West Park Conservation Area Appraisal and Management Plan
D-5-2	Far Headingley Conservation Area Appraisal and Management Plan
D-5-3	Headingley, Hyde Park and Woodhouse Moor Conservation Area Appraisal and Management Plan
D-5-4	Central Area - Leeds City Centre Conservation Area Map
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D-5-6	Far Headingley Conservation Area Map
D-5-7	Headingley Conservation Area Map
D-5-8	Weetwood Conservation Area Map
D-5-9	West Park Conservation Area Map
D-5-10	Woodhouse - Blenheim Square Conservation Area Map

D-5-11	Woodhouse - Woodhouse Lane University Precinct Conservation Area Map
D-6-1	Leeds Supertram (Extension) Order 1996 - LBC and CAC Matters
D-6-2	Leeds Supertram (Extension) Order 1996 Inspector's Report
D-6-3	The Regional Spatial Strategy for Yorkshire and the Humber to 2016
D-6-4	The Yorkshire and Humber Plan, the Regional Spatial Strategy to 2026
D-6-5	Belle Isle and Middleton Neighbourhood Framework
D-6-6	Leeds South Bank Planning Statement
D-6-7	Leeds City Priority Plan 2011 - 2015
D-6-8	Leeds Growth Strategy - Getting Leeds Working
D-6-9	Vision for Leeds 2011 – 2030
D-6-10	NGT Project Board Terms of Reference
D-6-11	My Journey West Yorkshire Transport Plan 2011 – 2026
D-6-12	Leeds City Council Climate Change Strategy - Making the Change 2012 to 2015
D-6-13	Leeds City Council Constitution Part 1 Summary and Explanation
D-6-14	A Parks and Green Space Strategy for Leeds
D-6-15	Leeds City Council Listed Building Gazetteer
D-6-16	A New Heart for Holt Park - Completing the Picture - An Informal Planning Statement for Holt Park District Centre

Category E: Legislation and Governmental Guidance

E-1-1	Land Compensation Act 1973 - Part 1
E-1-2	Control of Pollution Act 1974 - Sections 60 and 61
E-1-3	Control of Pollution Act 1974 - Part III
E-1-4	The Noise Insulation Regulations 1975 (Statutory Instrument No.1763 Building Buildings)
E-1-5	Wildlife and Countryside Act 1981 - Schedule 1
E-1-6	Wildlife and Countryside Act 1981 - Schedule 9

E-1-7	Environmental Protection Act 1990
E-1-8	Planning (Listed Buildings and Conservation Areas) Act 1990
E-1-9	Planning (Listed Buildings and Conservation Areas) Act Regulations 1990
E-1-10	The Town and Country Planning Act 1990 - Section 336
E-1-11	The Town and Country Planning Act 1990 - Section 90(20a)
E-1-12	New Roads and Street Works Act 1991
E-1-13	Water Resources Act 1991
E-1-14	Protection of Badgers Act (1992)
E-1-15	Transport and Works Act 1992
E-1-16	The Transport and Works (Inquiries Procedure) Rules 2004 (Statutory Instrument 2004. No.2018)
E-1-17	Transport and Works Applications (Listed Buildings, Conservation Areas and Ancient Monuments Procedure) Regulations 1992
E-1-18	Highways (Assessment of Environmental Effects) Regulations 1999
E-1-19	Planning and Compulsory Purchase Act 2004
E-1-20	The Transport and Works (Model Clauses for Railways and Tramways) Order 2006
E-1-21	The Electromagnetic Compatibility Regulations 2006 (Statutory Instrument 2006. No.3418)
E-1-22	The Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006
E-1-23	Planning Act 2008
E-1-24	Conservation of Habitats and Species Regulations 2010
E-1-25	Town and Country Planning (Environmental Impact Assessment) Regulations 2011
E-2-1	Council Directive 85/337/EEC
E-2-2	Council Directive 93/42/EEC
E-2-3	Council Directive 97/11/EC

E-2-4	Council Directive 1995/5/EC
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E-3-2	WebTAG 3.1.1 - Introduction to Modelling
E-3-3	WebTAG 3.1.2 - Transport Models
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E-3-12	WebTAG 3.10.4 - Variable Demand Modelling - Convergence Realism and Sensitivity
E-3-13	WebTAG 3.10.6 - Modelling Smarter Choices
E-3-14	WebTAG 3.10.7 - Modelling Parking and Park and Ride
E-3-15	WebTAG 3.11.1 - Model Structures and Traveller Responses for Public Transport Schemes
E-3-16	WebTAG 3.11.2 - Road Traffic and Public Transport Assignment Modelling
E-3-17	WebTAG 3.11.2d - Road Traffic and Public Transport Assignment Modelling

E-3-18	WebTAG 3.11.3 - Mode Choice Models - Bespoke and Transferred
E-3-19	WebTAG 3.11.5 - Expert Guidance on the Mixed Logit Model - Procedures and Documentation
E-3-20	WebTAG 3.15.1 - Forecasting Using Transport Models
E-3-21	WebTAG 3.15.2 - Use of TEMPRO data
E-3-22	WebTAG 3.15.3 - Forecasting and Sensitivity Tests for Public Transport Schemes
E-3-23	WebTAG 3.15.4 - Rail Passenger Demand Forecasting Methodology
E-3-24	WebTAG 3.15.5 - The Treatment of Uncertainty in Model Forecasting
E-3-25	WebTAG 3.19 - Highway Assignment Modelling
E-3-26	WebTAG 3.5.4 - Cost Benefit Analysis
E-4-1	Department for Transport and Welsh Office - Calculations of Road Traffic Noise
E-4-2	Traffic Appraisal Manual, Chapter 13
E-4-3	Department for Transport - Calculation of Railway Noise
E-4-4	Design Manual for Roads and Bridges - Volume 1, Section 1, Part 1, BD2/05 Technical Approval of Highway Structures
E-4-5	Design Manual for Roads and Bridges - Volume 10, Section 0, Part 1, HD86/01 Principles and Guidance
E-4-6	Design Manual for Roads and Bridges - Volume 10, Section 2, Part 1, HD85/01 Road Improvement within Limited Land Take
E-4-7	Design Manual for Roads and Bridges - Volume 11, Section 1, Part 1, HA200/08 Aims and Objectives of Environmental Assessment
E-4-8	Towards an Urban Renaissance
E-4-9	Traffic Advisory Leaflet 1-06 Part 1
E-4-10	Traffic Advisory Leaflet 1-06 Part 2
E-4-11	Traffic Advisory Leaflet 1-06 Part 3
E-4-12	Traffic Advisory Leaflet 1-06 Part 4

E-4-13	Department for Communities and Local Government - Circular 11/95: Use of Conditions in Planning Permission
E-4-14	Department for Transport - A TWA Guide to Procedures
E-4-15	Department for Transport Manual for Streets
E-4-16	Planning Policy Statement 5 Practice Guide - Planning for the Historic Environment
E-4-17	Department for Environment, Food and Rural Affairs - Noise Policy Statement for England
E-4-18	Standard S31 Grant conditions - March 2010
E-4-19	Planning Policy Guidance 13: Transport
E-4-20	Design Manual for Roads and Bridges - Volume 11, Section 3, Part 7, HD213/11 Noise and Vibration
E-4-21	National Planning Policy Framework
E-4-22	Department for Transport - Transport and Works Act Orders - A Brief Guide
E-4-23	Department for Communities and Local Government Guidance - Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents
E-4-24	National Planning Practice Guidance
E-4-25	Environment Agency PPG 05 – Work in, near or liable to affect watercourses
E-4-26	Assessment of Methods for Modelling and Appraisal of the Sub-National, Regional and Local Economy Impacts of Transport
E-4-27	Department for Transport Local Transport White Paper - Making Sustainable Local Transport Happen
E-4-28	Department for Transport - Door to Door - A strategy for improving sustainable transport integration
E-4-29	Traffic Signs Manual - Chapter 8
E-4-30	Design Manual for Roads and Bridges - Volume 10, Section 1, Part 2, HD56/92 New Roads, Planting, Vegetation and Soils
E-4-31	Design Manual for Roads and Bridges - Volume 11, Section 3, Part 5, Landscape Effects

E-4-32 Department for Communities and Local Government Guidance - A
Practical Guide to the Strategic Environmental Assessment Directive

Category F: British Standards

- F-1 British Standard 4428:1989 Code of practice for general landscape operations (excluding hard surfaces)
- F-2 British Standard 8233:1999 Sound Insulation and Noise Reduction for Buildings
- F-3 British Standard EN 60601-1-2:2001 Medical Electrical Equipment Part 1-2: General requirements for safety – Collateral standard: Electromagnetic Compatibility – requirements and tests
- F-4 British Standard 4142:2002 Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas
- F-5 British Standard EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use – EMC requirements
- F-6 British Standard EN 61000-6-2:2005 Electromagnetic Compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments
- F-7 British Standard BS EN 50121-1:2006 Railway applications – Electromagnetic compatibility - Part 1: General
- F-8 British Standard EN 50121-4:2006 Railway applications – Electromagnetic compatibility - Part 4: Emission and immunity of the signalling and telecommunications apparatus
- F-9 British Standard EN 50121-2:2006 Railway applications – Electromagnetic compatibility - Part 2: Emissions of the whole railway system to the outside world
- F-10 British Standard EN 50121-5:2006 Railway applications – Electromagnetic compatibility - Part 5: Emission and immunity of fixed power supply installations and apparatus
- F-11 British Standard EN 61000-6-1:2007 Electromagnetic Compatibility (EMC) – Part 6-1: Generic standards – Immunity for residential, commercial and light industrial environments
- F-12 British Standard EN 61000-6-3:2007 Electromagnetic Compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light industrial environments

F-13	British Standard EN 61000-6-4:2007 Electromagnetic Compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments
F-14	British Standard DD CLC/TS 50502:2008 Railway Applications. Rolling stock. Electric equipment in trolleybuses. Safety requirements and ion systems
F-15	British Standard 5228-1:2009 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise
F-16	British Standard 5228-2:2009 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration
F-17	British Standard EN 55011:2009+A1:2010 Industrial, scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement
F-18	British Standard 3998:2010 Recommendations for Tree Work
F-19	British Standard EN 50122-2:2010: Railway applications – Fixed installations – Electrical Safety, earthing and the return circuit. Part 2: Provisions against the effects of stray currents caused by d.c. traction systems
F-20	British Standard 5837:2012 Trees in Relation to design, demolition and construction – Recommendations ISBN 978 0 580 69917 7

Category G: Supporting Documents

G-1-1	Reference number no longer being used
G-1-2	City Plans Panel Presentation 14 February 2013
G-1-3	Reference number no longer being used
G-1-4	City Plans Panel Presentation 10 May 2013
G-1-5	City Plans Panel Minutes of Meeting 25 June 2013
G-1-6	City Plans Panel Presentation 25 June 2013
G-1-7	City Plans Panel Minutes of Meeting 17 October 2013
G-1-8	City Plans Panel Presentation 17 October 2013
G-1-9	City Plans Panel Minutes of Meeting 21 November 2013
G-2-1	Leeds Core Strategy Inspector's Letter to LCC on Duty to Co-operate Hearing 16 May 2013

G-2-2	Leeds Core Strategy LCC Letter on Notice of Hearings 24 May 2013
G-2-3	Leeds Core Strategy LCC Letter to Inspector 10 May 2013
G-2-4	Leeds Core Strategy LCC Letter to Inspector on Duty to Co-operate Issues 24 May 2013
G-2-5	Leeds Core Strategy Inspector's Letter on Duty to Co-operate 10 July 2013
G-2-6	Leeds Core Strategy Inspector's Letter to LCC 11 July 2013
G-2-7	Leeds Core Strategy Inspector's Letter to LCC 16 July 2013
G-2-8	Leeds Core Strategy Inspector's Agenda/Questions for Transport Hearing 14 October 2013
G-2-9	Leeds Core Strategy Inspector's Letter to LCC on 25 November 2013
G-2-10	Leeds Core Strategy Inspector's Letter to LCC on 8 November 2013
G-2-11	Leeds Core Strategy LCC Email to Inspector 22 November 2013
G-2-12	Leeds Core Strategy LCC Letter to Inspector 12 November 2013
G-2-13	Leeds Core Strategy LCC Letter to Inspector 28 November 2013
G-2-14	Leeds Core Strategy Inspector's Duty to Co-operate Letter to LCC 17 December 2013
G-2-15	Leeds Core Strategy Inspector's Letter to LCC 10 December 2013
G-2-16	Leeds Core Strategy LCC Letter to Inspector 17 December 2013
G-3-1	Leeds Executive Board Minutes of Meeting 16 July 2008
G-3-2	Leeds Executive Board Report 16 July 2008
G-3-3	Leeds Executive Board Minutes of Meeting 14 October 2009
G-3-4	Leeds Executive Board Report 14 October 2009
G-3-5	Leeds Executive Board Minutes of Meeting 12 February 2010
G-3-6	Leeds Executive Board Report - 12 February 2010
G-3-7	Leeds Executive Board Minutes of Meeting 10 March 2010
G-3-8	Leeds Executive Board Report 10 March 2010
G-3-9	Leeds Executive Board Minutes of Meeting 18 May 2011

G-3-10	Leeds Executive Board Report 18 May 2011
G-3-11	Leeds Executive Board Minutes of Meeting 17 October 2012
G-3-12	Leeds Executive Board Report 17 October 2012
G-3-13	Leeds Executive Board Minutes of Meeting 7 November 2012
G-3-14	Leeds Executive Board Minutes of Meeting 13 March 2013
G-3-15	Leeds Executive Board Report 13 March 2013
G-3-16	Leeds Executive Board Minutes of Meeting 19 June 2013
G-3-17	Leeds Executive Board Report 19 June 2013
G-4-1	Leeds Supertram – Secretary of State’s Decision Letters December 2000
G-4-2	Guidelines for Landscape and Visual Impact Assessment 2nd Edition
G-4-3	The Chartered Institute of Ecology and Environmental Management - Guidance on the Ecological Impact Assessment
G-4-4	Energy Network Association -Engineering Recommendation -G5/4-1
G-4-5	Leeds Transport Review Report - Post Supertram Proposals
G-4-6	The North American Federal Transit Administration (FTA) manual: ‘Transit Noise and Vibration Impact Assessment’
G-4-7	Bus Rapid Transport Project Board Minutes 14 November 2006
G-4-8	WYPTA Executive Board Report - Leeds BRT Initial Funding Submission 17 November 2006
G-4-9	WYPTA Executive Board Report- Supertram Replacement
G-4-10	English Heritage Guidance - Conservation Principles
G-4-11	Hallmarks of a Sustainable City (CABE, 2009)
G-4-12	WYITA Board Report - NGT Update 25 September 2009
G-4-13	The Role of Soft Measures in Influencing Patronage Growth and Modal Split in the Bus Market in England
G-4-14	Joint Nature Conservation Committee - Handbook for Phase 1 Habitat Survey: a technique for environmental audit
G-4-15	Standard S31 Grant Conditions for Major Local Transport Schemes

G-4-16	The Chartered Institute of Highways and Transportation - Manual for Streets 2
G-4-17	Leeds Station Southern Entrance Otter Survey
G-4-18	English Heritage Guidance - Seeing the History in the View
G-4-19	English Heritage Guidance - The Setting of Heritage Assests
G-4-20	English Heritage Guidance - Understanding Place: Conservation Area Designation, Appraisal and Management
G-4-21	Bat Conservation Trust - Bat Survey - Good Practice Guidelines (2nd Edition)
G-4-22	Guidelines for Landscape and Visual Impact Assessment 3rd Edition
G-4-23	Transyt 12 User Guide
G-4-24	The FA National Facilities Strategy 2013 – 2015
G-4-25	Extract from April 2013 Project Board re Revised Leeds University Layout
G-4-26	West Yorkshire Transport Fund [Plus] Draft Prospectus
G-4-27	Strategic Priority – buses, trams and fire (Ben Hallworth, Conference paper, JCT Traffic Signals Symposium, University of Warwick)
G-4-28	CAVAT Full Method User Guide
G-4-29	UK Post 2010 Biodiversity Framework
G-4-30	Survey protocols for the British herpetofauna
G-4-31	World Health Organisation - Guidelines for Community Noise
G-4-32	University of Alberta - Hybrid diesel electric bus / trolleybus demonstration project: Technical comparison of in-use performance. Annex B - Noise testing report
G-4-33	Reference number no longer being used
G-4-34	University of Leeds - EMC Assessment (report ref: 312694/EST/YHE/RPT072/B)
G-4-35	University of Leeds - EMC Assessment - Mitigation Measures (report ref: 312694/EST/YHE/RPT073/A)
G-4-36	A1: The Process: NGT Information Papers

G-4-37	A2: The Process: What Happens Next?
G-4-38	A3: The Process: Consultation
G-4-39	B1 Transport Case: What is NGT?
G-4-40	B2: Transport Case: Why NGT?
G-4-41	B3: Transport Case: Journey Times
G-4-42	B4: Transport Case: Vehicle Specification and Technology
G-4-43	B5: Transport Case: Alternatives
G-4-44	B6: Transport Case: Value for Money
G-4-45	B7: Transport Case: Road Use and Congestion
G-4-46	B8: Transport Case: Cycling
G-4-47	C1: Planning and Heritage: General Overview
G-4-48	D1: Environment: General Overview
G-4-49	E1: Construction: General Overview
G-4-50	F1: Land and Property: General Overview
G-4-51	F2: Land and Property: Local Businesses
G-4-52	F3: Land and Property: Building Fixings and Overhead Line Equipment
G-4-53	Route One 521 - Electric Bus Article
G-4-54	Yorkshire and Humber Assembly - Regional Transport Board Minutes of Meeting 15 June 2007
G-4-55	Study of High Quality Buses in Leeds, Atkins
G-4-56	Report to Chief Officer (Highways and Transportation) re NGT Alignment Design 25 May 2010
G-4-57	Report to Chief Officer (Highways and Transportation) for Approval of NGT Designs for TWA0 Submission 19 September 2013
G-4-58	NGT Project Initiation Document July 2013
G-4-59	Local Authority Major Schemes Development Pool - Expression of Interest
G-4-60	Cycle City Ambition Bid - Highway to Health

G-4-61	Reference number no longer being used
G-4-62	Eddington Transport Study
G-4-63	Northern Way Growth Strategy
G-4-64	Report to Director of City Development re NGT Appropriation of Open Space
G-4-65	Town and County Planning (General Permitted Development) Order 1995
G-4-66	Department for Communities and Local Government - Proposal to establish a combined authority for the area of West Yorkshire - Consultation
G-4-67	Circular from the Office of the Deputy Prime Minister - 06/2004
G-4-68	Wildlife and Countryside Act 1981 - Part 1 Section 9
G-4-69	Leeds City Region Deal
G-4-70	Transport's role in Regeneration & Economic Development
G-4-71	National Infrastructure Plan Dec 2013
G-4-72	Competition Commission Local Bus Services Market Investigation
G-4-73	RSP2 Guidance on Tramways
G-4-74	Local Transport Note - Cycle Infrastructure Design
G-4-75	London Cycle Design Standards
G-4-76	Local Transport Note - Shared Use Routes for Pedestrians and Cyclists
G-4-77	Local Transport Note - Shared Space
G-4-78	Inclusive Mobility
G-4-79	Road Vehicles (Construction and Use) Amendment Regulations 2003
G-4-80	Report to the Chief Officer Highways and Transportation 19 September 2013
G-4-81	TAS Bus Industry Performance 2013
G-4-82	TAS Report into the Bus Market - Competition Commission
G-4-83	Summary of hearing with TAS Partnership held on 3 August 2010 - Competition Commission

G-4-84	First Group plc Submission To The Competition Commission Inquiry
G-4-85	First Group plc Returning to strength Half-yearly financial report to 30 September 2013
G-4-86	Extract from PSV Operators Guide November 2011
G-4-87	Air Pollution in the UK 2012 - Defra - September 2013
G-4-88	Inspectors Report into the Manchester Metrolink Second City Crossing
G-4-89	Nottingham Express Transit System - Decision Letter
G-4-90a	RPT052A Headingley Lane Options report
G-4-90b	RPT052A Headingley Lane Options Appendices part 1
G-4-90c	RPT052A Headingley Lane Options Appendices part 2
G-4-90d	RPT052A Headingley Lane Options Appendices part 3
G-4-91	Headingley Alignment Options Report
G-4-92	Woodhouse Lane Bridge High Level Feasibility Report – Revision A
G-4-93	NAO report into Supertram
G-4-94	Metro letter to DfT regarding NGT 21 March 2014
G-4-95	Draft Local Transport Plan
G-4-96	Park and Ride Great Britain 2007, TAS Publications and Events Ltd, 2007
G-4-97	Leeds Supertram Extension Order - Environmental Statement Vol 2 Main Report Page 28
G-4-98	Leeds-City-Region-SEP-Part-A-Growth-Plan
G-4-99	Average Household Income Map
G-4-100	HS2 - A Transformational Opportunity for a new kind of City
G-4-101	The Leeds Initiative - Vision for Leeds - Consultation Report

Category H: Additional Documentation Submitted

H-1	The Historic Environment - Assessment of the Leeds New Generation Transport Environmental Statement dated January 2014
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H-2	Arboricultural Evaluation - Capital Asset Value for Amenity Trees (CAVAT)
H-3	National Planning Practice Guidance extract- Conserving and enhancing the historic environment
H-4	Landscape Institute - Positioning Statement
H-5	Assessment of Housing Market Conditions and Demand Trends in Inner North West Leeds - Report dated August 2012
H-6	Summary of the Leeds Census 2011
H-7	Minutes of the NGT Board Meetings

APPLICANTS' STATEMENT OF CASE & PROOFS OF EVIDENCE

APP SOC	Applicant's Statement of Case 30 January 2014
APP-1-1	Martin Farrington Summary Proof of Evidence
APP-1-2	Martin Farrington Main Proof of Evidence
APP-1-3	Martin Farrington Appendices
APP-2-1	David Haskins Summary Proof of Evidence
APP-2-2	David Haskins Main Proof of Evidence
APP-3-1	Jason Smith Summary Proof of Evidence
APP-3-2	Jason Smith Main Proof of Evidence
APP-3-3	Jason Smith Appendices
APP-4-1	John Henkel Summary Proof of Evidence
APP-4-2	John Henkel Main Proof of Evidence
APP-4-3	John Henkel Appendices
APP-5-1	Paul Hanson Summary Proof of Evidence
APP-5-2	Paul Hanson Main Proof of Evidence
APP-5-3	Paul Hanson Appendices
APP-6-1	Gordon Robertson Summary Proof of Evidence
APP-6-2	Gordon Robertson Main Proof of Evidence

APP-6-3	Gordon Robertson Appendices
APP-6-4	Gordon Robertson Errata t Proof of Evidence
APP-6-5	Gordon Robertson Appendix to Errata
APP-7-1	Neil Chadwick Summary Proof of Evidence
APP-7-2	Neil Chadwick Main Proof of Evidence
APP-7-3	Neil Chadwick Appendices
APP-8-1	Stephen Speak Summary Proof of Evidence
APP-8-2	Stephen Speak Main Proof of Evidence
APP-8-3	Stephen Speak Appendices
APP-9-1	Phil Ward Summary Proof of Evidence
APP-9-2	Phil Ward Main Proof of Evidence
APP-9-3	Phil Ward Appendices
APP-10-1	Thomas Walker Summary Proof of Evidence
APP-10-2	Thomas Walker Main Proof of Evidence
APP-10-3	Thomas Walker Appendices
APP-11-1	Sean Flesher Summary Proof of Evidence
APP-11-2	Sean Flesher Main Proof of Evidence
APP-11-3	Sean Flesher Appendices
APP-12-1	Jeremy Purseglove Summary Proof of Evidence
APP-12-2	Jeremy Purseglove Main Proof of Evidence
APP-12-3	Jeremy Purseglove Appendices
APP-13-1	Max Forni Summary Proof of Evidence
APP-13-2	Max Forni Main Proof of Evidence
APP-13-3	Max Forni Appendices
APP-14-1	Ken Webb Summary Proof of Evidence
APP-14-2	Ken Webb Main Proof of Evidence

APP-14-3	Ken Webb Appendices
APP-15-1	Kevin Leather Summary Proof of Evidence
APP-15-2	Kevin Leather Main Proof of Evidence
APP-15-3	Kevin Leather Appendices
APP-16-1	Richard Caten Summary Proof of Evidence
APP-16-2	Richard Caten Main Proof of Evidence
APP-16-3	Richard Caten Appendices

APPLICANTS' REBUTTAL EVIDENCE

REB-1 OBJ0168	Rebuttal Evidence Promoters' response to Mr Haigh
REB-1 OBJ0320	Rebuttal Evidence Promoters' response to The Yorkshire Congregational Union (INC) as Trustees for Headingley St Columba United Reformed Church Proof of Evidence
REB-1 OBJ0388	Rebuttal Evidence Promoters' response to Mr Foren
REB-1 OBJ0461	Rebuttal Evidence Promoters' response to Headingley Castle Management Limited, April 2014
REB-2 OBJ0461	Rebuttal Evidence Promoters' response to Headingley Castle Management Limited, August 2014
REB-1 OBJ0510	Rebuttal Evidence Promoters' response Meanwood Valley Partnership
REB-1 OBJ0573	Rebuttal Evidence Promoters' response to Mr Broadbent
REB-1 OBJ0591	Rebuttal Evidence Promoters' response to Mr Reed
REB-1 OBJ/0617	Rebuttal Evidence Promoters' response to Mr Geapin
REB-1 OBJ0675	Rebuttal Evidence Promoters' response to Lawnswood School (Jo Bell)
REB-1 OBJ0726	Rebuttal Evidence Promoters' response to Betty Cloughton
REB-1 OBJ0728	Rebuttal Evidence Promoters' response to Professor Griffiths
REB-1 OBJ/923	Rebuttal Evidence Promoters' response to Mr Alexander, First West Yorkshire

REB-2 OBJ/923	Rebuttal Evidence Promoters' response to Mr Turner, First West Yorkshire
REB-3 OBJ/923	Rebuttal Evidence Promoters' response to Mr Cheek, TAS Partnership on behalf of First West Yorkshire
REB-4 OBJ/0923	Rebuttal Evidence Promoters' response to Ms Lightbody, First West Yorkshire
REB-5 OBJ0923	Rebuttal Evidence Promoters' response to Mr Brooks, First West Yorkshire
REB-1 OBJ1166	Rebuttal Evidence Promoters' response to Mr Nigel Sleeman
REB-1 OBJ1182	Rebuttal Evidence Promoters' response to Mr Natkus on behalf of Leeds and Yorkshire Housing Association
REB-1 OBJ1354	Rebuttal Evidence Promoters' response to Mr Thomas on behalf of Weetwood Residents Association
REB-2 OBJ1354	Rebuttal Evidence Promoters' response to Weetwood Residents Association
REB-1 OBJ1388	Rebuttal Evidence Promoters' response to Suzanne Baskind
REB-1 OBJ1470	Rebuttal Evidence Promoters' response to Leeds Cycling Campaign Elizabeth Reather (Chair)
REB-1 OBJ1558	Rebuttal Evidence Promoters' response to Deborah Fahey
REB-1 OBJ/1608	Rebuttal Evidence Promoters' response to Mr Natkus (on behalf of the Morley House Trust) concerning Ford House (Rose Court Nursery and Pre-prep School)
REB-2 OBJ1608	Rebuttal Evidence Promoters' response to Mr Natkus (on behalf of the Morley House Trust) regarding the former Leeds Girls' High School site
REB-1 OBJ/1611	Rebuttal Evidence Promoters' response to Mr Natkus on behalf of Headingley Land Developers Ltd
REB-1 OBJ/1613	Rebuttal Evidence Promoters' response to Mr Natkus, Headingley Business Park
REB-1 OBJ1622	Rebuttal Evidence Promoters' response to Bill McKinnon
REB-1 OBJ1623	Rebuttal Evidence Promoters' response to Friends of Woodhouse Moor

REB-1 OBJ/1624	Rebuttal Evidence Promoters' response to North Hyde Park Neighbourhood Association
REB-1 OBJ1625	Rebuttal Evidence Promoters' response to Dawn Carey Jones
REB-1 OBJ1637	Rebuttal Evidence Promoters' response to Professor Andrews
REB-2 OBJ1637	Rebuttal Evidence Promoters' response to Professor Andrews
REB-1 OBJ/1641	Rebuttal Evidence Promoters' response to South Headingley Community Association
REB-1 OBJ/1644	Rebuttal Evidence Promoters' response to the A660 Joint Council
REB-1 OBJ/1719	Rebuttal Evidence Promoters' response to Mr Kemp on behalf of North West Leeds Transport Forum
REB-2 OBJ/1719	Rebuttal Evidence Promoters' response to Professor Bonsall on behalf of North West Leeds Transport Forum
REB-3 OBJ/1719	Rebuttal Evidence Promoters' response to Tony Ray on behalf of North West Leeds Transport Forum
REB-4 OBJ1719	Rebuttal Evidence Promoters' response to Caroline Hardie, North West Leeds Transport Forum
REB-1 OBJ1720	Rebuttal Evidence Promoters' response to Mr Kemp and the West Park Residents Association (WPRA)
REB-1 OBJ1727	Rebuttal Evidence Promoters' response to the Drummond and Churchwood Residents Association
REB-1 OBJ1756	Rebuttal Evidence Promoters' response to Mr Archbold
REB-1 OBJ1810	Rebuttal Evidence Promoters' response to Mr Bell
REB-1 OBJ1817	Rebuttal Evidence Promoters' response to Margaret Bell

APPLICANTS' DOCUMENTS SUBMITTED DURING THE INQUIRY

APP/100	Opening Statement for West Yorkshire Combined Authority and Leeds City Council
APP/101	Compliance with Statutory Requirements
APP/102	Leeds City Region Transport Strategy – Main Report – Delivering Low Carbon Connectivity to Promoted Faster Economic Growth
APP/103A	Response to NWLTF's Opening Statement Data Request

APP/103B	AECOM File Note Appendix A- Highway Flows
APP/104	Low cost alternative addendum note
APP/105	Note of Revised TRO Plans (A-13)
APP/106	Designer's Response - Stage 1 Road Safety Audit - March 2014
APP/107	Existing Parking / Loading Restrictions on A660 Otley Road (between Drummond Road and Drummond Avenue)
APP/108	Seating Capacity Analysis
APP/109	Summary of a response hearing with First Group held on 23 June 2011
APP/110	Appendix 6.5 to 8.4 "Entry, expansion and exit" to G-4-72 Competition Commission Local Bus Services Market Investigation
APP/111	Appendix 11.1 to 15.8 "Constraints in the absence of head-to-head competition" to G-4-72 Competition Commission Local Bus Services Market Investigation
APP/112	Local Bus Services Market Investigation: Route and Urban Area Analysis
APP/113	John Henkel – Proof of Evidence Errata
APP/114	Metro Bus Stop Standards
APP/115	Leeds Parking Policy - Supplementary Planning Document
APP/116	Competition Commission Assessment - West Yorkshire Combined Authority
APP/117	Responses from Gordon Robertson's cross examination
APP/118	Regulation of Trolley Vehicles - Bircham Dyson Bell LLP
APP/119	Notes from meeting at Metro re NGT - 6 February 2014
APP/120	PI Note - Northbound and Southbound Bus Lane Provision on A660
APP/121	LCC Report of Director of City Development dated 7 September 2011
APP/122	Further modelling response to NWTF dated 2 June 2014
APP/123	Errata to Proof of Evidence of Mr Phil Ward

APP/124	Trolleybus Stopping Sight Distances dated 5 June 2014
APP/125	NGT Response by Neil Chadwick, to Para 5.6, David Alexander Rebuttal dated 10 June 2014
APP/126	NGT Response by Paul Hanson, to First West Yorkshire (Chris Cheek) Rebuttal dated 9 June 2014
APP/127	NGT Age of Data in Model by Paul Hanson dated 10 June 2014
APP/128	NGT Operating Costs by Neil Chadwick dated 10 June 2014
APP/129	NGT Annualisation dated 12 June 2014
APP/130	NGT Consultation Note by Dave Haskins dated 13 June 2014
APP/131	NGT SATURN Version and Treatment of Queues dated 13 June 2014
APP/132	Seating Capacity Analysis: Further Analysis of FWY125 Rebuttal by Neil Chadwick, SDG dated 17 June 2014
APP/133	Response to Alexander Rebuttal Paragraph 5.9 (on Bus Route Lengths and Operating Cost) by Neil Chadwick dated 17 June 2014
APP/134	Response to FWY125 - Seating Analysis by Neil Chadwick dated 17 June 2014
APP/135	Note on DfT approval processes for NGT
APP/136	Quality Test Presented in Rebuttal to Professor Bonsall
APP/137	Note on Application of Quality Test Presented in Rebuttal to Professor Bonsall
APP/138	Note on Bus Stop Quality Penalties in Corridor dated 19 June 2014
APP/139	Note on UDM Inputs
APP/140	Errata on Headingley Hill mitigation area dated 23 June 2014
APP/141	Errata on areas of designated public space affected by the NGT dated 24 June 2014
APP/142	Note of Designated Greenspace and Public Space affected by NGT dated 24 June 2014
APP/143	Update to Neil Chadwick's Proof of Evidence (App-7-2) for the Public Inquiry dated 24 June 2014

APP/144	Centroid Connectors to Rail Stations in LTM dated 25 June 2014
APP/145	Note of the Rose Court Nursery Site Meeting dated 27 June 2014
APP/146	Errata to Proof of Evidence of Jeremy Purseglove
APP/147	Change in Public Transport Demand in Corridor and Origin of Park and Ride Trips by Paul Hanson dated 25 June 2014
APP/148	Promoters' response to letter dated 23 June 2014 submitted by Mr Bell
APP/149	Rose Court Piers set back technical note
APP/150	Leeds City Council Listed Building Validation Criteria (this is a direct request from Ms Peerless and is taken directly from the LCC website)
APP/151	Listed Building Validation – Commentary note
APP/152	St Joseph's Primary School Consultation note
APP/153	Accompanying Letter for Updated Heritage ES Document
APP/154	Promoters' submissions on updated Heritage Technical Appendix in response to letter from First West Yorkshire dated 14 July 2014
APP/154a	Supplement to APP/154
APP/155	Stated Preference: Trolley Vehicle Mode Specific Constants dated 17 July
APP/156	Analysis of Quantitative Research on Quality Attributes for Trams - Report by Institute for Transport Studies for UK Tram dated 17 July 2014
APP/157	Note on questions in relation to the updated heritage technical appendix dated 17 July 2014
APP/158	Landscape Institute Note on Third Edition GVLIA
APP/159	Extracts from updated version of the LCC Core Strategy
APP/160	Parking SDP Report dated 7 July 2014
APP/161	Seating Capacity Analysis of FWY131 Turner Evidence dated 22 July 2014
APP/162	NGT PEA confirmation letter to DfT dated 14 December 2012

APP/163	Update on Objector Numbers as at Day 40
APP/164	Note regarding Measurement for the frieze at Abtech House - LBC032 dated 16 July 2014
APP/165	Design Statements and Conservation Appraisals Summary dated 16 July 2014
APP/166	First Group Response to Competition Commission updated issues statement
APP/167	Competition Commission Summary of Hearing with First Group, 8 October 2010
APP/168	Measuring Public Transport Accessibility Levels, TfL, April 2010
APP/169	NGT Designers Response to the Supplementary RSA
APP/170	First Group Briefing notes/papers
APP/171	Comparison with DfT Quality Factors
APP/172	Rail Station Quality Factors
APP/173	Applicants response to questions from Mr Fitzsimmons dated 5 September 2014
APP/174	Report to Leeds City Council by Mr A Thickett dated 5 September 2014
APP/175	Leeds Local Development Framework, Development Plan Document March 2014
APP/176	Addendum to APP/16.2 - Property Objection Update
APP/177	Far Headingley, Weetwood and West Park Neighbourhood Design Statement
APP/178	Note on Park and Ride Facilities in Leeds dated 11 September 2014
APP/179	Note on Potential for Park and Ride at the Holt Park car park dated 11 September 2014
APP/180	Promoters' response to the submissions made on the Supplement to the Environmental Statement - Historic Environment by Mr J Williams dated 11 September 2014
APP/181	NGT Assessment to the BRT Standard 2013 dated 11 September 2014

APP/182	West Yorkshire Transport Fund Report dated 26 September 2014
APP/183	Note on Tree Loss in Conservation Area dated 25 September 2014
APP/184	Response to First West Yorkshire Written Questions by Mr Webb dated 25 September 2014
APP/185	Response to NWLTF questions by Mr Webb dated 25 September 2014
APP/186	Note on Assessment of Transport Impacts Beyond the NGT Corridor Construction Impacts
APP/187	Response to Claire Randall
APP/188	Prof Bonsall's email re Headingley Bypass route
APP/189	Response to questions on NGT construction compound on Monument Moor from Mr McKinnon
APP/190	Legal Opinion by Paul Lasock QC
APP/191	Note on Application of Shimizu Judgment to Conservation Area Consents
APP/192	Note on Headingley Castle Difference in Levels
APP/193	Notes of Meeting dated 28 May 2013 – Headingley Castle
APP/194	Note - The Dales Way & NGT Alignment by Tom Walker dated 6 October 2014
APP/195	Greater Manchester CC2 Secretary of State Decision dated 20 September 2013
APP/196	Leeds City Council Panel Report regarding Leeds Girls' High School dated 4 September 2014
APP/197	Note - Loss of Foraging Habitat Areas in Headingley Castle Area
APP/198	Leeds Core Strategy Position Update
APP/199	Proposed revisions to LBC and CAC Conditions
APP/200	Site Visit itinerary (Version 1)
APP/201	Site Visit itinerary (Version 2)
APP/202	Mr Forni supplementary proof of evidence on Noise

APP/203	Mr Caten supplementary proof of evidence on Property
APP/204	Further revisions to Heritage & Planning Conditions
APP/205	Filled up draft Order
APP/206	Leeds Local Development Framework Core Strategy Glossary
APP/207	Emergency Services Consultation Note
APP/208	Suitability of Traffic Model Data
APP/209	Kevin Leather points of clarification
APP/210	Position in relation to Statutory Undertakers
APP/211	Updated Book of Reference
APP/212	Response to Bill McKinnon on Open Space
APP/213	Updated Works and Land Plans
APP/214	Amended Planning Conditions
APP/215	Final Planning Conditions
APP/216	Green Space in Hyde Park and Woodhouse - Response to Mr McKinnon letters
APP/217	Final Site Visits Itinerary
APP/218	Applicants' Objection Response Schedule
APP/219	Objection Issue Schedule
APP/219A	Representation Issue Schedule
APP/220	Breakdown of Statutory Objectors
APP/221	Closing Submissions on behalf of West Yorkshire Combined Authority and Leeds City Council

APPLICANTS' LEGAL SUBMISSIONS REFERRED TO IN CLOSING

L-APP-1	East Northamptonshire v Secretary of State for Communities and Local Government [2015] 1 WLR 137
L-APP-2	Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847

L-APP-3	R (Blewett) v Derbyshire County Council [2004] Env LR 29
L-APP-4	R (Cherkley Campaign Group Ltd) v Mole Valley District Council [2014] EWCA Civ 567
L-APP-5	R (Hart District Council) v Secretary of State for Communities and Local Government [2008] 2 P&CR 16
L-APP-6	R (Morge) v Hampshire County Council [2011] UKSC 2
L-APP-7	R (Prideaux) v Buckinghamshire County Council [2013] EWHC 1054 (Admin)
L-APP-8	R (Forge Field Society) v Sevenoaks District Council [2014] EWHC 1895
L-APP-9	R (Samuel Smith Old Brewery (Tadcaster)) v. Secretary of State for Energy and Climate Change [2012] EWHC 46 (Admin)
L-APP-10	South Lakeland District Council v Secretary of State for the Environment [1992] 1 All ER 573
L-APP-11	Waddenzee [2004] Env LR 14
L-APP-12	Wakil v London Borough of Hammersmith and Fulham [2013] EWHC 2833 (Admin)
L-APP-13	Walker and Brian v Secretary of State for Communities and Local Government [2008] EWHC 62 (QB)
L-APP-14	R (Warley) v Wealden [2012] Env LR 4

SUPPORTERS' DOCUMENTS

SUPP/001	Jeffrey Gleisner
SUPP/002	Elizabeth Brown
SUPP/003	Christine MacNiven
SUPP/004	George Dawson
SUPP/005	Allied London LLP
SUPP/006	Muse Developments Ltd
SUPP/007	Bernard Foster
SUPP/008	University of Leeds

SUPP/009	Andrew Vickers
SUPP/010	Jules Staveley
SUPP/011	Barry Howgate
SUPP/012	Robert Stubbs
SUPP/013	Clive Barrett
SUPP/014	Carol Gleisner
SUPP/015	David Salinger
SUPP/016	Bruntwood Limited
SUPP/017	John and Lynn Thornton
SUPP/018	Bond Dickinson LLP
SUPP/019	Jones Lang Lasalle
SUPP/020	Nick Haslewood
SUPP/021	Ian Kirk
SUPP/022	Yorkshire County Cricket Club
SUPP/023	Lynne Strutt
SUPP/024	Mr B Ewart
SUPP/025	Leeds Rugby
SUPP/026	Downtown in Business
SUPP/027	Royal Armouries (international)
SUPP/028	The Tetley
SUPP/029	Clive Brook
SUPP/030	Land Securities
SUPP/031	Leeds Hotels and Venues
SUPP/032	Town Centre Securities plc
SUPP/033	Leeds University Union
SUPP/034	Lambert Smith Hampton

SUPP/035	Arc Inspirations LLP
SUPP/035A	First Direct Arena
SUPP/036	Leeds College of Building
SUPP/037	CBRE
SUPP/038	DWF LLP
SUPP/039	Equality User Access Group
SUPP/040	Tony Bundock
SUPP/041	Leeds City College
SUPP/042	Leeds Teaching Hospitals
SUPP/043	Opera North

OBJECTORS' INQUIRY DOCUMENTS

LBC/023-500	English Heritage - Letter to Inquiry dated 18 August 2014
OBJ/15 SOC	T Bridges Statement of Case, 14 December 2013
OBJ/69 SOC	M Wilson Statement of Case, 9 January 2014
OBJ/89 SOC	J Creasey Statement of Case, 27 January 2014
OBJ/129-500	Patricia Belford Letter to Inquiry dated, 17 July 2014
OBJ/159 SOC	N Ford Statement of Case, 26 January 2014
OBJ/168 SOC	A Haigh Statement of Case, 23 January 2014
OBJ/168 PoE	A Haigh Proof of Evidence
OBJ/168-100	A Haigh Rebuttal, 13 April 2014
OBJ/168-101	A Haigh Closing Statement and Attachment October 2014
OBJ/171 SOC	C Todd Statement of Case, Rough Translations of Documents and Documents referred to, 27 January 2014
OBJ/171 PoE	C Todd Proof of Evidence/Rebuttal and Appendices
OBJ/171-100	C Todd Presentation to Inquiry and Plans, October 2014
OBJ/171-101	C Todd Presentation to Inquiry Slides

OBJ/171-102	C Todd Presentation to Inquiry Photographs
OBJ/171-500	C Todd Letter to Inquiry dated 17 July 2014
OBJ/214 SOC	J Turner Statement of Case 14 January 2014
OBJ/253-100	M Hill Presentation to the Inquiry
OBJ/253-101	M Hill Details of Qualifications
OBJ/268 SOC	I Liptrot Statement of Case
OBJ/268-100	I Liptrot Closing Statement
OBJ/320 SOC	Yorkshire Congregational Union Inc Statement of Case, 28 January 2014
OBJ/320 PoE	Yorkshire Congregational Union Inc Proof of Evidence
OBJ/320-100	Yorkshire Congregational Union Inc Rebuttal
OBJ/320-101	Yorkshire Congregational Union Inc Further representations to the Inquiry, 16 October 2014
OBJ/330-100	L Howard Long Presentation to the Inquiry
OBJ/341-100	B MacKintosh Statement given to Inquiry by C Randall
OBJ/341-101	B MacKintosh Listed Building Detail and Plan submitted to Inquiry
OBJ/365 SOC	J Matthews Statement of Case, 28 January 2014
OBJ/365 PoE	J Matthews Proof of Evidence, March 2014
OBJ/365-100	J Matthews Additional Information including Project Risk Register
OBJ/381 SOC	J Phelps Statement of Case, 30 January 2014
OBJ/388 SOC	C Foren Statement of Case, 30 January 2014
OBJ/388 PoE	C Foren Proof of Evidence
OBJ/429 SOC	D Tong Statement of Case and Appendices, 29 January 2014
OBJ/461 SOC	Headingley Castle Management Limited Statement of Case, January 2014
OBJ/461 PoE	Headingley Castle Management Limited Proof of Evidence, March 2014

OBJ/461-100	Headingley Castle Management Limited Notes for Objection, 6 October 2014
OBJ/461-101	Headingley Castle Management Limited Photographs and Plans of the Site
OBJ/461-102	Headingley Castle Management Limited Response to NGT Advice Note, May 2014
OBJ/461-103	Headingley Castle Management Limited Note regarding Gradient Levels and the Impact upon the heritage asset, 24 July 2014
OBJ/461-104	Headingley Castle Management Limited Northern Archaeological Associates Ltd Response to Document B-13, July 2014
OBJ/461-105	Headingley Castle Management Limited Letter regarding a suggested condition, 14 October 2014
OBJ/461-106	Headingley Castle Management Limited Letter regarding realignment of route from DF2 to DF7, 28 October 2014
OBJ/461-107	Headingley Castle Management Limited Letter regarding the Applicants' draft Statement of Common Ground, 31 October 2014
OBJ/474 SOC	D Hood Statement of Case, 29 January 2014
OBJ/508-100	Evidence submitted to Inquiry by Ian Moxon
OBJ/510 SOC	Meanwood Valley Partnership Statement of Case and supporting documents, 24 January 2014
OBJ/510-100	Meanwood Valley Partnership Presentation to the Inquiry by Mr Sheard
OBJ/514 SOC	John Dammone, Salvos Restaurant Statement of Case 24 January 2014
OBJ/522 PoE	M Adcock Proof of Evidence, 7 April 2014
OBJ/527-100	Councillor Anderson Closing Presentation
OBJ/529 SOC	D Wanless Statement of Case, 26 January 2014
OBJ/555 SOC	G Lauder Statement of Case, January 2014
OBJ/555 PoE	G Lauder Proof of Evidence and References
OBJ/570 SOC	T Bavage Statement of Case, 29 January 2014
OBJ/573 SOC1	M Broadbent Statement of Case, 23 January 2014

OBJ/573 SOC2	M Broadbent Updated Statement of Case, 24 March 2014
OBJ/573 PoE	M Broadbent Proof of Evidence, 24 April 2014
OBJ/573-100	M Broadbent Presentation to the Inquiry, 14 September 2014
OBJ/591 SOC	J Reed Statement of Case, January 2014
OBJ/591 PoE	J Reed Proof of Evidence, 22 March 2014
OBJ/591-100	J Reed Letter to the Promoters, dated 10 February 2014, and response from the Promoters, dated 17 March 2014 regarding Air Quality
OBJ/591-101	J Reed Addendum on Air Quality, 22 March 2014
OBJ/591-102	J Reed Cross Examination Form, 17 April 2014
OBJ/591-103	J Reed Letter to the Promoters, dated 18 September 2014, and response from Leeds City Council, dated 8 October 2014 regarding Air Quality
OBJ/591-104	J Reed Addendum- Update of Statement of Case and Proof of Evidence, September 2014
OBJ/591-105	J Reed Letter regarding presentation of evidence, dated 9 October 2014
OBJ/591-106	J Reed Suggested Conditions, 16 October 2014
OBJ/591-500	J Reed Letter to Inquiry dated 28 August 2014
OBJ/617 SOC	G Geapin Statement of Case, 20 January 2014
OBJ/617 PoE	G Geapin Proof of Evidence
OBJ/617-100	G Geapin E-mail dated 12 January 2014
OBJ/617-101	G Geapin E-mail dated 30 January 2014
OBJ/617-102	G Geapin E-mail dated 2 February 2014
OBJ/617-103	G Geapin Letter dated 20 February 2014
OBJ/617-104	G Geapin Letter dated 29 February 2014
OBJ/617-105	G Geapin Letter from George Mudie MP dated 20 March 2014
OBJ/617-106	G Geapin E-mail dated 20 March 2014

OBJ/617-107	G Geapin Advantages of the hybrid and the Battery powered bus over the diesel and the trolley bus
OBJ/617-108	G Geapin Leeds Council Officers Expenses
OBJ/617-109	G Geapin Concerns regarding the process of the submission for the trolley bus contract details, 4 May 2014
OBJ/617-110	G Geapin Northern Powergrid letter dated 25 July 2014
OBJ/617-111	G Geapin Presentation of Documentation
OBJ/617-112	G Geapin Updated Presentation of Documentation, 23 September 2014
OBJ/630 SOC	A Reed Statement of Case, 24 January 2014
OBJ/647 SOC	Headingley Business Forum Statement of Case, 22 January 2014
OBJ/655 SOC	C Downing Statement of Case, 28 January 2014, read at the Inquiry by C Randall
OBJ/675 PoE	Lawnswood School Proof of Evidence, 28 March 2014
OBJ/675-100	Lawnswood School Evidence submitted to Inquiry
OBJ/692 SOC	E Pattison Statement of Case and photographs, 22 January 2014
OBJ/714 SOC	C Barton Statement of Case, 22 January 2014
OBJ/726 SOC	B Claughton Statement of Case, Plans and Photographs, 23 January 2014
OBJ/726 PoE	B Claughton Proof of Evidence, Plans and Photographs
OBJ/726-100	B Claughton Evidence submitted to Inquiry by C Perry
OBJ/728 SOC	Professor J Griffiths Statement of Case Appendices and attached Documents, 27 January 2014
OBJ/728 PoE	Professor J Griffiths Proof of Evidence, 27 March 2014
OBJ/728-100	Professor J Griffiths Response to Applicants' Statement of Case and Appendices, 10 March 2014
OBJ/728-101	Professor J Griffiths Response to Applicants' Statement of Case Supplement 1, 15 March 2014
OBJ/728-102	Professor J Griffiths Proof of Evidence Summary, 27 March 2014

OBJ/728-103	Professor J Griffiths Proof of Evidence with Rebuttal response, 22 July 2014
OBJ/728-104	Professor J Griffiths Proofs of Evidence summary, 12 October 2014
OBJ/763 and	
OBJ/764 -100	M Thompson and R Thompson Statement to Inquiry
OBJ/763-500	M Thompson Letter to Inspector dated 15 July 2014
OBJ/763-501	M Thompson Further correspondence to Inquiry sent by email dated 20 July 2014
OBJ/778 PoE	P Rhodes Proof of Evidence, 17 March 2014
OBJ-781 SOC	L Nelis Statement of Case, 27 January 2014
OBJ/781-100	L Nelis Documents referred to at the Inquiry
OBJ/797 SOC	G Riddell Statement of Case, January 2014
OBJ/798 SOC	K Torode Statement of Case, 24 January 2014
OBJ/798 PoE	K Torode Proof of Evidence
OBJ/798-100	K Torode Presentation to the Inquiry
OBJ/823-100	C Carey-Campbell Presentation to Inquiry
OBJ/839 SOC	D Bewell Statement of Case, January 2014
OBJ/861 SOC	St Chad's Parochial Church Council Statement of Case, 27 January 2014
OBJ/863 SOC	J Crawley Statement of Case, January 2014
OBJ/863-100	J Crawley Presentation to the Inquiry and photographs
OBJ/897 SOC	M Askey Statement of Case, 27 January 2014
OBJ/923:	<i>First West Yorkshire Ltd (FWY)</i>
OBJ/923 SOC	First West Yorkshire Ltd Statement of Case and Appendices, 30 January 2014
OBJ/923/01	First West Yorkshire Ltd Proof of Evidence of Christopher Cheek, 31 March 2014
OBJ/923/02	First West Yorkshire Ltd Proof of Evidence of Christopher Cheek Appendices, 1 April 2014

OBJ/923/03	First West Yorkshire Ltd Proof of Evidence of Paul Turner, 1 April 2014
OBJ/923/04	First West Yorkshire Ltd Proof of Evidence of John Brooks, 1 April 2014
OBJ/923/05	First West Yorkshire Ltd Heritage Proof of Evidence of Katy Lightbody, April 2014
OBJ/923/06	First West Yorkshire Ltd Proof of Evidence of David Alexander, 1 April 2014
OBJ/923/07	First West Yorkshire Ltd Proof of Evidence of David Alexander Appendices, 1 April 2014
OBJ/923/08	First West Yorkshire Ltd Proof of Evidence of Paul Turner Appendix
OBJ/923/09	First West Yorkshire Ltd Rebuttal Proof of Evidence of Christopher Cheek, 17 April 2014
OBJ/923/10	First West Yorkshire Ltd Rebuttal Proof of Evidence of David Alexander, 15 April 2014
OBJ/923/11	First West Yorkshire Ltd Rebuttal Proof of Evidence of John Brooks, 15 April 2014
OBJ/923/12	First West Yorkshire Ltd Rebuttal Proof of Evidence of Katy Lightbody, April 2014
OBJ/923/13	First West Yorkshire Ltd Rebuttal Proof of Evidence of Paul Turner, 15 April 2014
OBJ/923/14	First West Yorkshire Ltd Supplementary Rebuttal Proof of Evidence of Katy Lightbody, September 2014
FWY/100	Merseyside Rapid Transit System Order TWA Secretary of State's Decision letter dated 12 May 1999
FWY/101	Merseyside Rapid Transit System Order Public Inquiry Inspector's Report
FWY/102	PWC Report: Evaluation of the Impact of Different Bus Fleet Configurations, April 2014
FWY/103	Opening Statement on behalf of First West Yorkshire Ltd
FWY/104	Map showing overall area of bus routes
FWY/105	Map showing bus routes serving South Bank

FWY/106	Belle Isle and Middleton Neighbourhood Framework Overall Concept Plan from Core Document D-6-5
FWY/107	Not Allocated
FWY/108	Clemont-Ferrand & Padua Translohr photographs and descriptions
FWY/109	Rome Trolleybus Trolley motion articles and local press articles
FWY/110	Bari Trolleybus Description and news articles
FWY/111	Lecce Trolleybus Trolley motion articles
FWY/112	Castellon Trolleybus Trolley motion articles
FWY/113	Kerch Ukraine Kerch trolley.com article
FWY/114	Comparison between existing FWY bus capacity provision and planned NGT provision
FWY/115	FOI request to TfL regarding traffic signals in Central Croydon
FWY/116	Light Rail and Tram Statistics: England 2012/13
FWY/117	Passenger Focus: Bus Passenger Priorities for Improvement, March 2010
FWY/118	Passenger Focus: Tram Passenger Survey (TPS) Manchester Metrolink
FWY/119	Supplementary Rebuttal Proof of Evidence of Mr Cheek
FWY/120	Quantitative Assessment of Public Transport Interchanges, Piotr Olszewski
FWY/121	DfT Consultation on implementation of the Competition Commission remedies on bus registration, March 2014
FWY/122	CVs of those used by the Promoters for work on the Environmental Statement
FWY/123	Photograph of a trolleybus on Granville Street, Vancouver
FWY/124	AECOM File Note: Annualisation Factors- Response to TAS Rebuttal
FWY/125	Seating Analysis Rebuttal
FWY/126	Wellington City Council: Support for Electrical Buses
FWY/127	Press Release: York Park and Ride Electric Buses, 11 June 2014

FWY/128	Natural England Standing Advice Species Sheet: Bats
FWY/129	Bat Conservation Ireland: Bats & Lighting Guidance Notes
FWY/130	Written questions regarding electromagnetic compatibility
FWY/131	Mr Turner's Document in response to Mr Chadwick's notes of APP/132 and APP/134
FWI/132	Wellington Trolleybus axe update
FWY/133	Summary Proof of Evidence of Christopher Cheek
FWY/134	TAS Partnership Additional Information requested by the Promoters written 1 August 2014
FWY/135	Summary Proof of Evidence of Paul Turner
FWY/136	ATM Milan Trolleybuses: Main features and experiences
FWY/137	Article from The Times Newspaper, 10 September 2014
FWY/138	City of York Council: Double decker electric sight seeing bus
FWY/139	First Group Letter to National Audit Office dated 6 February 2008
FWY/140	Office for Low Emission Vehicles: A Strategy for ultra low emission vehicles in the UK
FWY/141	Email from Mr Alexander, FWY, dated 21 March 2014
FWY/142	Summary Proof of Evidence of David Alexander
FWY/143	Same as Document OBJ/923/12
FWY/144	Same as Document OBJ/923/14
FWY/145	Briefing Note Edinburgh Tram System (Supplementary Evidence), August 2014
FWY/146	Summary Proof of Evidence of Katy Lightbody, October 2014
FWY/147	Summary Proof of Evidence of John Brooks, April 2014
FWY/148	Business Review First Student Market overview
FWY/149	Driving Growth: The Sheffield Bus Partnership
FWY/150	DfT Local Transport Act 2008: Improving local bus services: Guidance on voluntary partnership agreements, February 2009

FWY/151	DfT Local Transport Act 2008 Quality partnership schemes: Statutory guidance to English local transport authorities and metropolitan district councils
FWY/152	DfT Local Transport Act 2008 Quality contracts schemes: statutory guidance
FWY/153	Leeds City Council Core Strategy Leeds Local Development Framework
FWY/154	Air Quality Update
FWY/155	Update to Alternative Technologies
FWY/156	Documents referred to in the cross examination of Mr Boodoo
FWY/157	House of Commons Hansard Debates, 15 October 2014
FWY/158	Suggested modifications to the Transport and Works Act Order
FWY/159	Closing Submission on behalf of First West Yorkshire Ltd
FWY/160	First West Yorkshire Ltd Competition Authorities, 31 October 2014
FWY/161	First West Yorkshire Ltd Disclosure Authorities
FWY/162	First West Yorkshire Ltd Authorities Volume 1
FWY/163	First West Yorkshire Ltd Authorities Volume 2
OBJ/923-500	First West Yorkshire Ltd Letter to Applicants dated 14 July 2014
OBJ/923-501	First West Yorkshire Ltd Letter to Transport & Works Act Order Unit dated 14 July 2014
OBJ/923-502	First West Yorkshire Ltd response to the Promoters' application to admit late evidence
OBJ/923-503	First West Yorkshire Ltd E-mail request for Mr Williams to be made available for cross examination by FWY, dated 2 October 2014
OBJ/923-504	First West Yorkshire Ltd E-mail response to the Applicants' reply to the request for Mr Williams to be made available for cross examination by FWY, dated 6 October 2014
OBJ/959 SOC	TF and JH (Braime) Holdings plc Statement of Case, 29 January 2014
OBJ/965 SOC	K Wigen Statement of Case, 27 January 2014

OBJ/965-500	K Wiggen Letter to Inspector received 21 July 2014
OBJ/967 SOC	Dr R Cunliffe Statement of Case, 7 January 2014
OBJ/997 SOC	S Sleeman Statement of Case and Appendices, 29 January 2014
OBJ/997-100	S Sleeman E-mail dated 30 October 2014 and Response to the Rebuttal Evidence by the Promoters
OBJ/997-101	S Sleeman Statement presented to the Inquiry
OBJ/997-500	S Sleeman As Document OBJ/1166-500
OBJ/998 SOC	C Randall Statement of Case and Documents 1 to 10, 25 January 2014
OBJ/998 PoE	C Randall Proof of Evidence and Documents 1 to 12
OBJ/998-100	C Randall Extract from Article on Speculative Housing Development in the Suburb of Headingley, Leeds, 1838-1914
OBJ/998-101	C Randall Questions for Philip Ward on Heritage, 5 June 2014
OBJ/998-102	C Randall Questions for Professor Purseglove, 25 June 2014
OBJ/998-103	C Randall Addendum to Proof of Evidence
OBJ/998-104	C Randall Documents submitted to the Inquiry
OBJ/998-105	C Randall Closing Statement to the Inquiry
OBJ/998-500	C Randall Letter to Inspector dated 13 July 2014
OBJ/998-501	C Randall further correspondence to Inspector received 21 July 2014
OBJ/998-502	C Randall Letter to Programme Officer dated 24 September 2014
OBJ/998-503	C Randall Letter to Inspector dated 1 October 2014
OBJ/1128-100	I Moxon Closing Statement to Inquiry, 14 October 2014
OBJ/1137 SOC	A Bowers Statement of Case, 30 January 2014
OBJ/1154 SOC	M Fitzsimons Statement of Case 27 January 2014
OBJ/1166 SOC	N Sleeman Statement of Case, 29 January 2014
OBJ/1166 PoE	N Sleeman Proof of Evidence

OBJ/1166-100	N Sleeman Letters Published in the Yorkshire Evening Post Opposing the proposed NGT Trolleybus Scheme 27 July 2014 to 22 January 2014
OBJ/1166-101	N Sleeman Supporting Documents
OBJ/1166-102	N Sleeman List of Documents for Proof of Evidence
OBJ/1166-103	N Sleeman Summary of Proof of Evidence
OBJ/1166-104	N Sleeman Errata to Proof of Evidence
OBJ/1166-105	N Sleeman Response to Promoter's Rebuttal REB-1 OBJ/1166
OBJ/1166-106	N Sleeman Documents 1 to 32 for Proof of Evidence
OBJ/1166-500	N Sleeman Letter to Inspector dated 21 July 2014
OBJ/1168 SOC	R Riddell Statement of Case, 27 January 2014
OBJ/1168-100	R Riddell E-mail dated 11 September 2014
OBJ/1180 SOC	D Kemp Statement of Case, 29 January 2014
OBJ/1182 PoE	Leeds and Yorkshire Housing Association Proof of Evidence of Stuart Natkus, March 2014
OBJ/1354:	Weetwood Residents' Association (WRA)
OBJ/1354 SOC1	Weetwood Residents' Association Statement of Case and Appendices, 26 January 2014
OBJ/1354 SOC2	Weetwood Residents' Association Revised Statement of Case and Appendices A and B, 12 March 2014
OBJ/1354 SOC3	Weetwood Residents' Association Revised Statement of Case Appendix C
OBJ/1354 PoE	Weetwood Residents' Association Proof of Evidence, 28 March 2014
WRA/100	Weetwood Residents' Association Opening Statement
WRA/101	Response to Document REB-1 OBJ/1354
WRA/102A	Note on A660 Traffic Counts
WRA/102B	Leeds Central Cordon 2012 Traffic Flows
WRA/103	Series of photographs
WRA/104	Note on Vehicle and System Capacities: Quality Factors

WRA/105	Note on NGT Changes to Access and Egress Weetwood and Far Headingley
WRA/106	Note on Parking Spaces Weetwood
WRA/107	Response to Document APP-3-2
WRA/108	Explanation of misunderstanding in Statement of Case
WRA/109	Response to Document REB-2 OBJ/1354
WRA/110	Script of Evidence (draft)
WRA/111	Script of Evidence (final amended version)
WRA/112	Weetwood Residents' Association Closing Statement
WRA/113	Weetwood Residents' Association Referred Documents
OBJ/1354-500	Weetwood Residents' Association Letter to Inspector dated 14 July 2014
OBJ/1355 PoE	J Elsworth Proof of Evidence, 11 May 2014
OBJ/1374 SOC	S Dunn Statement of Case, 25 January 2014, read at the Inquiry by C Randall
OBJ/1375 SOC	J Holland Statement of Case, 27 January 2014, read at the Inquiry by C Randall
OBJ/1380 SOC	A Burrows Statement of Case, read at the Inquiry by C Randall
OBJ/1388 SOC	S Baskind Statement of Case, 30 January 2014
OBJ/1388-100	S Baskind Evidence presented to the Inquiry by S Nabarro, 23 September 2014
OBJ/1454 SOC	Northern Powergrid (Yorkshire) plc Statement of Case and Appendices
OBJ/1470 SOC	Leeds Cycling Campaign Statement of Case and Appendices, 30 January 2014
OBJ/1470 PoE	Leeds Cycling Campaign Proof of Evidence and Appendix
OBJ/1470-100	Leeds Cycling Campaign Public Inquiry Statement and additional Appendices
OBJ/1470-101	Leeds Cycling Campaign Summary Proof of Evidence of E Reather

OBJ/1504 SOC	H Pickering Statement of Case, 27 January 2014
OBJ/1505 SOC	G Jennings Statement of Case
OBJ/1505 PoE	G Jennings Proof of Evidence
OBJ/1505-100	G Jennings Closing Statement to Inquiry
OBJ/1520-100	Councillor Bentley Evidence to the Inquiry
OBJ/1543 SOC	D Winters Statement of Case
OBJ/1558 SOC	D Fahey Statement of Case and accompanying documents
OBJ/1558-100	D Fahey Presentation to the Inquiry and accompanying documents
OBJ/1558-101	D Fahey Petition of Whitfield residents Against NGT Trolley Bus Scheme
OBJ/1586 SOC	Park Row Limited Statement of Case
OBJ/1591 SOC	Weetwood House Court (Leeds) Ltd Management Statement of Case, 28 January 2014
OBJ/1591-100	Weetwood House Court (Leeds) Ltd ManagementE-mail dated 11 September 2014
OBJ/1593 SOC	Councillor S Bentley Statement of Case, 28 January 2014
OBJ/1595-100	S Hammond Evidence Presentation to the Inquiry
OBJ/1600 SOC	John Lewis Partnership Statement of Case, 28 January 2014
OBJ/1605 SOC	Adel & Wharfedale Branch Labour Party Statement of Case, 29 January 2014
OBJ/1605-100	Adel & Wharfedale Branch Labour Party Branch Meeting Minutes 9 July 2013
OBJ/1608 SOC1	Morley House Trust Former Leeds Girls' High School Statement of Case, January 2014
OBJ/1608 SOC2	Morley House Trust Elinor Lupton Centre Statement of Case, January 2014
OBJ/1608 SOC3	Morley House Trust Rose Court/Ford House Statement of Case, January 2014
OBJ/1608 PoE1	Morley House Trust Former Leeds Girls' High School Proof of Evidence of Stuart Natkus, March 2014

OBJ/1608 PoE2	Morley House Trust Elinor Lupton Centre Proof of Evidence of Stuart Natkus, March 2014
OBJ/1608 PoE3	Morley House Trust Ford House Proof of Evidence of Stuart Natkus, March 2014
OBJ/1608-500	Morley House Trust Letter to Inspector dated 8 September 2014
OBJ/1611 SOC	Headingley Land Developments Statement of Case, January 2014
OBJ/1611 PoE	Headingley Land Developments Proof of Evidence of Stuart Natkus, March 2014
OBJ/1611-500	Headingley Land Developments email submitted to Inquiry regarding the cross examination of Professor Purseglove dated 15 July 2014
OBJ/1613 SOC	Topland Ridgeway Limited Statement of Case, January 2014
OBJ/1613 PoE	Topland Ridgeway Limited Proof of Evidence of Stuart Natkus, April 2014
OBJ/1622 SOC	Bill McKinnon Statement of Case
OBJ/1622 PoE1	Bill McKinnon Proof of Evidence
OBJ/1622 PoE2	Bill McKinnon Proof of Evidence Appendices Volume 1
OBJ/1622 PoE3	Bill McKinnon Proof of Evidence Appendices Volume 2
OBJ/1622-100	Bill McKinnon Rebuttal Evidence
OBJ/1622-101	Bill McKinnon Closing Statement, 23 October 2014
OBJ/1623 SOC	Friends of Woodhouse Moor Statement of Case
OBJ/1623 PoE1	Friends of Woodhouse Moor Proof of Evidence
OBJ/1623 PoE2	Friends of Woodhouse Moor Proof of Evidence Appendices
OBJ/1623-100	Friends of Woodhouse Moor Closing Statement, 23 October 2014
OBJ/1623-101	Friends of Woodhouse Moor Legal Advice from Alexander Greaves 7 October 2014
OBJ/1623-500	Friends of Woodhouse Moor Letter to Inspector dated 14 July 2014
OBJ/1623-501	Friends of Woodhouse Moor Further letter to Inspector dated 20 July 2014

OBJ/1624 SOC	North Hyde Park Neighbourhood Association Statement of Case
OBJ/1624 PoE1	North Hyde Park Neighbourhood Association Proof of Evidence
OBJ/1624 PoE2	North Hyde Park Neighbourhood Association Proof of Evidence Appendices
OBJ/1624-100	North Hyde Park Neighbourhood Association Closing Statement, 23 October 2014
OBJ/1624-500	North Hyde Park Neighbourhood Association Letter to Inspector dated 14 July 2014
OBJ/1624-501	North Hyde Park Neighbourhood Association Further letter to Inspector dated 17 July 2014
OBJ-1625 SOC	D Carey Jones, 30 January 2014
OBJ-1625 PoE	D Carey Jones Proof of Evidence/Revised Evidence and Appendices 1 to 11
OBJ/1625-100	D Carey Jones Final Submission made on 24 October 2014
OBJ/1637 SOC	Professor G Andrews Statement of Case, 28 January 2014
OBJ/1637 PoE	Professor G Andrews Proof of Evidence, 1 March 2014
OBJ/1637-100	Professor G Andrews Rebuttal
OBJ/1641 SOC	South Headingley Community Association Statement of Case, 29 January 2014
OBJ/1641 PoE1	South Headingley Community Association Proof of Evidence
OBJ/1641 PoE2	South Headingley Community Association Proof of Evidence Appendices SHCA 1 to SHCA 14
OBJ/1641 PoE3	South Headingley Community Association Proof of Evidence Extra Appendices SHCA 15 to SHCA 39
OBJ/1641-100	South Headingley Community Association Plan of Conservation Area
OBJ/1641-101	South Headingley Community Association Response to Historic Environment Update Document B-13, 4 September 2014
OBJ/1641-102	South Headingley Community Association Final Submission, 24 October 2014

OBJ/1641-103	South Headingley Community Association Final Submission made to the Inquiry on 28 October 2014 by D Carey Jones
OBJ/1641-104	South Headingley Community Association Statement of S Buckle made to the Inquiry, 28 October 2014
OBJ/1641-105	South Headingley Community Association Documents referred to in presentation to the Inquiry
OBJ/1641-106	South Headingley Community Association Petition submitted on 28 October 2014
OBJ/1641-107	South Headingley Community Association Documents
OBJ/1641-500	South Headingley Community Association Letter to Inspector dated 10 July 2014
OBJ/1641-501	South Headingley Community Association Further letter to Inspector dated 21 July 2014
OBJ/1644:	A660 Joint Council (A660JC)
OBJ/1644 SOC1	A660 Joint Council Statement of Case, 30 January 2014 and Appendices 1 to 14
OBJ/1644 SOC2	A660 Joint Council Statement of Case Appendices 15 to 47
OBJ/1644 PoE	A660 Joint Council Proof of Evidence of Christopher Foren
A660JC-100	Leeds Allocations Plan: Volume 2-5 North Table 5.5.1 Surpluses and deficiencies in different types of green space in North Leeds
A660JC-101	Leeds City Council Plan 5.3 Housing-North Leeds
A660JC-102	Extract from Document Understanding Walking and Cycling
A660JC-103	Yorkshire Evening Post Article: Readers give Leeds Trolleybus Service the thumbs down
A660JC-104	Yorkshire Evening Post: MP adds voice to criticism of £250m Leeds Trolleybus Plans
A660JC-105	VanHool ExquiCity trolleybus Technical Specifications,
A660JC-106	London Cycling Campaign Space for Cycling, May 2014
A660JC-107	Making Space for Cycling A Guide for New Developments and Street renewals by Cyclenation, Second edition 2014
A660JC-108	A660 Joint Council Photographs of the Headingley area

A660JC-109	A660 Joint Council Information Request by Chris Foren: response by Promoters giving redacted versions of individual responses to NGT consultations
A660JC-110	A660 Joint Council Final Submission
OBJ/1644-500	A660 Joint Council Letter to Inspector dated 13 July 2014
OBJ/1644-501	A660 Joint Council Letter regarding further document submitted to Inquiry dated 21 July 2014
OBJ/1647 SOC	L Barker Statement of Case, 28 January 2014
OBJ/1684 SOC	J Illingworth Statement of Case, 29 January 2014
OBJ/1684 PoE	J Illingworth Proof of Evidence
OBJ/1717 SOC	S Buckle Statement of Case, 29 January 2014
OBJ/1719:	North West Leeds Transport Forum (NWLTF)
OBJ/1719 SOC	North West Leeds Transport Forum Revised Statement of Case and Appendices A to I, 28 February 2014
OBJ/1719 PoE1	North West Leeds Transport Forum Proof of Evidence of Doug Kemp
OBJ/1719 PoE2	North West Leeds Transport Forum Proof of Evidence of Peter Bonsall
OBJ/1719 PoE3	North West Leeds Transport Forum Proof of Evidence of Tony Ray
OBJ/1719 PoE4	North West Leeds Transport Forum Proof of Evidence of Tony Ray (Revised)
OBJ/1719 REB	North West Leeds Transport Forum Rebuttal Evidence, April 2014
NWLTF/100	North West Leeds Transport Forum Opening Statement
NWLTF/101	North West Leeds Transport Forum Appendix to Opening Statement
NWLTF/102	HM Treasury The Green Book Appraisal and Evaluation in Central Government
NWLTF/103	Supplementary Green Book guidance
NWLTF/104	HM Treasury/DWP Valuation Techniques for Social Cost-Benefit Analysis July 2011

NWLTF/105	Transport Analysis Guidance: An Overview of Transport Appraisal
NWLTF/106	Transport Analysis Guidance: The Transport Appraisal Process
NWLTF/107	Notes following Opening Statements
NWLTF/108	Response to data request of Peter Bonsall
NWLTF/109	Response to data request of Mr Tong
NWLTF/110	Goodwin Graph
NWLTF/111	Figures in regard to low to critical junctions in Headingley
NWLTF/112	Metro response to Mr Kemp Mode Share
NWLTF/113	Extracts from TAG Unit A4.1 Social Impact Appraisal
NWLTF/114a	Extracts from NGT document TAG Unit M2
NWLTF/114b	The role of soft factors on the bus Report DfT 2009
NWLTF/115	Response to FOI request dated 4 April 2014
NWLTF/116	Plans and graphs submitted by Professor Bonsall when cross examining Mr Neil Chadwick
NWLTF/117	Not Allocated
NWLTF/118	Professor Bonsall's response to the Rebuttal of his Proof of Evidence
NWLTF/119	Extract from Analysis of Quantitative Research on Quality Attributes for Trams
NWLTF/120	Cross examination questions for Thomas Walker
NWLTF/121	Cross examination questions for Ken Webb
NWLTF/122	Supplement to Proof of Evidence submitted by Peter Bonsall
NWLTF/123	Response to Promoter's Rebuttal to Mr Kemp on behalf of NWLTF
NWLTF/124	NWLTF Evidence by Doug Kemp on behalf of NWLTF
NWLTF/125	Letter to Inspector from Peter Bonsall dated 2 October 2014
NWLTF/126	Evidence given to Inquiry by Tony Ray on 29 September 2014
NWLTF/127	Evidence given to Inquiry by Professor Bonsall on 30 September 2014

NWLTF/128	North West Leeds Transport Forum Closing Statement
OBJ/1719-500	North West Leeds Transport Forum Letter to Inspector dated 9 July 2014
OBJ/1719-501	North West Leeds Transport Forum Further letter to Inspector dated 17 July 2014
OBJ/1719-502	North West Leeds Transport Forum Further letter to Inspector dated 21 July 2014
OBJ/1719-503	North West Leeds Transport Forum suggested conditions, 20 October 2014
OBJ/1720 SOC	West Park Residents' Association Statement of Case, 28 January 2014
OBJ/1720 PoE	West Park Residents' Association Proof of Evidence, March 2014
OBJ/1720-100	Response to Promoters' Rebuttal Document REB-1 OBJ/1720
OBJ/1720-101	West Park Residents' Association Summary of Proof of Evidence, March 2014
OBJ/1720-102	West Park Residents' Association Statement by Doug Kemp, 17 October 2014
OBJ/1720-103	West Park Residents' Association Closing Statement presented to the Inquiry by Doug Kemp, 24 October 2014
OBJ/1720-500	West Park Residents' Association Letter to Inspector dated 9 July 2014
OBJ/1721 PoE	Federation of Small Businesses Proof of Evidence of Chris Longley
OBJ/1721-100	Federation of Small Businesses Additional Evidence Statement of Chris Longley
OBJ/1727:	<i>Drummond & Churchwood Residents' Association (DCRA)</i>
OBJ/1727 SOC1	Drummond & Churchwood Residents' Association Statement of Case Letter, 27 January 2014
OBJ/1727 SOC2	Drummond & Churchwood Residents' Association Statement of Case
OBJ/1727 SOC3	Drummond & Churchwood Residents' Association Updated Statement of Case and Appendices, March 2014

OBJ/1727 PoE	Drummond & Churchwood Residents' Association Proof of Evidence, March 2014
DCRA/100	Documents in reference to cross-examination of Jason Smith
DCRA/101	Rebuttal of APP-8-2 Mr Speak PoE; APP-9-2 Mr Ward PoE and APP-10-2 and APP-10-3 Mr Walker PoE and Appendices, May 2014
DCRA/102	Archaeo-Environment Ltd Response to REB-4 OBJ/1719
DCRA/103	English Heritage Research into the effects of Conservation Areas on value
DCRA/104	English Heritage Economic Impact of the Historic Environment
DCRA/105	Email from DCRA to Leeds City Council dated 20 December 2013
DCRA/106	IHBC NewsBlog Archive- DfT: Have your say on new powers to reduce street clutter
DCRA/107	DfT TAG Unit 3 Environmental Impact Appraisal, May 2014
DCRA/108	Extract from Design Manual for Roads and Bridges Volume 11 Environment Assessment Section 3 Environmental Topics
DCRA/109	English Heritage NPPF and Heritage Assets, 5 June 2014
DCRA/110	The Research Agency of the Forestry Commission Social Research Report: Climate Change & Street Trees Project
DCRA/111	The Barriers and Drivers to Planting and Retaining Urban Trees Working Draft for Discussion
DCRA/112	Information and Advisory Note Number 60 The Sustainable City: the urban forest resource, January 1997
DCRA/113	Note on How NGT Scheme may affect property prices in Leeds by Moore Estate Agents dated 6 February 2013
DCRA/114	Photographs of part of the route showing tree loss
DCRA/115	Drummond & Churchwood Residents' Association Supplementary Proof of Evidence, October 2014
DCRA/116	Drummond and Churchwood Residents' Association E-mail response following cross-examination
DCRA/117	Yorkshire Tiger Bus Timetable

DCRA/118	West Yorkshire Combined Authority Transport Committee NGT Update, 26 September 2014
DCRA/119	Drummond and Churchwood Residents' Association Final Submission to the Inquiry, October 2014
OBJ/1727-500	Drummond and Churchwood Residents' Association Letter to Inspector dated 10 July 2014
OBJ/1727-501	Drummond and Churchwood Residents' Association E-mail from Helen Pickering, dated 14 October 2014, with recommended archaeological conditions
OBJ/1733 SOC	Richmond House School Statement of Case, 29 January 2014
OBJ/1736 SOC	GE CIF Trustees Ltd Statement of Case, 30 January 2014
OBJ/1756 SOC	S Archbold Statement of Case, 24 January 2014
OBJ/1756-100	S Archbold Summary Proof of Evidence, September 2014
OBJ/1756-101	S Archbold Presentation to the Inquiry
OBJ/1765 SOC	J Buchan Statement of Case, 22 January 2014
OBJ/1791-100	Network Rail Written Representation submitted to Inquiry
OBJ/1797-100	K Fabri Presentation to Inquiry
OBJ/1797-101	K Fabri Closing Statement, 24 October 2014
OBJ/1797-102	K Fabri E-mails
OBJ/1798 SOC	I Simpson Statement of Case
OBJ/1798 PoE	I Simpson Proof of Evidence and Summary
OBJ/1798-100	I Simpson Supplementary Statement
OBJ/1798-101	I Simpson Presentation to the Inquiry
OBJ/1802 SOC	Round Strategies Limited Statement of Case, 30 January 2014
OBJ/1810 SOC	M Bell Statement of Case, 28 January 2014
OBJ/1810 PoE	M Bell Proof of Evidence, 27 March 2014
OBJ/1810-100	M Bell Letter regarding the calling of Leeds City Councillors, dated 23 June 2014

OBJ/1810-101	M Bell Letter regarding the calling of Leeds City Councillors, received 3 September 2014
OBJ/1810-102	M Bell Appendix Outline Questions for Councillors
OBJ/1810-103	M Bell Submission to the Inquiry Issue 1.6
OBJ/1810-104	M Bell Submission to the Inquiry Issue 1.71
OBJ/1811 SOC	High Field Surgery Statement of Case, 28 February 2014
OBJ/1815	G Mulholland MP letter of objection
OBJ/1817 PoE	Margaret Bell Proof of Evidence of Doug Kemp
OBJ/1817-100	Margaret Bell Rebuttal by Doug Kemp
OBJ/1817-101	Margaret Bell Presentation to Inquiry by Doug Kemp
OBJ/1818-100	E Stewart Letter of Objection, 15 June 2014
OBJ/1818-101	E Stewart Statement of Case
OBJ/1818-102	E Stewart Closing Statement

REPRESENTATIONS' INQUIRY DOCUMENTS

REP/001	A Walsh
REP/002	Not Used
REP/003	Natural England
REP/004	Bramhope and Carlton Parish Council
REP/005	Anzir Boodoo
REP/005 PoE	Anzir Boodoo Proof of Evidence
REP/005-100	Anzir Boodoo Commentary on Scheme Design & Proposed Operation
REP/005-101	Anzir Boodoo Note on Potential for Segregated Cycle Lanes from Bodington to Belle Isle
REP/005-102	Anzir Boodoo Revised BRT Standard Scoring 7 October 2014
REP/006	Town Centre Securities plc
REP/007	WYG

REP/008	Sport England
REP/009	Verizon Business (Statutory Utility)
REP/010	West Yorkshire Archaeology Advisory Service
REP/011	Arla Foods Limited

DOCUMENTS ISSUED BY THE INSPECTOR

INSP/001	Pre-Inquiry Meeting Agenda
INSP/002	Note Following the Pre-Inquiry Meeting
INSP/003	Pre-Inquiry Meeting Record of Attendance
INSP/100	Response to letter dated 17 June 2014 submitted by Mr Foren; D Carey Jones; and Mr McKinnon
INSP/101	Response to letter dated 23 June 2014 submitted by Mr Bell
INSP/102	The Inspector's Ruling regarding the admission by the Applicants of Document B-13
INSP/103	Response to letter submitted by Mr Bell on 3 September 2014

STATEMENTS OF COMMON GROUND

OBJ/1719 SoCG	North West Leeds Transport Forum Statement of Common Ground with the Applicants regarding the comparison of appraisal grant/subsidy line in C1 and C2, October 2014
OBJ/1818 SoCG	Emma Stewart Statement of Common Ground with the Applicants, 22 October 2014

COSTS APPLICATIONS DOCUMENTS

CO-OBJ/923	First West Yorkshire Ltd Partial Costs Application, dated 29 October 2014
A-CO-OBJ/923	Applicants' reponse to First West Yorkshire Ltd Partial Costs Application
CO1-OBJ/1727	Drummond and Churchwood Residents' Association Costs Application, dated 28 October 2014
A-CO-OBJ/1727	Applicants' reponse to Drummond and Churchwood Residents' Association Costs Application

CO2-OBJ/1727 Drummond and Churchwood Residents' Association Costs
Application Reply to Applicants' response, dated 17 November
2014

OTHER INQUIRY DOCUMENTS

INQ-1 Daily attendance lists
INQ-2 Daily appearance lists

APPENDIX C: SUGGESTED CONDITIONS DEEMED PLANNING PERMISSION

The reasons given for the conditions are given in detail in my conclusions under Matter 11 on page 679 of this report, but I have also included those reasons briefly under each condition.

Preamble

In these conditions:

'*authorised trolley vehicle system*' means the system of transport by vehicles constructed or adapted for use on roads without rails under electric power transmitted to them by overhead wires (whether or not there is an additional source of power on board the vehicles) authorised by the Order;

'*the development*' means the works authorised by the Order;

'*the Environmental Statement*' means the set of documents of that description submitted with the application for the Order under document number A-08;

'*the local planning authority*' means Leeds City Council;

'*the Order*' means the Leeds Trolley Vehicle System Order 201.....;

'*the permanent land*' means land within the permanent limits as defined in the Order; and

'*phase*' means a phase approved under condition 2.

1 Time limit for commencement of development

The development hereby permitted shall be begun before the expiration of 5 years from the date that the Order comes into force.

Reason- To ensure that the development would be commenced within a reasonable period of time.

2 Phasing

None of the works comprised in the development shall commence until details of the proposed phasing for the implementation of the authorised trolley vehicle system and the appropriate part of the development to which such phasing relates shall be submitted to and approved in writing by the local planning authority.

Reason- To ensure the orderly execution of the development

3 Construction management process

No phase of the authorised trolley vehicle system shall be commenced until there have been submitted to and approved in writing by the local planning authority details of the construction management process including:

- (a) the routing and timing of deliveries;
- (b) contractor parking facilities;
- (c) proposals for consultation with affected persons;
- (d) the location of all site compounds and structures;

- (e) the proposed hours of construction work through the week;
- (f) details of the steps to be taken to prevent the pollution of watercourses and groundwater; and
- (g) details of the methods to be employed for the prevention of mud, grit, dust and dirt being carried onto the public highway from the development.

The works shall be carried out in accordance with the approved details.

Reason- In the interests of public amenity, the continued operation of the bus services and highway safety.

4 Design Statement

No phase of the authorised trolley vehicle system shall be commenced until a design statement for that phase in accordance with the principles of the Urban Design and Access Statement submitted with the application for the Order under document number A-08k has been submitted to and approved in writing by the local planning authority. The design statement for each phase shall include, so far as relevant to that phase, the following matters:

- (a) the branding for the authorised trolley vehicle system;
- (b) surface materials and street furniture
- (c) boundaries and structures;
- (d) vehicle design;
- (e) stop design;
- (f) park and ride sites;
- (g) the depot;
- (h) lighting and overhead equipment;
- (i) substations;
- (j) soft landscaping;
- (k) safety and security;
- (l) sustainability and climate proofing; and
- (m) environmental management and maintenance.

Reason- To ensure that the development would be designed in accordance with those principles that have been set out in the Urban Design and Access Statement and have been subject to public consultation.

5 Approval of details

No development to which the following matters are relevant shall be commenced until details of those matters in accordance with the design statement approved under condition 4 for the phase in which that development is comprised have been submitted to and approved in writing by the local planning authority:

- (a) details of the proposed surface materials to be used for the authorised trolley vehicle system and for any highway surfacing works, and details of the layout and reinstatement of the highway consequent on those works (but not the siting of any part of the authorised trolley vehicle system);
- (b) all new and replacement walls and/or fences or permanent boundary treatment including siting, height and material;

- (c) the design, external appearance and landscaping of the trolley vehicle stops;
- (d) the formation, laying out or alteration of a means of access to any highway used by vehicular traffic;
- (e) the formation, laying out of any new and the alteration of any existing pedestrian route, including any proposed pedestrian barriers;
- (f) the siting and landscaping of any off-highway vehicle parking areas other than a park and ride site or terminus;
- (g) the laying out, and drainage of the proposed park and ride sites at Bodington and Stourton, and the terminus at Holt Park;
- (h) the reinstatement and landscaping of land used for construction in accordance with condition 3;
- (i) details of the overhead line equipment, including the siting, design and colour of building fixings, pole supports and lighting columns;
- (j) the extent of all building demolition works and any necessary alteration works;
- (k) the proposed reinstatement works on the alignments between Alma Road and Headingley Lane;
- (l) the siting, design and external appearance of any bridge;
- (m) the siting, design and external appearance of any buildings or structures which are not mentioned above, including buildings and structures within the park and ride sites, and sub-stations together with the details of the electricity supply apparatus serving the sub-stations;
- (n) details of the proposed mitigation measures included in Annex E to the Environmental Statement; and
- (o) details of the design and layout of the proposed new sports facilities (artificial turf pitches, sports pavilion and cricket pitches) at Lawnswood, Bodington and Weetwood playing field sites.

The works shall be carried out in accordance with the approved details.

Informative: The design and layout of the sports facilities should comply with the relevant industry Technical Design Guidance, including guidance published by Sport England, National Governing Bodies for Sport. Particular attention is drawn to: Sport England Artificial surfaces for Outdoor Sport (2012), The FA Guide to Artificial Grass Pitches (January 2010) RFU Artificial Grass Pitches for Rugby and Association Football Guidance Document, RFU IRB Comparison of Performance Specification for Artificial Surfaces, ECB TS6 - Technical Requirements and Performance Specification for non-Turf Cricket Pitches and ECB Recommended Guidelines for the construction, preparation and maintenance of cricket pitches and outfielders at all levels of the game, and Sport England Pavilions and Clubhouses

Reason- To ensure that there would be adequate control by the local planning authority over those details of the design that would be completed at the later stage.

6 Landscaping scheme

No development in any phase shall be commenced until full details of both hard and soft landscaping for that phase in accordance with the landscaping plans submitted to the Inquiry into the Order as Appendix 1 to the Proof of Evidence of Mr Thomas

Walker, under document number APP-10-3, have been submitted to and approved in writing by the local planning authority.

Hard landscape details shall include, as appropriate, plans, proposed finished levels and/or contours including comparison to existing levels, means of enclosure of open areas, alterations to water courses, car parking layouts, other vehicle and pedestrian access and circulation areas, hard surfacing materials and artefacts and structures (including lighting, furniture, refuse or other storage units, signage, lighting, external services, drainage, manholes).

Soft landscape details shall include planting plans, tree pit design and specifications (including load bearing rooting zones, cultivation and other operations associated with plant establishment), schedules of plants noting species, planning sizes and proposed densities where appropriate and a proposed timetable for planting and laying out of hard surfaces. The plans submitted in accordance with this condition shall indicate the location of all trees and/or hedges on the land, together with the species of each tree. The works shall be carried out in accordance with the approved details.

Reason- To compensate for any harm that the development would cause to the character and appearance of the surrounding area, including the CAs.

7 Trees

No development affecting trees in any phase of the authorised trolley vehicle system shall commence until there has been submitted to and approved in writing by the local planning authority:

- (a) where any trees having a stem diameter of 100mm or greater are intended to be lopped, pruned or felled in connection with the carrying out of development in relation to that phase, a scheme identifying those trees and setting out how the works are to be carried out in conformity with BS5837:2012;
- (b) where trees having a stem diameter of 100mm or greater are to be felled in relation to that phase, a scheme for their replacement, including provision for the replanting of any trees which require replacement in consequence of accidental damage during the construction period; and
- (c) a scheme for the protection, during the period of construction, of all retained mature trees in the vicinity of the development in relation to that phase identifying their location and species and conforming with BS5837:2012, and a method statement including particulars relating to working methods, temporary protective fencing, location of hoardings and areas prohibited for use by contractors.

Development shall be carried out in compliance with the approved schemes.

Reason- To compensate for any harm that the development would cause to trees.

8 Tree maintenance

If within a period of five years from the date of the planting of any tree, hedge or shrub that tree, hedge or shrub, or any replacement, is removed, uprooted or destroyed or dies, or becomes, in the opinion of the local planning authority, seriously damaged or defective, another tree, hedge or shrub of the same species and size as

that originally planted shall be planted in the same location no later than the first available planting season, unless the local planning authority agrees in writing that a different species, size and/or location may be substituted.

Reason- To compensate for any harm that the development would cause to trees.

9 Walls, fences and boundaries

All walls, fences and boundary treatments referred to in Condition 5(b) shall be erected before the phase of the authorised trolley vehicle system to which they relate is brought into use and any such wall, fence or boundary treatment located on the permanent land shall thereafter be retained and shall not be altered or removed.

Reason- In the interests of the amenity of local residents and the surrounding area.

10 Stonework in Conservation Areas

For those phases of the authorised trolley vehicle system passing through a conservation area, no stonework forming part of the relevant phase of the development shall be commenced until a sample panel of the stonework to be used has been approved in writing by the local planning authority. The panel shall be erected and examined on site to establish the details of bonding, coursing and colour and type of jointing material. The stonework shall be constructed in accordance with the approved sample panel(s). The sample panel shall remain in place during construction of the stonework.

Reason- To reduce the harm to their character and appearance.

11 Topsoil

No work, other than works to protect trees referred to in Condition 7, shall be commenced on any phase of the authorised trolley vehicle system which includes the Bodington and Stourton Park and Ride sites; or the off highway section between Alma Road and Headingley Lane until the whole of the topsoil has been stripped off those parts of the sites to be developed, and either removed or retained on site for re-use in a 'secure position' where it will not be damaged or contaminated by construction activities at the sites. Details of the 'secure position', including the location within the sites and maximum height of mounds shall be submitted to and approved in writing by local planning authority prior to commencement of the works on site on that phase. The works shall be carried out in accordance with the approved details.

Reason- To ensure the protection and re-use of topsoil.

12 Lighting system

Details of the lighting system proposed at all trolley vehicle stops and highway and trolley vehicle route intersections along the route (including immediately to the rear of the Arndale Centre) and at new and replacement footpaths shall be submitted to and

approved in writing by the local planning authority. The lighting system shall be implemented in accordance with the approved details before each such part of the development is brought into operation.

Reason- To ensure that any lighting that would be provided would minimise light pollution in the interests of public amenity and safety.

13 Park and ride sites and terminus

No part of any of the park and ride sites at Bodington and Stourton, or the terminus at Holt Park, that is shown to be used by vehicles on the plans approved pursuant to Condition 5(g) shall be brought into use until that part has been laid out, drained, and surfaced, as approved, and that part shall not thereafter be used for any other purpose other than the vehicle -related use approved.

Reason- To reduce the likelihood of pollution and flooding and prevent unauthorised use in order to protect the amenity of the surrounding area.

14 Archaeological investigations

(a) No development shall take place on any phase which includes any of the areas marked in red on the document titled 'Known areas of Archaeology affected by the NGT Route – February 2014²¹⁷³' until a programme of archaeological work in accordance with a written scheme of investigation has been submitted to and approved in writing by the local planning authority. The scheme shall include:

- an assessment of significance and research questions;
- the programme and methodology of site investigation and recording;
- the programme for post investigation assessment;
- provision for analysis of the site investigation and recording;
- provision for publication and dissemination of the analysis and records of the site investigation;
- provision for archive deposition of the analysis and records of the site investigation;
- details of the measures to be taken in order to protect, record or preserve any significant archaeological remains that may be found; and
- nomination of a competent person or persons/organisation to undertake the works set out within the scheme.

(b) No development shall take place within each affected area other than in accordance with the written scheme of investigation approved under (a) above.

(c) The parts of the development within each affected area shall not be brought into use until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the written scheme of investigation approved under (a) above and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

²¹⁷³ Document APP-8-3 Appendix 5

Reason- To ensure the adequate protection and recording of archaeological remains.

15 Prevention of water pollution

The steps approved under condition 3(f) shall include a scheme for the prevention of the pollution of watercourses and groundwater, including by the following methods:

- (a) no contaminated material, or polluting construction or demolition material or refuse shall be deposited within the relevant limits;
- (b) no rainwater contaminated with silt or soil from ground disturbed during construction works shall be permitted to drain to any surface watercourse or water sewer without sufficient prior settlement;
- (c) no foul drainage or contaminated surface water run-off shall be discharged into any borehole, well, spring soak-away or watercourse, including dry ditches connected to a watercourse;
- (d) all surface water drainage from impermeable parking areas, new roadways and hardstandings for vehicles comprised in the development shall be passed through an oil interceptor or other appropriate device before being discharged into any watercourse, surface water sewer or soak-away system;
- (e) prior approval of the construction details of any storage facilities for oils, fuels or chemicals shall be obtained in writing from the local planning authority before that element of the development is commenced; and
- (f) details of measures designed to mitigate the risk of pollution to controlled waters from electricity transformers along the route shall be submitted to and agreed in writing by the local planning authority prior to installation of the electricity transformers.

The works shall be carried out in accordance with the approved scheme.

Reason- To provide a safeguard against the pollution of watercourses and groundwaters during and after the construction process.

16 Public address systems

No public address system forming part of the development shall be operated until details of the operation of that system, including hours of operation, have been submitted to and approved in writing by the local planning authority. The public address system shall thereafter only be used in accordance with the approved details.

Reason- To protect the public from noise disturbance.

17 Contaminated Land

No development shall commence until a Phase I Desk Study has been submitted to and approved in writing by the local planning authority and:

- (a) where the approved Phase I Desk Study indicates that intrusive investigation is necessary, development shall not commence until a Phase II Site Investigation Report has been submitted to, and approved in writing by, the local planning authority;

- (b) where remediation measures are shown to be necessary in the Phase I/Phase II Reports and/or where soil or soil forming material is being imported to the development site, development shall not commence until a Remediation Statement demonstrating how the site will be made suitable for the intended use has been submitted to, and approved in writing by, the local planning authority. The Remediation Statement shall include a programme for all works and for the provision of Validation Reports to provide confirmation that all measures outlined in the Remediation Statement have been completed, including where appropriate, validation testing. The works shall be carried out in accordance with the approved Remediation Statement.

Reason- To identify any contamination and ensure that the appropriate remediation is carried out in the interests of health and safety.

18 Contaminated Land

If remediation is unable to proceed in accordance with the approved Remediation Statement, or where significant unexpected contamination is encountered, the local planning authority shall be notified in writing immediately and operations on the affected part of the site shall cease. An amended or new Remediation Statement shall be submitted to and approved in writing by the local planning authority prior to any further remediation works which shall thereafter be carried out in accordance with the revised approved Remediation Statement.

Reason- To identify any contamination and ensure that the appropriate remediation is carried out in the interests of health and safety.

19 Contaminated Land

On completion of remediation works required by an approved Remediation Statement, any Validation Reports provided for in that Statement in respect of those works shall be submitted in writing to the local planning authority in accordance with the approved programme. The site or phase of a site shall not be brought into use until such time as all validation information has been approved in writing by the local planning authority.

Reason- To identify any contamination and ensure that the appropriate remediation is carried out in the interests of health and safety.

20 Environmental mitigation measures

No phase of the authorised trolley vehicle system shall be commenced until a scheme for implementation and retention of the mitigation measures specified in Annex E to the Environmental Statement in relation to that phase has been submitted to and approved in writing by the local planning authority. The mitigation measures shall be implemented and retained in accordance with the approved scheme.

Reason- To ensure that the environmental mitigation would be implemented in the interests of the character and appearance of the surrounding area and public amenity.

21 Bodington playing fields

No development in relation to the construction of the Bodington Park and Ride car park shall commence until:

- (a) the replacement artificial sports pitches at Lawnswood have been implemented in accordance with the details approved under condition 5(o);
- (b) a community use scheme relating to the use of the replacement playing pitches and changing facilities has been submitted to and approved in writing by the local planning authority. The scheme shall include details of pricing policy, hours of use for community groups, access by non-university users, management responsibilities and a mechanism for review. The scheme shall be implemented in accordance with the approved details; and
- (c) a scheme to ensure the continuity during construction works of the existing sports use of the playing fields shown on Drawing No. 312694/TD/009B (submitted to the Inquiry into the Order under document reference A11) is submitted to and approved in writing by the local planning authority. The scheme shall ensure that any temporary relocation of pitch users is to a replacement facility or facilities at least as accessible and at least equivalent in terms of usefulness, attractiveness and quality to the existing playing fields. The approved scheme shall be implemented and complied with in full throughout the carrying out of the development.

Reason- To ensure that acceptable sports facilities would be provided as a replacement for those at Bodington during the construction and after completion of the development.

22 Training and employment opportunities

No development shall commence until an employment and training strategy has been submitted to and approved in writing by the local planning authority. The strategy shall include details of measures to provide for the recruitment and training of local people and employment of local people in the construction and operation of the authorised trolley vehicle system. The strategy shall be implemented prior to the commencement of development.

Reason- To secure appropriate training and employment opportunities in accordance with development plan policy.

23 Flood Risk Assessment

The development shall only be carried out in accordance with the approved Flood Risk Assessment²¹⁷⁴ (FRA) prepared by Mott MacDonald dated September 2013.

²¹⁷⁴ Document A-08g-4

Reason- to reduce the risks from flooding to the proposed development and future users.

24 Approval of works in Flood Zone 3

No works within the development to increase ground levels in an area of Flood Zone 3 on the Environment Agency Flood Map shall commence until details of these works have been submitted to and approved in writing by the local planning authority. The works shall be carried out in accordance with the approved details.

Reason- To reduce the risks from flooding to the proposed development and future users.

25 Site Waste Management Plan

No development shall be commenced until a Site Waste Management Plan (SWMP) has been submitted to and approved in writing by the local planning authority. Development shall be carried out in compliance with the details of the approved SWMP.

Reason- To ensure that the development would be carried out sustainably.

26 Bats

No phase of the development which includes:

- the proposed new sports facilities at Lawnswood, Bodington and Weetwood;
 - the Bodington Park and Ride site;
 - the off-highway section at Headingley;
 - the Stourton Park and Ride site; or
 - any demolition of buildings (except for demolition of buildings at Blenheim Park)
- shall be commenced until a detailed mitigation and monitoring strategy in accordance with the measures set out in Annex E to the Environmental Statement has been submitted to and approved in writing by the local planning authority. All works shall be carried out in accordance with the approved strategy.

Reason- To ensure that appropriate measures would be used to protect bats.

APPENDIX D: REPORT ON THE LISTED BUILDING AND CONSERVATION AREA CONSENTS

- D1. This Appendix considers the applications made in respect of the Scheme for the proposed LTVS Order that relate to LBC and CAC. These applications are made separately to the proposal under the TWA Order application and the related deemed planning application and need to be considered as such.
- D2. This Appendix has been written by Katie Peerless Dip Arch RIBA for consideration by the Lead Inspector Martin Whitehead and the Secretaries of State. It covers the evidence given on historic heritage matters that supported or objected to the applications and reaches conclusions on the impact of the proposals on the designated heritage assets, including the deemed planning application as it relates to the wider impact of the NGT proposals on the character and appearance of the conservation areas.
- D3. It does not cover other planning matters such as landscape impact, neither does it undertake the balancing exercise that will be needed in respect of any harm caused to the heritage assets and whether this is outweighed by the public benefits of the proposal. These matters are dealt with in the main report by Inspector Whitehead.

Policy considerations and other guidance

- D4. Section 16 (2) of the LB&CA Act 1990 requires that, in considering whether to grant LBC for any works, the local planning authority or as the case may be, the Secretary of State, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.
- D5. Section 66 of the LB&CA Act 1990 requires that in considering whether to grant planning permission for development which affects a listed building or its setting that the local planning authority or the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

- D6. In addition to these statutory duties, paragraph 131 of the National Planning Policy Framework (NPPF) also notes that decision takers should take into account the desirability of sustaining and enhancing the significance of heritage assets and of new development making a positive contribution to local character and distinctiveness when considering planning applications.
- D7. There is provision in The Transport and Works Applications (Listed Buildings, Conservation Areas and Ancient Monuments Procedure) Regulations 1992 (the 1992 Regulations) which allows for the modification of the normal level of information required to accompany an application for LBC, as set out in s10(2)(b) of the LB&CA Act, in the situation where all such information or drawings are not yet available. The 1992 Regulations call for the submission of details that are necessary to describe the works but accept that a clear written description of the proposed works, supported by such other material as the Applicant is reasonably able to provide can be considered sufficient in the circumstances where the scheme design is not finalised.
- D8. The NPPF makes clear that the setting of a heritage asset is a key consideration and states at paragraph 132 that significance can be harmed or lost through development within its setting as well as through alteration or destruction of the heritage asset.
- D9. In addition to the duties under the LB&CA Act referred to above, the policies from the recently adopted Core Strategy²¹⁷⁵ of the Leeds Local Development Framework (CS) and the saved policies from the Leeds Unitary Development Plan (UDP) policies are also a material consideration in these cases. CS policy P11 deals with the conservation of the historic environment and the supporting text refers to the relevant complementary saved UDP policies.
- D10. Of these, UDP policy N14 seeks to prevent the demolition of listed buildings other than in exceptional circumstances and only with the strongest justification and is consequently in broad compliance with the NPPF. Policies

²¹⁷⁵ The CS was adopted after the close of the Inquiry, in November 2014, and now forms part of the Development Plan; however the draft document was considered in the parties' evidence

N15 and N16 relate to changes of use of, and extensions to, listed buildings and are consequently not directly relevant to these applications. Policy N17 seeks to preserve features that contribute to the character of the listed building.

- D11. Apart from N14, these policies are now somewhat dated in comparison to the policies in the NPPF and make no reference to the need to explain and understand the significance of a listed building and to assess how proposed development that would involve alterations to it, or would be within its setting, would affect this significance. I would therefore recommend that the policies of the NPPF take precedence over them as material considerations.
- D12. The NPPF and UDP policies N18A, N18B and N20 provide for the protection of the character and appearance of conservation areas and establish a presumption against the demolition of a building or parts of a building, and the loss of other features such as trees and boundary walls, that make a positive contribution to the heritage asset. Policy N18B requires a suitable replacement scheme to be approved before permission for demolition is granted. Policy N28 of the UDP specifically seeks to protect historic parks and gardens. Policy N29 relates to the protection of items of archaeological interest and makes reference to further policies that require archaeological investigations to be undertaken. These are set out in Appendix 4 of Volume 2 of the UDP.
- D13. Conservation area appraisals have not been undertaken for all the areas affected by the proposals. There are such documents for Weetwood, Far Headingley, Headingley Hill and Hyde Park and Woodhouse Moor and Woodhouse Lane – University Precinct conservation areas, some of which makes reference to a high speed transit system for the City such as NGT, but not specifically as proposed.

Listed Building and Conservation Area Consent Applications

General observations

- D14. There are now 60 LBC applications and 17 applications for CAC for consideration and these are set out in full at the outset of the main Report and contained in Documents A-09a to c (LBCs) and A-10 (CACs). They are not, therefore, listed again in full here. Since the applications were first submitted and following comments from English Heritage, application No LBC049 for OLE fixings to the Grade 1 listed Holy Trinity Church in Boar Lane has been withdrawn and it is now proposed to carry the wirescape on poles in this location.
- D15. The listed building applications describe the location of the site, the proposed works, the significance of the listed building and its setting and the contribution made to the conservation area in which it is sited (if applicable). In most cases, the applications for LBC relate to the fixing of the eyelets to which the OLE would be attached and there are standard paragraphs included which deal with the scheme details, its impact, access, the justification for it and mitigation measures. Each application also includes a standard set of conditions, which will be discussed fully in subsequent paragraphs.
- D16. Because of the virtually identical nature of each of the applications to insert eyelets in the elevations of the listed buildings, there are many points that are common to the considerations of the merits of all of them and it will therefore be convenient and practical to deal with these common factors together. The applications which relate to other alterations to a listed building, of which there are 11, will be considered individually.
- D17. The CAC applications contain similar information to the listed building applications and detail the historic background to the conservation areas, the significance of the relevant property within that area and the impact of the proposals on the conservation area as a whole. As these applications make provision for the road widening necessary to accommodate the Applicants'

proposals, each situation is different and will need to be the subject of an individual assessment.

- D18. The information submitted for each application for LBC and CAC does not provide the detail called for by the list of national validation requirements or any additional information that Leeds City Council would normally require to support such applications. However, as noted above, the 1992 Regulations have modified the requirements set out in the LB&CA Act on which the local list is based.
- D19. Therefore, although in other circumstances, the information submitted with the applications would not be detailed enough to enable an informed decision to be made on the impact of the proposals or even register the applications, in this case, the Applicants consider that the written descriptions and photographs are sufficient for the purposes of the TWA Order. This is disputed by the objectors as detailed in subsequent paragraphs.
- D20. The conditions that have been proposed to be imposed on any grant of LBC for the attachment of OLE equipment require the submission of further details and the Applicants have stated that, if it is shown that, upon further investigation, a building or structure is incapable of supporting the weight of the OLE, then alternative solutions would be sought.
- D21. The proposals would also result in the demolition of part of the wall within the curtilage of Headingley Castle, but a LBC application has not been submitted for this. The Applicants contend that the wall makes only a minor contribution to the significance of the listed building and that consent is not, therefore, required.
- D22. That test is, however, not the correct one. The wall is within the curtilage of Headingley Castle and is, therefore, treated as part of that listed building. Any works which affect the special architectural or historic interest of the building, whether in a positive or a negative way, require consent to authorise them. Demolition of part of a listed building is bound to have an impact of some sort and I therefore consider that LBC would need to be obtained for this particular

section of the proposed works. However, as no such application has been made, I am unable to consider the merits or impact of this aspect of the Scheme.

Environmental Statement – Historic Environment and Historic Environment Technical Appendix

- D23. The original versions of these documents were produced in June 2013 and updated in January 2014, before the proofs of evidence were submitted and the Inquiry opened. After the heritage witness for the Applicants had given his evidence, his team presented a further document²¹⁷⁶ (the Supplement) that is described as a supplement to the ES Historic Environment chapter and the Historic Environment Technical Appendix²¹⁷⁷ A-08c-7.
- D24. This Supplement is intended to set out further details of the listed buildings and conservation areas that were assessed as part of the EIA process and the likely effects of the proposed scheme on their settings and significance. It does not alter the overall conclusions on heritage impacts in relation to the claimed benefits of the Scheme.
- D25. There were strong objections raised against the admission of this document to the Inquiry, based on its late submission, the extent of the alterations that have been made and the claim that objectors did not have the resources to process the significant amount of new detail at that stage of the Inquiry, after the Applicants' only witness on the topic had already been cross-examined. It was clearly felt by some parties that the document was enabling the Applicants to revisit the evidence already given and tested before the Inquiry.
- D26. However, the Lead Inspector, in a ruling issued on 24 July 2014 agreed that the document could be admitted, subject to a number of limitations, to ensure that all available information was put before the Inquiry and the Secretaries of State. The ruling makes clear that the document does not replace the Heritage chapter of the ES; it is supplementary information only and does not

²¹⁷⁶ Document B-13

²¹⁷⁷ Document A-08c-7

alter the evidence given by the Applicants' heritage witness. Opposing parties were given the opportunity to respond to the document and to amend their evidence in the light of its contents.

Amendments to the application documents

D27. Following the publication of the Supplement, the Applicants have suggested a series of proposed amendments to the application documents, including the Design and Access Statements, and these were considered at the Inquiry. These modifications are listed in Annex 1 to this Appendix and give some more specific details of the proposals and, in a number of cases, correct the description of what is intended. I consider that all of these modifications are needed, either to make sense of the wording of some of the applications or to reflect the most up-to-date description of the proposal. I therefore recommend that they are adopted to inform the Secretaries of State's consideration of the applications.

The case for the Applicants

D28. The impact on conservation areas and listed buildings has been carefully described in the ES. The methodology underpinning the assessment is unquestionably sound. The methodology was appropriately scoped. English Heritage responded with very detailed comments²¹⁷⁸ as to how the assessment should be undertaken. Whilst English Heritage does have some residual observations in respect of the conclusions reached in the ES, it has no concerns as to the methodology²¹⁷⁹. English Heritage has withdrawn its objection to the LBC applications. FWY accept that the methodology is appropriate²¹⁸⁰. The criticism made that the heritage assessment should have been based on WebTAG is simply misconceived²¹⁸¹.

²¹⁷⁸ See Document A-08b, Annex A, page 113

²¹⁷⁹ English Heritage response to B-13 (letter dated 18 August 2014 at LBC-023-500)

²¹⁸⁰ Ms Lightbody made no substantive criticism of the ES methodology in her evidence and confirmed in answer to Inspector Peerless' questions that although she would have used a different methodology the ES methodology was appropriate.

²¹⁸¹ OBJ 1727 DCRA oral evidence given at the Inquiry

- D29. In addition to the assessment of the Scheme's impact on the character and appearance of the townscape through which it passes²¹⁸² the Scheme's impact on conservation areas and listed buildings is assessed in detail²¹⁸³. The main conservation area impacts are those associated with the construction of the Headingley off-road section, road widening on Headingley Hill, and the loss of trees within the Headingley, Far Headingley and West Park Conservation Areas²¹⁸⁴. There will also be limited residual adverse impacts on a small number of listed buildings arising from the construction and operational stages of the Scheme²¹⁸⁵.
- D30. A number of third parties disagree with the judgments underpinning the Applicants' assessment of the Scheme's heritage impacts, which is perhaps to be expected. But it is important to remember that as set out above the assessment is underpinned by a sound methodology. That limits the scope for legitimate disagreement as to the scale of the Scheme's likely impact.
- D31. FWY's accusation that the photomontages are deliberately misleading is entirely rejected. There is no substantive criticism of what is shown; the photomontages are plainly fit for purpose in that they give a visual representation of the Scheme at various points along its route. It is clear that, whilst the Scheme will inevitably have an impact on a number of designated heritage assets, the impacts in all cases will be less than substantial harm for the purposes of paragraph 134 of the NPPF. There is no credible suggestion to the contrary before the Inquiry.
- D32. There was substantial criticism as to the adequacy of the ES as originally submitted with the TWA Order application. That criticism is not accepted by the Applicants but, in any event, it has been overtaken by events with the publication and advertisement of the Supplement.

²¹⁸² Documents APP-10-2 and A-08e-1

²¹⁸³ For a summary of the impact on conservation areas and listed buildings see B-13 page 78 paragraph 4.146 and table 4.7. Individual listed buildings are included in table 4.7 where significant residual impacts remain after mitigation; see also table A.1 in Annex A to revised technical appendix (B-13 page 96).

²¹⁸⁴ B-13 page 89 paragraphs 5.6 and 5.10

- D33. The Supplement was properly advertised and all parties had ample opportunity to respond following the Inspector's ruling that it should be admitted²¹⁸⁶. Only 11 responses were received including the response from English Heritage referred to above²¹⁸⁷. The Applicants' response to the issues raised is set out in Document APP/180 but the following points summarise that response:
- The Canal & River Trust raised concerns about the use of poles on Leeds Bridge. The Applicants have confirmed by letter that this will not happen and the Canal & River Trust have accepted that this satisfies their concerns²¹⁸⁸;
 - Mr Reed (Objector 591) raises a number of concerns as to the adequacy of the assessment in the Supplement. Document APP/180 references where that detail is provided in the Supplement;
 - The Weetwood Residents' Association considers that the Supplement is '*more fit for purpose*' than the original ES assessment but has concerns about the weighting that has been given in the assessment. The question of what weight should be given to a particular factor is a matter for the decision maker in any given case. The concerns raised by Weetwood Residents' Association do not begin to demonstrate that the ES is legally flawed;
 - FWY's suggestion that the Supplement 'flatly contradicts'²¹⁸⁹ the original ES is simply wrong. Its criticisms as to the adequacy of the original ES (which are denied) are no longer relevant to the merits of the case²¹⁹⁰. Its arguments as to the need for archaeological investigation run contrary to the position agreed by West Yorkshire Archaeology Advisory Service (WYAAS)²¹⁹¹. In short, the ES, including the Supplement, provides a clear analysis of the Scheme's heritage impacts. Whilst a handful of objectors maintain that the ES should have contained even more information,

²¹⁸⁵ Document B-13 pages 89 paragraphs 5.8 and 5.10

²¹⁸⁶ Document INSP/102

²¹⁸⁷ See Applicants' response in Document APP/180.

²¹⁸⁸ Letter from Canal & River Trust to DfT dated 11 September 2014

²¹⁸⁹ FWY's 'Immediate Response' paragraph 10

²¹⁹⁰ Ibid paragraph 11

²¹⁹¹ Ibid paragraph 12

particularly with regard to heritage impacts, those conclusions ultimately turn on matters of planning judgment²¹⁹².

- D34. The assertion by SHCA that the Applicants' assessment of the Scheme's impact on South Headingley suffers from a lack of transparency is misconceived. The Scheme's impacts are assessed in detail in the ES²¹⁹³ which has been fully publicised and as the witness for SHCA accepts, she has not been prejudiced in any way in presenting SCHA's case to the Inquiry²¹⁹⁴. There is no basis for concluding that the residents of Hyde Park are more sensitive to the impacts of new development (by virtue of the size of their gardens and their levels of car ownership) than other residents in other parts of Leeds.
- D35. FWY's argument that the listed building applications failed to meet LCC's validation criteria is both wrong and irrelevant. Section 10(2)(b) of the LB&CA Act 1990 as modified by the Transport and Works Applications (Listed Buildings, Conservation Areas and Ancient Monuments Procedure) Regulations 1992 required the current applications to be supported by: '*(b) such other plans, drawings, sections, models, photographs and other materials as are necessary to describe the works which are the subject of the application and which may include—(i) detailed plans, drawings and sections; or (ii) extracts from plans and sections submitted, or to be submitted, with an application under section 6 of the Transport and Works Act 1992; or (iii) (where no such plans, drawings or sections have been prepared at the date of the application) a clear written description of the works proposed to be carried out at or to the building, supported by such other materials as the Applicant is reasonably able to provide*'.

²¹⁹² See eg Ms Lightbody who argued in Document FWY/146 paragraph 1.23 that the assessment of Spenfield House at Document B-13 page 104 should contain more information as to the building's setting and a more detailed assessment as to why the identified setting makes a moderate contribution to the asset's special interest and significance. The Applicants do not accept this or Ms Lightbody's other criticisms. The ES plainly contains enough information to allow an informed judgment to be made

²¹⁹³ See eg with regard to the Scheme's landscape and visual impacts, Document A-08e character area N16 (Hyde Park Corner) at page 179

²¹⁹⁴ Dawn Carey Jones cross examination

- D36. The applications were accompanied by sufficient material to describe the works. The suggestion that the plans were not sufficient and that the applications were treated as if in outline fails to take account of section 10(2)(b)(iii) which expressly contemplates that plans or drawings showing certain details will not have been prepared at the date of the application and provides that in those circumstances a written description can be provided. In any event, the applications have been validated and are before the Secretary of State for determination. It is now far too late to challenge LCC's decision to validate the applications.
- D37. FWY's contention that there cannot be a compelling case in the public interest for the compulsory acquisition of rights to fix OLE to listed buildings until the detailed design of the Scheme is known is misconceived²¹⁹⁵. It is necessary to acquire the rights sought to deliver the Scheme. The fact that some of the rights may not be exercised in due course does not mean that it is unnecessary to acquire them now. In short, it is necessary to acquire the rights sought in order that the Scheme can be delivered according to the Scheme objectives and following the detailed design stage.
- D38. There appears to be no dispute between the Applicants and FWY as to the correct approach to sections 66 and 72 of the LB&CA Act – the Applicants' approach being set out above. FWY fall back on the contention that the Secretary of State does not have enough information to determine the application²¹⁹⁶ (a variation on its validation complaint) but for the reasons set out above that is misconceived.
- D39. FWY's concerns as to the impact on Rose Court Gate Piers are over-stated²¹⁹⁷. There is no basis on which to conclude that the works are likely to result in substantial harm; and it is entirely appropriate to impose a condition limiting the scope of the set-back proposed. Of course it can never be guaranteed that works to a listed building will not result in its total demolition. However,

²¹⁹⁵ Document FWY/159: closing submissions paragraphs 348 to 351

²¹⁹⁶ Document FWY/159: closing submissions paragraph 351

²¹⁹⁷ Document FWY/159: closing submissions paragraph 355

on that basis, if FWY's suggestion that it must be assumed that the works would result in total demolition is correct, this would apply to every listed building application in the country. There is no basis for such an overly cautious approach.

- D40. FWY continue to complain about the adequacy of the original ES heritage assessment²¹⁹⁸. As set out above, that complaint is rejected²¹⁹⁹ but, in any event, is now irrelevant given the submission of the Supplement. The only question now is whether the environmental information before the Inquiry, including the Supplement, is sufficient to enable the Secretary of State to make an informed decision as to the Scheme's likely impacts and it is submitted that it is.
- D41. The information in the ES is plainly sufficient to enable an informed judgment to be made²²⁰⁰. The heritage witness for FWY does not agree with all the judgments made by the Applicants, for example she says that the impact at Headingley Castle would be '*approaching substantial harm*²²⁰¹', ie she agrees it would still be less than substantial for the purposes of the NPPF, but that does not undermine the ES in terms of the adequacy of the information it contains. There is ample information before the Inquiry on which the Scheme's likely impacts can be assessed.
- D42. There would be beneficial and adverse impacts to listed buildings, conservation areas and undesignated heritage assets along the proposed route of NGT. The beneficial impacts are likely to arise from the following:
- Increased longevity of rebuilt listed and unlisted boundary walls in conservation areas.

²¹⁹⁸ Document FWY/159: closing submissions paragraphs 357 to 359

²¹⁹⁹ Notwithstanding FWY's assertions that eg the Applicants should have seen fit to "confess their abject inability to assess the heritage impacts of the project" at closing submissions paragraph 359

²²⁰⁰ With regard to the assets considered by Ms Lightbody see: Spensfield House at Document B-13 page 104 (LBC 030); Headingley Castle at Document B-13 page 126 (LBC 093); Rose Court and Rose Court Piers at Document B-13 page 152 (LBCs 158 and 159)

²²⁰¹ Document OBJ/923/14: Ms Lightbody supplementary proof paragraph 3.53

- Streetscape improvements and urban realm enhancements in the setting of listed buildings and in conservation areas.
 - Enhanced appreciation of the historic environment through recording in advance of demolition of buildings and structures and disturbance of archaeological remains.
 - Longevity of tree cover in conservation areas and in the setting of listed buildings through replacement of ageing tree stock.
- D43. Beneficial effects have to be balanced against adverse effects which are likely to arise from the following:
- Loss of historical value of listed boundary walls and unlisted walls and structures in conservation areas through demolition and reinstatement resulting from new alignments and carriageway widening.
 - Increased clutter and visual intrusion in the setting of listed buildings and in conservation areas resulting from the installation of OLE.
 - Loss of trees and green space in the setting of listed buildings and in conservation areas through new alignments, carriageway widening and off-highway routes.
 - Construction of new NGT stops in front of listed buildings or near positive buildings in conservation areas.
 - Noise and visual intrusion in the setting of listed buildings and conservation areas arising from construction.
 - Introduction of traffic into non-traffic areas in the setting of listed buildings and in conservation areas through off-highway routes.
- D44. Mitigation measures would reduce the number of adverse effects on listed buildings and conservation areas, but some adverse effects would remain, such as the loss of buildings and the effects of OLE equipment. These are called residual effects in the assessment methodology of the historic environment.
- D45. There would be a cumulative impact in conservation areas and on the setting of listed buildings associated with OLE which would be mitigated by the use of wall mounted fixings as much as possible. Given the current level of visual

intrusion within all conservation areas arising from traffic, traffic management and other types of street clutter, the impacts of the introduction of the OLE and wirescape is considered to be low.

- D46. There would be more significant cumulative impacts associated with the demolition of listed boundary structures and unlisted structures within the Headingley and Headingley Hill, Hyde Park and Woodhouse Moor Conservation Areas. The walls would be set back and reinstated as closely as possible to their original condition in accordance with the draft conditions and the CoCP. The residual effect of their demolition is therefore considered not to be significant.
- D47. The cumulative effect of the demolition of other positive buildings and structures in the Headingley and Headingley Hill, Hyde Park and Woodhouse Moor Conservation Areas at Shire Oak Road, Shire Oak Street, the Coach House at the former Leeds Girls' High School, 2 Victoria Road and 6 Wood Lane cannot be mitigated except by architectural recording and will remain as residual effects but the impact on the conservation area is considered to be neutral to only slightly adverse.
- D48. The most significant residual effects are those associated with the construction of the off-highway corridors between Alma Road and 62 Headingley Lane and across Monument Moor and the tree loss in the Far Headingley, Headingley and Headingley Hill, Hyde Park and Woodhouse Moor Park Conservation Areas. These impacts will be mitigated through replanting and landscaping to be incorporated into the townscape and landscape design set out in Volumes 1 and 2 of Urban Design Statement²²⁰², but this mitigation will not take effect until the planting has matured.
- D49. The demolition of the principal and curtilage listed boundary structures would cause harm to their historical value but their architectural value would be mitigated by careful rebuilding. Loss of trees, installation of OLE and new NGT stops have the potential to harm the setting of listed buildings even after

²²⁰² Document A-08k

mitigation. Following the technical guidance to the NPPF, which advises that it is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed, the harm is considered to be less than substantial. In the case of works causing less than substantial harm to designated assets *'this harm should be weighed against the public benefits of the proposal'* ²²⁰³.

- D50. Central Government's objectives for the historic environment apply to all heritage assets including Registered Park and Gardens. Hunslet Cemetery has the potential to be affected from temporary visual intrusion, noise and dust during construction (as all building works have the potential to do) but cannot be considered to cause harm in the meaning of national and local policy.
- D51. The NGT Scheme involves the demolition of properties and boundary walls which are positive features of the Headingley and Headingley Hill, Hyde Park and Woodhouse Moor Conservation Areas. The effects of the demolition of boundary walls would be mitigated through rebuilding but the effects of the demolition of properties will not. However, the properties affected are not important or integral to the character or appearance of the conservation areas. The residual effects of demolition in the conservation areas referred to above would therefore be less than substantial harm in terms of the NPPF definition.
- D52. The mitigation of the tree loss in the Far Headingley, Headingley and Headingley Hill and Hyde Park and Woodhouse Moor Conservation Areas through replanting would not take proper effect until well into the operation phase of NGT. The residual effect must be considered to be important in the short term but reducing as the replacement trees mature with the possibility of a net gain for the corridors in the long term. The effect of tree replacement would cause less than substantial harm to the conservation areas mentioned above as a result of the design and control measures of the Scheme enshrined in the Urban Design Statement and Access²²⁰⁴.

²²⁰³ Document E-4-21: NPPF Paragraph 134

²²⁰⁴ Document A-08k

- D53. The construction of a new road through an existing green space corridor and public park which make a positive contribution to the Headingley Conservation Area and the Headingley Hill, Hyde Park and Woodhouse Moor Conservation Areas would be both damaging to their appearance and character and would not be in keeping with the existing form, pattern and layout of the historic landscapes. However, the adverse impact on the conservation areas would not reach the high test for substantial harm required by the NPPF and therefore the harm would be less than substantial.
- D54. The effects of demolition, tree felling and the off-road routes would occur in combination in the Far Headingley, Headingley and Headingley Hill and Hyde Park and Woodhouse Moor Conservation Areas and the cumulative impact of NGT on those areas must be assessed. The impact of the Scheme would be particularly acute where there is tree loss and permanent change due to demolition and severance of spaces in the Headingley and Headingley Hill and Hyde Park and Woodhouse Moor Conservation Areas as a result of the off-road routes. However, the impact on the significance of each heritage assets (ie the conservation area) *taken as a whole* would not reach the high test of substantial harm in the NPPF.
- D55. In respect of the demolition of 14 and 15 Eldon Terrace, both non-designated heritage assets, the NPPF requires a balanced judgment '*having regard to the scale of any harm or loss and the significance of the asset*'. Paragraph 135 of the NPPF applies equally to non-designated archaeological remains as well as ARC07 of the UDP. Excavation and ground disturbance has the potential for impact on a number of areas of local archaeological value but all impacts can be mitigated through preservation by record.
- D56. Taking into account the compensating enhancements of NGT to the historic environment, although the NGT will cause harm to several heritage assets, this harm would be less than substantial. In cases where less than substantial harm to a designated asset is anticipated, the NPPF requires that this harm should be weighed against the public benefits of the proposal.

D57. The likely location, date and significance of likely archaeological remains are set out in the ES²²⁰⁵. This information is based upon standard Desk Based assessment methodology. This has been used to predict the likely impact and is standard practice. The results of this assessment are set out in the Historic Environment chapter of the Environmental Statement²²⁰⁶. The ES concludes that '*there are no significant effects on buried archaeology*'²²⁰⁷. The WYAAS rightly considers that appropriate mitigation measures can be secured by condition and has agreed the wording of the suggested condition²²⁰⁸.

Impacts of attaching overhead line equipment to buildings

D58. OLE fixings will be unobtrusive²²⁰⁹ (and are commonplace in many continental European cities and in the UK - Manchester, Nottingham, Sheffield and Edinburgh are examples). Their precise locations are to be finalised pursuant to conditions essentially identical to those previously imposed by the Secretary of State²²¹⁰.

The case for First West Yorkshire

D59. A large number of designated heritage assets would be affected by the LTVS proposals and there would be a series of direct and indirect impacts resulting from the installation of building fixings, the demolition of curtilage listed structures and walls, and the demolition and partial demolition of buildings and structures in conservation areas. The proposals would have a potential widespread impact upon the setting of the listed buildings and would affect the character and appearance of the conservation areas through which the LTVS would travel.

D60. The LB&CA Act and the NPPF make clear that development can affect the significance of a listed building or its setting and that decision takers must pay

²²⁰⁵ See Document A-08c-7 Chapter 3 (baseline).

²²⁰⁶ Document A-08c-7 Chapter 4 (impact).

²²⁰⁷ Document A-08c-7 at page 60.

²²⁰⁸ See WYAAS letter dated 10 April 2014 at Appendix A of Document REB-4 OBJ 1719

²²⁰⁹ See Document B-13 page 42; see also Document G-4-52 for NGT information paper A3: Land & Property - Building Fixings and Overhead Line Equipment; see also Document A-08k *Urban Design and Access Statement* at page 50

special regard to the desirability of preserving these factors. The LTVS has not been supported by an assessment of the impact of the proposals on the setting and significance of the assets affected and that there was no evidence of the English Heritage setting guidance having been applied when the applications were made.

- D61. The City Council's own list of validation criteria for LBC applications was not complied with here. In particular, there were no elevations showing the proposed works in relation to any features that are proposed to be altered, including decorative details. There is insufficient description and no analysis of the *'impact on the special character of the listed building or structure, its setting and the setting of adjacent listed buildings'*.
- D62. Nor do the listed building applications comply with Section 10(2)(b) of the LB&CA Act 1990 as modified by the 1992 Regulations, because they fail to contain *'such other plans, drawings, sections, models, photographs and other materials as are necessary to describe the works which are the subject of the application'*. The applications were treated as if they were outline applications, even though there is no such thing as an outline LBC application.
- D63. No specific details were given as to the design or materials of fixings or wires of the OLE that would attach to each of the listed buildings, nor of the poles that would support them. No locations were shown for the siting of the fixings or the poles. No structural or internal survey was conducted in support of the applications. No information was given about the loads or tension on the wires, nor as to how they would be maintained, what risk they posed to the building, and how they would affect maintenance of the building. No or insufficient information was provided on the settings of the listed buildings and conservation areas and which elements of the settings contribute to the assets' significance.
- D64. The Order applied for seeks to compulsorily acquire rights to affix OLE to these and other buildings and yet there is no evidence that to do so is necessary or

²²¹⁰ See eg Document APP/195: Manchester City Crossing, 2013.

even most appropriate in any given instance, merely that it was 'preferable' to poles in general terms²²¹¹. There can be no compelling case in the public interest to authorise compulsory acquisition of fixing rights that are merely 'preferred' if they are not essential to the project, particularly where other alternatives are available.

- D65. The Urban Design and Access Statement has a variety of illustrative designs for traction poles and states that they will be combined with lighting columns where possible. It states that the current assumptions were that the height would be above 5.8m²²¹². The actual designs have not been specified and in no specific location is it clear what lighting columns and/or poles will be introduced.
- D66. The draft Order and the applications are silent as to the minimum and maximum distances between poles, their girth/thickness and maximum/minimum height and numbers. They would authorise any number of poles of any design to be installed.
- D67. Reliance was placed by the Applicants on the Manchester Metrolink extension decision where it appears that the Secretary of State may have endorsed an approach that allowed the detailed design of overhead cable fixings to be determined after a TWA Order and LBC were granted. The decision letter and Inspector's report are not conclusive on this but, if it was the basis for the decision, then it is respectfully submitted that it was wrong in law and the Secretaries of State must not repeat the same error.
- D68. There were, however, differences in that case including details about the number of fixings to specific buildings and the materials used, and many of the 19 buildings had apparently already had fixings attached with no ill-effects. In this case, the findings are for trolleys rather than trams, so there

²²¹¹ Cross examination of Mr Caten by Mr Graham on 11 September 2014; Cross examination of Mr Walker by Mr Jones on 15 July 2014: '*not an absolute necessity but it is a preference*', said Mr Walker

²²¹² Document A-08k paragraph 2.8.10

would be twice as many wires. There was also no evidence in this case about whether poles would cause less impact to the listed buildings than OLE.

- D69. In addition to the failure to detail the works relating to wires and demolitions, there are also fundamental failings in the evidence in terms of a failure to investigate, assess and provide information on the significance and settings of the affected listed buildings. The Heritage Chapter of the ES and its Technical Appendix wholly failed to analyse settings of listed buildings, the character and setting of conservation areas or, in many cases, to consider individual buildings separately at all. The impact of the LTVS on the setting and significance of heritage assets is a key consideration and should therefore have been addressed in the original ES.
- D70. Annex A of the Supplement is entitled 'Listed Buildings within the Study Area'. For each listed building within the study area there is now a description of the listed building and a judgment on the value it holds (based on the English Heritage guidance 'Conservation Principles'). A brief description of the setting of each listed building has been added, together with a judgment on whether the setting makes a contribution to the special interest or significance of the asset.
- D71. However, in relation to each asset only a very short description of setting has been added which does not explain or assess those elements of setting that contribute to the significance of the asset. Instead, in a large number of cases, it makes a judgment as to whether the setting in general contributes to the significance or special interest of the listed building.
- D72. Heritage setting is a key issue, particularly following the Court of Appeal's judgment on the Barnwell Manor²²¹³ case in February 2014 which restated and clarified the law on heritage planning. The impacts of the judgment are wide ranging. Most notably the Court of Appeal found that:

²²¹³ Document L-APP-1

- Parliament's intention in enacting Section 66(1) of LB&CA Act was that decision makers should give '*considerable importance and weight*' to the desirability of preserving the setting of listed buildings when carrying out the balancing exercise.
- Even where harm to heritage assets is '*less than substantial*', the balancing exercise required by national policy cannot ignore the overarching statutory duty imposed by Section 66(1).

- D73. In order to address this, it is critical that the significance of affected heritage assets is clearly assessed, their settings are defined and their contribution to the significance explained. How the significance of listed buildings is likely to be affected by proposed development should be clearly identified and for each asset it should be confirmed whether the likely impact is substantial, less than substantial, neutral or an enhancement. It is then the responsibility of those dealing with planning matters to conclude whether the public benefits of the development outweigh the harm, having given '*considerable importance and weight*' to the statutory duty of the LB&CA Act and heritage considerations.
- D74. The NPPF provides advice on how proposals can minimise harm to the significance of a heritage asset. It confirms that a clear understanding of the significance of a heritage asset and its setting is necessary to develop proposals which avoid or minimise harm. It also states that early appraisals, a conservation plan or targeted specialist investigation can help to identify constraints and opportunities arising from the asset at an early stage. Such studies can reveal alternative development options, for example more sensitive designs or different orientations, that will deliver public benefits in a more sustainable and appropriate way.
- D75. There is no evidence or explanation in the Supplement of alternative proposals having been revised in response to heritage significance and setting. This was an issue that was raised in the Forge Fields High Court judgment and paragraph 61 of the judgment states the following: '*As the parties agree, this was a case in which possible alternative sites for the development had to be considered.....If there is a need for development of the kind proposed, which in*

this case there was, but the development would cause harm to heritage assets, which in this case it would, the possibility of the development being undertaken on an alternative site on which that harm can be avoided altogether will add force to the statutory presumption in favour of preservation. Indeed, the presumption itself implies the need for suitably rigorous assessment of potential alternatives.'

- D76. The ES does not assess the cumulative impacts on heritage assets from noise, vibration, air pollution, and visual intrusion. It did not consider the cumulative impacts on the settings of listed buildings of harm to other, overlapping settings, nor the cumulative harms to all the heritage assets, designated or otherwise.
- D77. The requirements for information have been considered by FWW in greater detail in relation to the NGT proposals affecting Spenfield House, Headingley Castle and its associated Lodge and Rose Court as examples of how the assessments should have been carried out. In relation to these assets, a brief assessment of significance and setting was undertaken, based on a site visit/visual inspection, historic map regression and other research.
- D78. The description of the significance and setting of the Grade II* listed Spenfield House and the associated listed buildings provided by the Applicants does not provide sufficient information to enable the significance of these assets to be fully appreciated and understood. Neither have the settings and how these contribute to the significance of the listed buildings been explained. The impact of the proposals has been underplayed by not considering all of the works that will cumulatively affect these assets. No structural assessment of the wall proposed for demolition and relocation has been undertaken and it is not, therefore, known whether any material could be salvaged and re-used. However, this is used as a reason for the reduction in the magnitude of impact.
- D79. Turning to Headingley Castle, the application of the Supplement methodology set out at Table 2.2 would give a high magnitude of impact arising from the proposed works on the significance of the Castle and its setting. The proposed

works would result in a significant change to baseline conditions and would cause harm that breaches the duty under s66 of LB&CA Act because the setting of the building would not be preserved. The cumulative effect of these works would constitute comprehensive change to elements of the setting of Headingley Castle that contribute to its significance and these works would harm the significance of the asset. The extent of harm would be approaching '*substantial harm*'.

- D80. In relation to the original lodge serving Headingley Castle, the proposed off-line highway route would further divorce and sever the Grade II listed lodge from Headingley Castle. As a result, the significance of the lodge as a residence with functional associations with Headingley Castle would be harmed and the legibility of this former relationship would be reduced. Demolition of part of the flanking wall would reduce the continuity of the boundary treatment to Headingley Lane and reduce the enclosure and privacy this provides. Additional visual effects would arise from the creation of NGT stops and the construction of a substation and compound to the north west of the building, further surrounding the building by development.
- D81. The impact of these proposals on the significance and setting of the Lodge House has been markedly underestimated. By applying the methodology set out at Table 2.2, the magnitude of impact should be moderate adverse as opposed to low adverse. There would be a moderate change to baseline conditions and this change is such that the setting of the Lodge House would be noticeably different and the value (significance) of the asset would be harmed.
- D82. In relation to the '*relocation*' of the Grade II listed gate piers at Rose Court, the heritage witness for the Applicants confirmed that, until the gate piers were taken down, it could not be known how much of the original structure could be salvaged. There has been no structural assessment to establish the condition of the piers and whether they are capable of relocation and no method statement has been submitted to confirm how this process could be managed. It is therefore possible that no material could be salvageable,

negative impacts would therefore not be mitigated and the proposals could result in total loss of significance of the Grade II listed gate piers. As a result, paragraph 133 of the NPPF would be engaged.

- D83. The impact of these works has been underestimated in the Supplement. The magnitude of impact of the construction phase of the development during which the piers would be demolished/removed is classed as '*moderate adverse*'. Applying the methodology at Table 2.2, this impact should be '*high adverse*'. Demolition or taking down of the gate piers would result in a significant change to the baseline conditions and would amount to change that totally alters or destroys the asset. The magnitude of impact for the operation phase should also be '*high adverse*' as there is no guarantee that any of the original material of the gate piers could be salvaged.
- D84. The impact of the works on the listed house at Rose Court is classified as '*moderate adverse*', reduced to '*minor adverse*' as a result of mitigation measures. The judgment of '*moderate adverse*' impact is reasonable, but the extent and nature of this moderate adverse impact or harm is not explained. It is not made clear that the set back of the wall would affect the former garden and one of the few remaining preserved elements of its setting. The effect of bringing the wall and piers closer to the listed building and how site levels would be negotiated has not been explained. There is no section drawing submitted with the application for LBC or included in an Advice Note prepared on the works. It has not been demonstrated that the cumulative effect of the demolition and set back of the wall and gate piers and the resultant loss of setting, the adverse impact arising from the OLE and associated infrastructure, together with the loss of trees, could be mitigated by the measures set out in Annex A of the Supplement to the extent that the residual impact would be '*minor adverse*'.
- D85. Having considered in more detail the significance and setting of a number of designated heritage assets it is clear that the Supplement, whilst providing additional information, still does not provide a thorough or clear understanding of those assets or the elements of setting that contribute to their significance.

A range of harmful effects have been identified and in some instances these effects are mitigated by a series of measures that are not specific and cannot be guaranteed.

- D86. As a result, in these cases, the level of harm has been underestimated and it has also been demonstrated that there are circumstances where the cumulative impact of a number of effects has not been sufficiently considered or assessed. The assessment work has not, therefore, been carried out in an appropriately thorough manner or undertaken in accordance with best practice.
- D87. On any view, there will be significant harm to a very large number of designated heritage assets. The Supplement now recognises significant adverse effects on 15 heritage assets²²¹⁴. It was accepted in cross-examination that there was '*major adverse*' harm to Headingley Castle applying the ES methodology. The Applicants' heritage witness also accepted that the impacts on Ivy Lodge and Headingley Land's property were '*major adverse*' overall. He disagreed with the appraisal of the ES that the City Centre Conservation Area had only medium value and ascribed to it a high value. He accepted that there would be an adverse impact on the West Park Conservation Area and '*moderate adverse*' effects on Headingley Hill Conservation Area and to the setting of Broderick Court near the turnaround facility behind the Arndale Centre.
- D88. Photomontages were produced that were aimed to downplay the extent of visual clutter, to minimise the intrusiveness of the overhead wires and that exaggerated the benefits of tree planting. For example, the photomontage showing behind the Arndale Centre does not show overhead wires continuing into the middle distance, nor how they are affixed to the traction poles. The wires appear too high and do not marry up with the trolley vehicles that are depicted²²¹⁵.

²²¹⁴ Document B-13 page 76 paragraphs 4.126 to 4.127

²²¹⁵ Document A-08f page 242

- D89. In the photomontage for Headingley Hill, wires are not shown connecting to many of the traction poles. It also depicts new trolleybus shelters in a neutral battleship grey colour, when the oral evidence was that in fact the proposal was to make them as visible as possible. The Monument Moor photomontage does not show all the wires that would be required, particularly showing none connecting to the vehicle on the right of the frame. The Cookridge Street photomontage does not show all the necessary overhead wires, which appear to stop abruptly in the middle distance for the right-hand trolley vehicle²²¹⁶.
- D90. At Hyde Park Corner, the demolition of Victorian buildings is not shown and instead the photomontage focuses on the removal of 3 ugly advertising billboards which are situated on the Applicants' own land and whose removal is in no way contingent upon the Project going ahead, or indeed relevant to the trolleybus infrastructure on the highway²²¹⁷.
- D91. It is clear that the photomontages were produced to show a 'best case' scenario wherein the new infrastructure would be as unobtrusive as they could possibly be depicted, trees disguising the ugly poles and street furniture being reduced beyond what was, in fact, likely to be required. No photomontages were produced showing the City Museum or the Headrow, which in the opinion of the Applicants' heritage witness would be where the most serious harm to streetscape would be done. Other witnesses pointed out views where there would be high levels of harm, such as at Belle Isle Circus or views across to the Parkinson Building in Headingley, that were not visualised²²¹⁸.
Photographic viewpoints often appeared to have been taken to avoid areas where mature trees would be removed. No photomontages show double cantilever traction poles or fixings to listed buildings²²¹⁹.

²²¹⁶ Document B-7, photomontages, page 29.

²²¹⁷ Evidence in Chief of Ms Dawn Carey Jones; Document B-7-2, photomontages pages 19 to 20

²²¹⁸ eg Cross Examination of Ms Claire Randall

²²¹⁹ Cross Examination by Mr Tony Ray, 27 June 2014; Cross examination by Mr Douglas Kemp on 27 June 2014 [referring to Document APP-10-2, page 14]; Cross Examination by Mr Jones on 15 July 2014

- D92. Without specific designs showing what the wirescape would look like, what fixings are proposed and where traction poles would be located and without surveys to provide security that the statutorily protected structures would not be put at risk, it is impossible to evaluate how much harm there would be to the buildings or conservation areas concerned and to their settings, in order to come to a balancing judgment about whether to grant consent for the LBC or CAC applications or an Order under the TWA 1992. The extent of harm to heritage assets is a material consideration and if it is unknown and unknowable then the Secretaries of State cannot lawfully grant consent.
- D93. Not enough information has been provided to enable an assessment of the impact of the proposals on the special architectural or historic interest of the affected listed buildings to be carried out and the Applicants have not demonstrated that the proposals would comply with s66 of the LB&CA Act.
- D94. The Applicants have also not demonstrated that the proposals would preserve or enhance the character or appearance of the relevant conservation areas or accord with s72 of the LB&CA Act.
- D95. The requirements of paragraph 128 of the NPPF have not been met and the significance of the heritage assets affected by the proposals, including any contribution made by their setting, has not been assessed. Through lack of assessment and detailed information, the level of harm caused by the proposals in NPPF terms cannot be quantified and a judgment on whether the public benefits generated by the Scheme outweigh this harm cannot be made.
- D96. When applying the duties under s66 and s72 of the LB&CA Act there is always a presumption against granting a consent or an Order that would fail to preserve the asset and its setting. The requirements of paragraph 128 of the NPPF have not been met and the significance of the heritage assets affected by the proposals, including any contributions made by their setting, has not been properly assessed.
- D97. Accordingly, as there is inadequate information to prove that the asset would be preserved, the applications must be refused on a precautionary basis

unless there is some compelling necessity that outweighs the considerable importance and weight that is attached to its preservation. This is not a case where there is evidence about the design of the specific works concerned that can be assessed, but rather a dispute about the implications of the proposals for the heritage assets and the degree to which they would cause harm. Accordingly, this is not a question of planning judgment but of a basic lack of evidence in support of the applications which makes it impossible to form a judgment.

The case for the North West Leeds Transport Forum

- D98. Paragraph 65 of the NPPF states that '*Local Planning Authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design (unless the concern relates to a designated heritage asset and the impact would cause material harm to the asset or its setting which would not be outweighed by the proposal's economic, social and environmental benefits)*'.
- D99. Conservation areas are designated heritage assets and there are 6 almost continuously along the A660 route from the Lawnswood roundabout to Leeds University. Listed buildings and structures, of which there are 58 along the same A660 route, are also designated heritage assets and all of these would, according to the Supplement, suffer from '*adverse residual effects*'. The LTVS would cause material harm to all of the above assets or to their setting and the cumulative impact of that harm would not be outweighed by the benefits of the Scheme.
- D100. The summary of the Weetwood Conservation Area Appraisal and Management Plan (2010) states that one of the key characteristics of the area is the '*surviving elements of the landscaped grounds of the mansions, in particular the boundary belts and mature trees form a dominant element of the special character*'. Although the ES²²²⁰ makes reference to '*landscaped grounds with*

²²²⁰ Document A-08c-7 paragraph 3.44

lodge houses' as 'focal points' on the Otley Road, the Supplement²²²¹ inexplicably concludes that the residual impact is only 'minor adverse/not significant'. The impact of setting back boundary walls and tree loss to Spenfield (Grade II) and the removal of trees in the central reservation opposite the entrance to Weetwood Hall (Grade II*) would be 'moderate adverse' and would affect the setting and special character of the conservation area.*

- D101. The Far Headingley Conservation Area Appraisal and Management Plan (2008) states that *'Trees are an important part of the distinctive character of the area'* and *'Tree lined roads are a defining feature'*²²²². In the NGT Main Statement²²²³ a description of the impact of loss of green space and trees within conservation areas is followed by the conclusion that it would have a *'moderate adverse effect'* on Otley Road between St Chad's Drive and St Chad's Parish Centre.
- D102. However, the NGT non-technical summary²²²⁴ recognises that Otley Road (St Chad's) is among the *'character areas that have significant negative residual effects..... where there is not the opportunity to provide sufficient mitigation measures'* and yet, the Supplement shows the residual effect as *'minor adverse/not significant'*²²²⁵. It is submitted that the impact would be major because of the significance of the street scene to the special character of the conservation area and the particular significance of the mature trees.
- D103. The Headingley Hill, Hyde Park and Woodhouse Moor Conservation Area Appraisal and Management Plan (2012) states on page 10 that *'The streetscape of Headingley Lane is central to the character of the area'*, and on page 17 that *'Any proposal under the NGT scheme, or similar Public Transport schemes, should respect the particular character of the streetscape of*

²²²¹ Document B-13 Table 4.7

²²²² Document D-5-6: Significant trees are identified on map page 8

²²²³ Document A-08b paragraph 7.159

²²²⁴ Document A-08a paragraph 8.57

²²²⁵ Document B-13 Table 4.7

Headingley Lane, notably stone boundary walls, and take advantage of opportunities for enhancements’.

- D104. Document A-08a identifies the stretch from Shaw Lane to Hyde Park Corner (off-highway section and Headingley Lane) as also being among the ‘*character areas that have significant negative residual effects..... where there is not the opportunity to provide sufficient mitigation measures there remains significant negative effects on the landscape/townscape character*’ (significant being either moderate or major). It is submitted that there would be a significant impact on all the listed buildings and structures and, since the streetscape of Headingley Lane is central to the special character of the conservation area, the cumulative impact would be major.
- D105. Paragraph 128 of the NPPF requires that, where a development includes a heritage asset with archaeological interest, ‘*the developers should submit an appropriate desk based assessment and, where necessary, a field evaluation*’. However, paragraphs 2.26 and 2.29 of the Heritage chapter of the ES acknowledge that no fieldwork has taken place and that the impacts on the heritage assets are uncertain. No pre-determination evaluation has taken place on any archaeological site, despite the sites being referred to as ‘significant’ by the WYAAS.

The case for the South Headingley Community Association

- D106. The Applicants have at no point been transparent about what the effects of the Scheme would be at Hyde Park Corner. The visual relationship between the tight busy streetscape of Hyde Park Corner and the open, green Woodhouse Moor is special, as agreed by the Applicants’ heritage witness during cross examination. Hyde Park Corner is the gateway between Headingley and the City Centre and a nodal point between Hyde Park and Woodhouse.
- D107. Hyde Park Corner is geographically at the centre of the Headingley Hill, Hyde Park and Woodhouse Moor Conservation Area. The Appraisal²²²⁶ for this conservation area says that the Hyde Park character area is focused around

²²²⁶ Document D-5-3

the local centre of Hyde Park Corner and also describes Hyde Park Corner as the heart of the area.

- D108. The Applicants' choice of view for photomontages at Hyde Park Corner is of advertising hoardings in front of St Augustine's Church on land owned by the Applicants. The Applicants say that NGT will improve Hyde Park Corner by removing these hoardings to get a better view of the church, however the Applicants could have removed these at any time over the last few decades seeing as they own them.
- D109. The choice of view ignores the site of the demolitions at Hyde Park Corner which is where the major visual and heritage impacts of the Scheme would be. It is here where it is proposed to make the road up to twice as wide, causing irreparable damage to the tight streetscape and funnelling effect of Hyde Park Corner before it opens out onto Woodhouse Moor. To choose this view as their only photomontage of effects at Hyde Park Corner is disingenuous.
- D110. These Hyde Park Corner demolitions are the subject of CAC applications CAC015 (Numbers 27-29 Headingley Lane); CAC016 (Number 25a Headingley Lane/2 Victoria Road); and CAC017 (Numbers 11-25 Headingley Lane). The buildings the subject of the CAC017 application for demolition are Victorian, having been constructed between 1891 and 1894, as shown by census evidence submitted by SHCA in response to the Supplement. The Applicants have repeatedly referred to them in written and oral evidence as early twentieth century, or modern or having modern modifications. As shown in photographic evidence the buildings are almost exactly the same as they were in the 1930s including detailing.
- D111. CAC016 and CAC017 misquote the Conservation Area Appraisal (CAA), which was adopted in May 2012. They say the appraisal says the buildings which are the subject of these applications '*are also negative inclusions within the Conservation Area*' whereas in fact the appraisal, on page 20, shows the buildings to be positive additions to the conservation area. They fit into three

of the CAA's six categories²²²⁷ for what may constitute a positive contribution to the conservation area, only needing to fit into one to be considered positive. To misquote the CAA to such an extent prejudices the general public in their ability to be able to respond to the applications properly.

- D112. Applications CAC015, CAC016 and CAC017 do not list all the buildings within 50m of the demolition sites although they purport to do so. The sections about consultation in these applications contains erroneous information and are error strewn throughout.
- D113. Information about what would happen to the leftover space after the road widening and construction of the trolleybus stop at Hyde Park Corner (if the buildings are demolished) is vague. On the Design Freeze 7 landscape plan for Hyde Park Corner it says '*Regeneration Opportunity. Potential future building plot to repair urban grain*' but the plan shows a grassed area with trees. It is likely that the 'leftover' space would not be the site of '*urban realm improvements*' or '*greenspace*' for long but would be sold for development.
- D114. The Applicants' heritage witness said during cross examination²²²⁸ that he thought that, in the immediate term, it would be a landscaping scheme to give some public realm back to Hyde Park Corner, but that it may be redeveloped in future. The ES says that the site may be redeveloped. If the buildings here are demolished and the road is widened as proposed, the streetscape can never be restored.
- D115. Before contemplating granting consent to demolish these positive additions to the conservation area it should be clear what would replace them. There should be detailed information about landscaping, or detailed information about what would be built there instead but to say there will be landscaping there for an unspecified period of time before development will take place if

²²²⁷ The three they fit into are: Buildings which provide evidence of the area's history and development; Buildings with local historical associations; Groups of buildings which together make a positive contribution to the streetscape, Page 13 of Document D-5-3-the CAA

²²²⁸ Document OBJ/1641 PoE3: Appendix SHCA 37

there is a market interest is unacceptable and a decision should not be made without detailed information.

- D116. All the LBC and CAC applications should be resubmitted with all the mistakes corrected and missing information added and the public given a few weeks to respond.

The case for the Drummond and Churchwood Residents' Association

- D117. The ES is not fit for purpose. There has not been enough detailed or accurate evidence put before the Inquiry by the Applicants about the impact on environmental resources including heritage assets, the landscape/streetscape, and the green environment for a proper evaluation of significance and impact to be made.
- D118. The unacceptable nature of the work is exemplified by the misnaming of roads, the variable counting and inadequate descriptions of conservation areas and listed buildings, inaccurate and inconsistent information used in evaluations, the failure to apply an appropriate methodology when setting the baseline values used for evaluation, the proper measurement of cumulative impact, the lack of understanding of the importance of 'setting', opaque descriptions and costing of mitigation schemes, the failure to carry out any predetermination work relating to the known archaeological sites in proximity to the route giving a financial hostage to fortune, and so forth.
- D119. Most notable is the recognition by the Applicants, after evidence giving and cross examination, that information on large chunks of the heritage assets of the City had not been included in the original Historic Environment Chapter of the ES. This resulted in the hasty production of an additional and still inaccurate 370 plus page document to compensate for this omission. All this is unacceptable for such a costly and impactful scheme.

The case for the A660 Joint Council

- D120. The trolleybus system will do very serious damage to the townscape especially in sensitive areas. It is planned to run through a number of conservation areas along the northern route. The necessity for the OLE will do immense

damage to the townscape as will the necessary felling of many healthy mature trees. The Applicants claim that replacement trees will be planted but these will take many years to come to maturity.

- D121. One of the Applicants' witnesses expressed the opinion that some people would find the wires an attractive feature. We have yet to meet anyone else who holds that opinion and comments about the unsightliness of the OLE have been very common in the written representations.

The case for Claire Randall

- D122. Heritage matters are a significant part of the impacts of the proposed Scheme and the conclusions reached on this, from the evidence presented, is that the impacts were largely downplayed and that the cumulative effect was ignored.
- D123. For instance the proposals for road widening on Headingley Hill would change the character of the area to its detriment forever. This would also apply to all the consecutive conservation areas along the northern route.
- D124. In addition to this, in some cases it is still not clear how far it is proposed to move a wall, as was demonstrated in the cross examination of the Applicants' heritage and landscape witnesses, who gave different statements on how much the gate piers of Rose Court would be required to be moved. Somewhere between 2 and 5m is not sufficient clarity or exactness. With respect to these gate piers it has also been established that, should they be damaged extensively, they might need to be replaced in their entirety and would lose their authenticity.
- D125. The loss of proportion of the space in front of Rose Court is also something that has not been satisfactorily addressed. Proportion is a quintessential aspect of classical architecture. Rose Court mansion is built in the classical style and the distance from Headingley Lane would have been a consciously considered part of the spatial relation between the two. The narrowing of this space would do much more than affect the generosity of space, but would fundamentally alter the proportions and the ratio of the dimensions of the space. This is a mathematical fact. In addition, a loss of 5m would almost

certainly affect the ability of the forecourt space to function as originally intended for turning a horse drawn vehicle, and the gradient would be adversely affected by being increased.

D126. These are clearly significant impacts. However, the Applicants insist they would not be, although this cannot be fully assessed if the actual distances involved are not accurately stated. This is the most obvious example of the shortcomings of the considerations of heritage impacts, of which there are many, and which are mostly downplayed. The impacts would change the conservation areas for ever.

D127. Furthermore, the Scheme, if implemented would be expected to conform to the plans as submitted to the Inquiry. Again, this cannot be done if the exact measurements are not known. It is the case that many important aspects of the proposals would be dealt with later in the design process. Some of this may be unavoidable, but too much is left unexplained, or unattended to, by the Applicants.

The case for the other Objectors

D128. Other parties objecting on specific heritage grounds include the following: Headingley Castle Management Ltd, Headingley Land Developers, South Headingley Community Association, Topland Ridgeway, Morley House Trust, Leeds and Yorkshire Housing Association, Friends of Woodhouse Moor and the North Hyde Park Neighbourhood Association.

D129. These objections include those already set out in the heritage case put by FWY and the others summarised above. In particular, they also refer to the adequacy of the ES Heritage Chapter, citing a failure to estimate properly the impact of the proposals on heritage assets, a failure properly to take account of the cumulative effects, a failure to follow recommended methods and procedures for assessing the significance of setting and the contribution it makes to a listed building and similar criticisms on the assessment of the qualities of the conservation areas and the impact of the proposals on these qualities.

- D130. Concerns are also raised about the submission of a document, at a late stage, that seeks to address some of the criticisms made during the cross-examination of the Applicants' heritage witness. It is submitted that the document nevertheless fails to achieve this aim and only highlights the lack of a proper assessment in the first instance.
- D131. The objectors also point to a lack of information, citing the facts that there have been no structural surveys undertaken, no detailed information supplied on the location of building fixings and no information on the positions of poles or gantries.
- D132. They consider that the loss of trees throughout the conservation areas is not only a landscape issue; it is also an important factor in contributing to the character and appearance of these areas. They agree with the assessment of FWY that the mitigation measures proposed cannot be considered meaningful, as the extent to which the suggested works could actually be carried out has not been established.

ASSISTANT INSPECTOR'S CONCLUSIONS

The numbers in square brackets [] in this section are references to previous paragraphs in this Appendix upon which these conclusions are based.

Adequacy of the ES in respect of heritage matters

- D133. The Supplement is not part of the original ES and the ruling by the Lead Inspector made clear that it was not to be regarded as such, but was admitted only to give more information on the heritage assets within the areas that would be affected by the application proposals. It does not, therefore, contribute to the original adequacy of the Heritage chapter, although the information it provides has been considered as part of the background to the proposals.
- D134. The objectors consider that the Heritage chapter of the ES is inadequate as it does not provide the information that is required to allow a decision on the LBC and CAC applications to be made. They submit that it would have been possible to provide more detailed assessments to inform the decision making process. **[D69, D76, D92, D93, D97]** Although the Applicants agree that there is no finalised design as yet, they consider that all reasonable detail presently available has been provided. **[D28, D32, D36, D40, D41]**
- D135. The methodology by which the effects of the proposals and their significance on the historic environment are assessed are set out in section 2 of the ES Historic Environment chapter and subsequently applied throughout the document. This has been carried forward and expanded upon in the Supplement to it. The methodology is intended to be a tool that allows a consistent and legible evaluation of the effects of the proposals to be undertaken, to ensure that all the relevant factors are assessed in a uniform manner.
- D136. However, the terminology varies throughout the documents and different levels of impact are described in conflicting ways, both here and in the tables attached to the listed building applications which seem to relate back to the ES Heritage chapter. For instance, the residual effects in the tables now included

in Annex A of the Supplement range from neutral, through minor adverse, to moderate adverse (significant). In the tables attached to the LBC and CAC applications describing the impacts of the proposals on the heritage assets (where included), the significance of effects after mitigation (residual effect in the ES) range from slight beneficial, through neutral, to slight adverse.

- D137. In the original Table 7.9 'Summary of Historic Environment Effects' there are only 2 grades of residual effect – '*significant*' or '*not significant*' – but there is no explanation of why, in some cases a '*moderate, adverse, permanent*' effect is classed as '*not significant*' in some cases and '*significant*' in others. This table has been replaced in the Supplement and most, but not all, of these anomalies have now been adjusted.
- D138. However, how the assessments on the contribution made by the settings of the listed buildings to their architectural and historic significance have been reached is not altogether clear. The extent of the setting and the contribution made by it to the significance of the heritage asset lacks detail in some cases and the reasons for the conclusions drawn are not well explained. Without this detail, the assessment of the level of impact on the setting has not been demonstrated to be sound. **[D85]**
- D139. Similarly, how the conclusions on the changes brought about by the proposed mitigation measures have been reached are also not analysed or explained. These are, to a certain extent, subjective judgments but, in the absence of a finalised and detailed scheme, the information available to support any such conclusions is necessarily limited. **[D92, D93]**
- D140. In respect of the need to consider alternatives, the objectors consider that, in terms of the specific route, there would be alternatives that would have less impact than that shown in Design Freeze 7, which is that considered by the Inquiry. However, the fact that there have been several iterations of the routes demonstrates that consideration has been given to different solutions, even though others may not believe that the best option has been chosen.

- D141. It is also the case that even though the Supplement includes significantly more information than the original ES and reaches some different findings on the residual impacts, the Applicants have made no alterations to their overall conclusions that the extent of the harm caused would be outweighed by public benefits. **[D75]**
- D142. However, although I consider that, in some instances, the conclusions drawn by the heritage section of the ES are questionable, in my opinion it is the lack of a detailed design for the Scheme that has caused the difficulties in assessing the impact of the proposals and has led to the lack of explanation of how, in particular, the effects on the settings of the listed buildings have been assessed. **[D69, D71, D85, D96]**
- D143. If it is accepted that the less stringent requirements for the submission of detailed information on the Scheme as set out in the 1992 Regulations have been met, the Heritage chapter would not be inadequate in terms of the criteria set by Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.
- D144. Nevertheless, it would have been possible to carry out structural surveys of the most sensitive buildings where OLE fixings are proposed and of those listed buildings where repositioning is envisaged. It would also have been possible to produce elevations and plans where appropriate, even if only for illustrative purposes pending a final design, to allow a better understanding of the impact of the proposals. **[D61, D74, D75]**
- D145. Consequently, I consider that the Applicants have not provided all the information that they were '*reasonably able*' to and the detail necessary to undertake a proper assessment of the Scheme is lacking in terms of the 1992 Regulations as well as in the more normally accepted national and local validation requirements. In this respect the ES Heritage chapter is not as complete as it should be for the purpose of judging the full impact of the proposals in respect of the heritage assets. **[D73, D76]**

D146. However, in order for the Secretaries of State to conclude whether or not the available information is sufficient for them to reach an informed decision on the impacts of the proposals, the conclusions drawn on these matters by the Applicants and the objectors have been analysed as far as possible and recommendations made on the extent of the potential impacts that would be caused by the proposals.

Comments on conclusions drawn in the ES and the Supplement

D147. Attention has been drawn to what are said to be underestimations of the extent of residual harm in the ES and the Supplement. **[D81, D83, D86, D91, D122, D129]** These relate to the application of the matrix tables, where, in some cases, the level of residual impact is noted as being reduced significantly by the proposed mitigation measures. For instance, Spenfield (Grade II*) and its lodge are recorded in paragraph 4.19 of the Supplement as being subject to a '*moderate adverse*' effect but the residual effect is said to be '*neutral*' resulting from the mitigation measures. These measures are replacement trees and high quality landscaping, but these measures would not compensate for the loss of historic significance brought about by the alteration to the setting of the listed buildings.

D148. Headingley Castle is a Grade II listed building that would have a '*medium*' value or significance according to Table 2.1. The impact of the NGT off-highway section is said to have only a '*moderate*' magnitude of impact on the setting of the listed building and its Lodge house, also listed, as set out in Table 2.2. This would result in a '*moderate adverse*' effect from the matrix in Table 2.3. However, it is also noted that this residual effect would be '*significant*' in respect of the Castle but '*minor adverse*' in respect of the Lodge in the tables on pages 12 and 126 of the Supplement.

D149. Nevertheless the impact of the changes that would be brought about to the setting of the Castle and its Lodge would, in my opinion be great enough to be classed as '*high*' because they would bring about a '*comprehensive change to the setting affecting the assets' significance*' as noted in Table 2. 1 of the Supplement. The NGT route would pass through the historic parkland

associated with the Castle and create a physical barrier that would sever it from the Lodge and the village. If my assessment is correct, the magnitude of impact would be '*major*' and this would have implications for the wider cumulative effects on the conservation area. **[D79, D80]**

D150. In respect of the Grade II listed piers in the wall to Rose Court, it has been accepted that the piers may not be able to be rebuilt using all, or even any, of the original fabric and, if this occurred, the whole significance of the building would be lost. This would amount to the '*substantial*' harm envisaged by the NPPF and not a residual '*minor adverse*' impact as noted in the Supplement. **[D82, D83]**

D151. Other such under estimations and inconsistencies are highlighted in the objectors' submissions and these all combine to instil a lack of confidence in the robustness of the overall assessment of the impacts of the proposals and consequently the extent of harm that would be caused to the heritage assets. **[D86, D106, D111, D116, D118, D119]**

D152. Therefore, although the methodology for assessing the impacts may be considered sound, it is the inconsistent application of that methodology that is questioned. The Applicants accept that these assessments will be subject to individual professional judgments **[D33]** and I have therefore, in subsequent paragraphs, given my own views on the conclusions drawn on the potential impacts of the LBC and CAC applications.

LBC applications for OLE eyelet references:

13/03914/LI (LBC003), 13/04303/LI (LBC005), 13/03890/LI (LBC010),
13/03915/LI (LBC011), 13/03942/LI (LBC013), 13/03941/LI (LBC014),
13/03944/LI (LBC015), 13/03943/LI (LBC016) 13/03933/LI (LBC018),
13/03950/LI (LBC019), 13/03892/LI (LBC020), 13/03896/LI (LBC021),
13/03897/LI (LBC022), 13/03945/LI (LBC023), 13/03930/LI (LBC024),
13/03928/LI (LBC025), 13/03907/LI (LBC026), 13/03906/LI (LBC027),
13/03929/LI (LBC028), 13/03923/LI (LBC029), 13/03927/LI (LBC030),
13/03926/LI (LBC031), 13/03936/LI (LBC032), 13/03918/LI (LBC033),
13/03920/LI (LBC034), 13/03922/LI (LBC035), 13/03925/LI (LBC036),
13/03898/LI (LBC037), 13/03895/LI (LBC038), 13/03937/LI (LBC039),
13/03938/LI (LBC040), 13/03948/LI (LBC041), 13/03946/LI (LBC042),
13/03947/LI (LBC043), 13/03913/LI (LBC044), 13/03899/LI (LBC045),

13/03940/LI (LBC046), 13/03939/LI (LBC047), 13/03935/LI (LBC048), 13/03900/LI (LBC050), 13/04330/LI (LBC051), 13/03934/LI (LBC052), 13/03894/LI (LBC054), 13/04314/LI (LBC055), 13/03912/LI (LBC056), 13/03888/LI (LBC057), 13/03889/LI (LBC058), 13/03931/LI (LBC059), 13/03949/LI (LBC061).

- D153. In principal, the fixing of the eyelets would not be very different to the situation in which fixings for lighting, signage or other attachments are required on listed buildings. Although there is little information given on the size of the eyelets, and nothing on their number and positioning, **[D63]** the application documents indicate that they would not be large, as the weight of the OLE is said to be light.
- D154. In most cases, it is likely that the eyelets, on their own, would have little impact on the historic fabric, appearance or architectural character of the building. **[D58]** It is also proposed to use any pre-existing anchor points, where possible. However, as noted previously, there has, as yet, been no survey of where these might be, and it is consequently not possible to conclude how many suitable locations could be re-used.
- D155. The assessment of the impact of the eyelet fixings in the applications is given in standard paragraphs. Either: *'The physical impact on the building will be a limited number of relatively small holes in a less significant section of the structure with an exposed eyelet. The impact upon the conservation area will be the construction of a network of cross wires spanning the skyline. It is considered that there is less than substantial harm to the building from the scheme'* or *'The physical impact of the scheme on the building will be a relatively small hole (or limited number of relatively small holes) in a less significant section of the structure with an exposed eyelet. The secondary impact upon the conservation area will be slightly adverse {my emphasis} in terms of the construction of a network of cross wires spanning the skyline. It is considered that there is less than substantial harm to the building from the scheme'.*
- D156. These paragraphs acknowledge that the insertion of the eyelets necessarily means that the installation of the wirescape is an integral part of the Scheme.

Consequently, the impact of the wires must also be considered as part of the application. In a number of instances, the analysis of significance in the supporting documentation for the LBC applications located in the City Centre contains wording along the lines of: *'The OLE aspect of the scheme in this area would bring a novel historic streetscape, reminiscent of the 1900's black and white photographs of the trams and general streetscape, back into existence, highlighting the City's historic past.'* Or: *'the NGT scheme will somewhat re-create historical streetscapes, using the overhead catenary which will provide a green form of transport whilst harking back to the 1900's photographs of the city'.* Or: *'it is possible that the works associated with the NGT scheme will, with the overhead catenary reminiscent of the 1900's trams and the largely unaltered Victorian façades of this eastern end of Boar Lane, bring a novel and unique focal attraction to this area of town and help the rejuvenation of the area.'*

- D157. However, there is no explanation of why, in some instances, the cross wires are said to have a *'slight adverse'* impact and in others there is no mention of any impact. Conversely, in the other examples, the wires are considered to be beneficial in terms of creating an historic reference to the former tram system.
- D158. There is also no detailed explanation of the criteria by which *the 'less significant section'* of the building would be selected. There is nothing, as yet, to indicate which sections of each individual building are considered *'less significant'* and this is an important omission. It is stated that the fixings would be at a minimum height of 6.8m above ground level, a maximum of 28m apart and at least 2.5m from windows, doors, balconies of other publically accessible areas. With these parameters already having been set, it appears that it would have been possible to provide indicative elevations showing where the fixing points were likely to be located. The criteria by which the *'less significant'* sections would be identified are also not explained and this seems to me to be an exercise that could have been undertaken at this stage of the project.

- D159. Overall, it is agreed that the introduction of the wirescape into the settings of the heritage assets would create an adverse impact. **[D43]** They would cut across views of the buildings, some of which have intricate decorative detailing, and detract from their aesthetic qualities. They would intrude into the open skyline in longer views, particularly along roads such as Park Row, the Headrow and Cookridge Street where there are significant concentrations of listed buildings to which it is proposed to fasten wires. **[D89, D91]**
- D160. In my view, the introduction of an '*overhead catenary reminiscent of the 1900's*' would be a retrograde step that would do little to recreate the atmosphere of a bygone age. The wires would be seen in conjunction with the more modern insertions that have already changed the streetscape to the extent that the OLE would be seen only as additional clutter, intruding into what is left of the open areas between the buildings.
- D161. For example, the Leeds Museum is described as an '*architecturally stunning backdrop to an area of high pedestrian footfall*' in the application documents where its significance is considered. The introduction of catenary wires in front of this backdrop, in an area that is well used by the public, would have a very visible and, I consider, detrimental impact.
- D162. There would also always be a danger that damage would be caused to the fabric of the building by an attempt to insert the stud anchors that would be necessary to hold the eyelets in place, but the likelihood of this could be reduced by a thorough structural investigation of the building before work begins, secured by condition.
- D163. The Applicants' claim, in the application documents and ES, that the use of building fixings would be a mitigating factor when considering the impact of the Scheme, because it would reduce the need to use poles to support the OLE. However, in the case of fixing to listed buildings this is not '*mitigation*' because this solution would also result in an additional degree of harm to the building to which they are attached.

- D164. There would be some damage to historic fabric and there would be harm to the setting of the listed buildings caused by the wirescape that would detract from the aesthetic qualities of the buildings, as noted above. I consider that the OLE within the settings of all the listed buildings to which eyelets would be attached would have an adverse impact through the introduction of additional visual clutter and would detract from the appreciation of their architectural and historic qualities.
- D165. Although, for the reasons set out above, there would be an adverse impact on these designated heritage assets, this would not amount to the '*substantial harm*' that the NPPF advises should result in refusal in all but very exceptional circumstances. However, any harm to a heritage asset must be accorded considerable weight and, because of the extent of the identified harm which affects so many listed buildings and their settings, I recommend that the only circumstance in which LBC should be granted for the fixing of eyelets to the listed buildings is if the harmful impacts are clearly outweighed by the public benefits of permitting the NGT Scheme.

Impact of OLE and associated infrastructure on listed building settings and conservation areas

- D166. Although the Applicants agree that there would be a negative impact on the heritage assets, [D45] there is little detailed discussion in the application documents or in the original ES Heritage chapter on the specific impact of the OLE wires and the street level NGT infrastructure (bus stops, support poles, substations etc) on the settings of the listed buildings that would not be directly affected by OLE fixings and on the character and appearance of the conservation areas. The trolley vehicle system would need twice the number of longitudinal wires than the previous proposal for the tramway and a corresponding number of transverse wires to support them. The wirescape would therefore be extensive and have an impact on all 6 conservation areas through which the NGT would pass.
- D167. As noted in preceding paragraphs and as required by s16 and s66 of the LB&CA Act, special regard needs to be paid to the desirability of preserving

listed buildings and their settings and it is agreed that the impact of the installation of this equipment consequently needs to be assessed.

- D168. In addition, in the situations outside the conservation areas where the line would run past a listed building but be carried on poles, there is no assessment in the original ES of the impact on the setting of the building as required by s66 of the LB&CA Act when considering whether deemed planning permission should be granted for the proposals.
- D169. The Supplement²²²⁹ has introduced a more detailed assessment of the effect of the OLE on the settings of the listed buildings and on the conservation areas and of the residual effect after mitigation, but in the majority of cases the impact is assessed as being low, resulting in a '*minor adverse*' or '*not significant*' effect. Only 30 of the 168 listed buildings in Table 4.5 of the Supplement are considered to be subject to a '*moderate adverse*' effect but, as considered in later paragraphs, there is no explanation of why the magnitude of impact is considered to be '*moderate*' in some cases and '*low*' in others.
- D170. However, there is now agreement²²³⁰ that there would be '*significant adverse effects*' remaining at Headingley Castle and its Lodge and Headingley Conservation Area. There would also be '*significant residual adverse effects*' on the settings of the listed buildings at, Leeds Civic Hall, Leeds Museum (Grade II*), Leeds Town Hall, the Roman Catholic cathedral (Grade II*), the statue of the Black Prince, Mill Hill Chapel (Grade II*), Holy Trinity Church, the Time Ball Buildings (Grade II*), the Corn Exchange and the Garden Gate public house (Grade II*). These impacts result from the attachment of the OLE equipment (in some cases) and the introduction of the catenary wires, the new NGT stops and the support poles into the settings.
- D171. Nevertheless, even given the modifications brought about by the 1992 Regulations, the extent of the overhead wire system is not illustrated or

²²²⁹ Document B-13 paragraphs 4.90 to 4.95 and 4.113 to 4.146 and Tables 4.5, 4.6 and 4.7

²²³⁰ Document B-13 paragraph 5.10 page 89

discussed in any meaningful way, being limited to 12 photomontages taken along the route and which do not cover some of the most important views in which the OLE would be visible. **[D88 to D92]** For instance, there are no views along Park Row, around the Leeds City Museum and Millennium Square or looking down the Headrow towards the junction with Westgate, where the proposed route would cross.

- D172. The impact on the settings of the listed buildings can, in the majority of cases, therefore only be imagined and this is a direct result of the lack of detail on the proposed fixing positions. However, the photomontages that are available illustrate how the overhead wires would intrude into the skyline and affect views of the listed buildings and, in my opinion, confirm that the impact would be harmful.
- D173. I therefore recommend that the conclusions drawn in the Supplement on the extent of the harm should not be considered as particularly reliable given the paucity of information on the design of the Scheme. The assessment of the effect on the settings of the listed buildings must also necessarily be open to question, for the reasons set out above.

Non-OLE LBC applications

General comments

- D174. Many of the applications refer to the proposed works in terms of a '*set back of up to Xm of associated curtilage*'. This description is confusing as 'curtilage' is an area of land and cannot therefore be '*set back*'. The proposals generally involve the demolition of a curtilage listed boundary wall and the consequential loss of land within the curtilage of the listed building. It has been suggested that the descriptions of the developments in the applications and the accompanying Design, Access and Heritage Statements are amended to reflect this and these modifications were discussed at the Inquiry. The suggested changes are listed at Annex 1 to this Appendix. The insertion of the word '*wall*' after '*curtilage*' would achieve this and it is recommended that these changes are made before any LBCs are granted and the cases where this applies are noted under the individual applications.

D175. A number of the LBC applications refer to the '*relocation*' and *re-instatement*' of a listed building. In my judgment, if a listed building is taken down and rebuilt, even if all the original material is re-used, there will be substantial harm to the heritage asset and its setting will have been significantly altered. In such cases, the impact, according to the methodology employed by the ES Heritage chapter, is likely to result in a high level of harm.

The Coach House, 184 Otley Road, Leeds LS16 5LW (13/03880/LI) (LBC001)

D176. The works proposed are '*the set back of up to 170m of associated curtilage along Otley Road, to be relocated to a position of up to 10m north-northwest of the current position*'. It has been suggested that the extent of the set back should be limited by condition to no more than 5m. In this application, the initial comments made in respect of the meaning and extent of '*curtilage*' also apply. If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.

D177. The wall in question also forms part of the setting of Spenfield, a large Grade II* mansion set in landscaped grounds, which include the Coach House. It is agreed that the wall that is proposed for partial demolition and repositioning makes a positive contribution to the conservation area and the Applicants consider that the residual effect would be '*minor adverse*'. This conclusion is, however, one of those challenged in detail by objectors who consider that the effect of the works has been underestimated and the assessment of significance is not detailed enough to allow proper consideration of the impacts of the proposal. For the reasons set out below, I also have concerns in this regard. **[D78]**

D178. This is one of the situations where the mitigation measures rely on the wall being rebuilt using original materials. As previously noted, without a structural survey, there is no indication of whether this would be possible. Trees would be removed as part of the proposal and would be replaced but this would not mitigate against the loss of an area of curtilage or the possible loss of the original fabric of the wall. It is accepted that the introduction of the

OLE into the setting of the listed buildings would have an impact but there is no analysis of the impact of the NGT bus stop for which the relocation of the wall is intended to provide space.

D179. Although the set back would reduce the area of curtilage associated with the Coach House, this would not be to a significant extent when set against the extensive grounds in which it, and Spenfield, are set. Nevertheless, the work would, in the worst case, result in the loss of a long section of a wall that is making a strong visual contribution to the character and appearance of the conservation area. The residual harm would not amount to that classified as '*substantial*' in terms of the NPPF but the alterations would nevertheless have a perceptible impact on the curtilage listed wall and the setting of 2 listed buildings.

D180. I consider the level of harm to be greater than '*minor adverse*' as suggested and closer to '*moderate adverse*'. It is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

The Horse Trough opposite 62 Otley Road, Leeds LS6 3QG (13/03887/LI) (LBC002)

D181. The works proposed are '*to set back the horse trough from its existing site by approximately 8m to the north-west.*' The horse trough is made of cast iron and is set slightly into the cycle lane on the northbound carriageway of the A660. It is currently used as a planter. The proposal is to set it back from the roadside into an area of green space at the back of the pavement.

D182. There would be a loss of historic significance caused by moving the horse trough away from the roadside, but the heritage asset would otherwise be preserved. I consider the impact of relocating the horse trough would be largely mitigated by the improvement in its setting, further away from an existing bus stop and in a position where it could be more readily appreciated by the public. The harm resulting from this proposal is therefore limited and it is recommended that this unlikely, in isolation, to warrant refusal of the application.

62 Headingley Lane, Headingley, Leeds LS6 1BN (13/03873/LI) (LBC004)

- D183. The works proposed are *'the removal of a section of approximately 45m of part of the listed wall which is currently approximately 2m in height'*. The wall is not intended to be replaced and the plans submitted with the application do not show any detail of the exact parts of the wall that it is intended to demolish. However, the loss of a considerable length of the boundary wall that is forming part of the setting to one of the original lodges to Headingley Castle is classified as being only *'minor adverse'*. No explanation is given for this classification.
- D184. In contrast to the assessment in the Supplement, I consider that there would be a distinct change to the setting of the listed buildings and that this would diminish the surroundings in which the heritage asset is experienced, detracting from its significance. Consequently, I assess that the effect would be *'moderate adverse'*. It is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

Buckingham House, Headingley Lane, Leeds LS6 1BL (13/03878/LI) (LBC006)

- D185. The works proposed are *'the set back of up to 70m of associated curtilage along Headingley Lane and up to 65m of associated curtilage down the western extent of Buckingham Road'*. It has been suggested that the extent of the set back should be limited by condition to no more than 5m.
- D186. In this application, the initial comments made in respect of the meaning and extent of *'curtilage'* also apply. If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.
- D187. This is one of the applications that seeks LBC for the repositioning of a listed structure. The comments in the introductory paragraphs therefore apply and the level of harm to the fabric of the wall is likely to be high, particularly as the wall has wrought iron railings set into its coping stones. The proposed mitigation relies on the use of the original material and as there is no structural assessment of the wall and railings, it is not possible to estimate

how much, if any, of this will be able to be reused. In such circumstances, the effectiveness of the mitigation measures will be unknown and can therefore be given only limited weight.

D188. I therefore consider that the residual effect could remain as '*moderate adverse*' and not '*slight adverse*' after mitigation, as assessed in the application documentation. It is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

Ford House, Headingley Lane, Leeds LS6 1BP (13/03879/LI) (LBC007)

D189. The works proposed are '*the set back of up to 55m of associated curtilage along Headingley Lane and up to 80m of associated curtilage down the eastern extent of Buckingham Road*'. It has been suggested that the extent of the set back should be limited by condition to no more than 2m.

D190. If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.

D191. The wall that is the subject of the application is an imposing structure that, together with the walls to Buckingham House and the piers and walls to Rose Court (discussed in subsequent paragraphs) is one of the conservation areas distinctive features. This application, together with these others, seeks LBC for the repositioning of a listed structure. The comments in the introductory paragraphs therefore apply and the level of harm would be high. The proposed mitigation relies on the use of the original material and as there is no structural assessment of the wall, it is not possible to estimate how much, if any, of this will be able to be reused. In such circumstances, the effectiveness of the mitigation measures will be unknown and can therefore be given only limited weight.

D192. I therefore consider that the residual effect could remain as '*moderate adverse*' and not '*slight adverse*' after mitigation, as assessed in the application documentation. It is recommended that LBC should only be

granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

The Piers, Rose Court, Headingley Lane, Leeds LS6 1BN (13/03877/LI) (LBC008)

- D193. The works proposed are *'the set back of the twin piers to the north of Rose Court.'* This is one of the applications that seeks LBC for the repositioning of a listed structure. If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.
- D194. The comments in the introductory paragraphs therefore apply and the level of harm would be high. The proposed mitigation relies on the use of the original material and as there is no structural assessment of the piers, it is not possible to estimate how much, if any, of this will be able to be reused. In such circumstances, the effectiveness of the mitigation measures will be unknown and can therefore be given only limited weight.
- D195. This again is a proposal that would have a significant impact on the heritage assets that are the Grade II listed piers, their immediate setting and the wider setting of the separate listed building at Rose Court. As previously noted, the impact of the possible total loss of the significance of the piers has not been factored into any assessment of the possible harm and, in addition, the garden setting of Rose Court and the generous oval of the former carriage entrance turning circle which contribute to the significance of the site as a whole would be reduced by an unspecified amount, although the maximum set back of the piers is now suggested to be limited by condition to no more than 3m.
- D196. I therefore consider that the residual effect would be likely to be *'significant adverse'* and not *'slight adverse'* after mitigation, as assessed in the application documentation. It is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

Rose Court, Headingley Lane, Leeds LS6 1BN (13/04271/LI) (LBC009)

- D197. The works proposed are '*the setting back of approximately 105m of walling by up to approximately 5m.*' It has been suggested that the extent of the set back should be limited by condition to no more than 3m. If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.
- D198. This is one of the applications that seeks LBC for the repositioning of a listed structure. The comments in the preceding paragraphs therefore apply and the level of harm would be high. The proposed mitigation relies on the use of the original material and as there is no structural assessment of the wall, it is not possible to estimate how much, if any, of this will be able to be reused. In such circumstances, the effectiveness of the mitigation measures will be unknown and can therefore be given only limited weight.
- D199. This application should be considered in conjunction with application LBC008 as it also affects the boundary wall to Rose Court, of which the piers are a part. Moving this wall would result in the loss of a number of trees in the garden of Rose Court and result in a reduction in the space that originally surrounded the house. There is a considerable difference between the ground levels on each side of the wall, with the level on the highway side being higher than that of the garden, and there is as yet no indication of how this would be accommodated if the wall was moved. The impact on the setting of the listed building is not quantified and the effect on the significance of the heritage assets is, as noted above, unknown.
- D200. I have assumed that the garden level would remain as existing and that there would need to be an area of fill to raise the current level of the land taken into the public realm, held back by a new retaining wall. However, the existing wall is presently performing a retaining function and it seems likely that any rebuilding would need to be to upgraded standards, meaning that much of the original fabric would need to be replaced, or used only as facing material.

D201. The residual effect of the works is assessed as being '*slight adverse*', but taking into account the length of wall affected and loss of the trees that presently provide an element of screening between the historic garden and the road, I would consider the impact to be '*moderate adverse*' in respect of the setting of the listed building and '*significant adverse*' in respect of the loss of significance of the curtilage listed wall. It is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

Kingston Terrace, Woodhouse, Leeds LS2 9BW (13/03875/LI) (LBC012)

D202. The works proposed are '*the relocation of approximately 9m length of listed wall and one gate pier and their reinstatement to a location less than 5m to the north east of its current location.*' If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.

D203. This is one of the applications that seeks LBC for the repositioning of a listed structure. The comments in the preceding paragraphs therefore apply and the level of harm could be high. The proposed mitigation relies on the retention of the pier for set back and 'sympathetic reinstatement'. As there is no structural assessment of the wall and pier, it is not possible to estimate how much, if any, of this material will be able to be reused. In such circumstances, the effectiveness of the mitigation measures will be unknown and can therefore be given only limited weight.

D204. I therefore consider that the residual effect could remain as '*moderate adverse*' and not '*slight adverse*' after mitigation, as assessed in the application documentation. It is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

Old Broadcasting House, Woodhouse Lane, Leeds LS2 9EN (13/03876/LI) (LBC017)

D205. The works proposed are '*the demolition and reinstatement of approximately 83m of walling and gate piers by less than 10m to the north-east of its present*

location.' If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.

- D206. This is another of the applications that seeks LBC for the repositioning of a listed structure. The comments in the preceding paragraphs therefore apply and the level of harm could be high. The proposed mitigation relies on the retention of 2 piers for set back, the relocation site being in a position as near as possible to the original, 'sympathetic reinstatement' and the provision of replacement planting to compensate for the areas lost. However, it is not possible to be completely confident that the piers could be reused and, in such circumstances, the effectiveness of the mitigation measures will be unknown and can therefore be given only limited weight.
- D207. However, the wall itself is low and of a simple design and the impact of moving it would not perhaps be as significant as some of the other LBC applications associated with the NGT proposals. Consequently I agree with the assessment that the residual impact is likely to be '*slight adverse*', but with the qualification that this would rise to '*moderate adverse*' should the piers not be able to be re-used. If that is the case, it is recommended that LBC should only be granted if the public benefits of the NGT Scheme are shown to outweigh this harm.

Braime Building, Hunslet Road, Leeds LS10 1JZ (13/03982/LI) (LBC060)

- D208. The works proposed are '*the removal of up to 85m of associated curtilage along Sayner Lane located to the northeast of the structure and at Gate 5 into the Braime Works*'. In this application, the initial comments made in respect of the meaning and extent of '*curtilage*' also apply. If LBC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.
- D209. The wall in question, although associated with the main Grade II listed factory building, is not of any architectural quality and has been extensively re-built in

places. Whether its alignment marks any original boundary is not clear and the re-alignment would have little impact on the setting of the listed building. There is, however, no detailed design for the replacement wall which would be subject to a condition. Consequently, I agree with the assessment that the residual impact would be '*neutral*', but could not yet conclude that it would be '*slightly beneficial*', as also suggested. However, I consider that there would be no harm to the wall or the setting of the listed building and it is recommended that LBC should not be refused for this application if the Scheme is recommended for approval.

The Old Red Lion Public House, 2 and 4 Meadow Lane, Leeds (13/05470/LI) (LBC062)

- D210. This application proposes '*the installation of a new substation including a new stone plinth and lintel between the building and the substation which may require a structural tie-in at below-ground level to provide a secure compound facility.*' The reason why the application needs LBC is the possibility that below ground, the foundations would need to abut those of the public house.
- D211. The site is currently used as a car park and the installation of the substation would be adjacent to the largely blank south west elevation of the listed building where it would have little adverse impact on its setting. The main elevations are those facing north and east and the pitched roof and rendered walls of the new building would complement those of the existing. In this respect, the residual effect would be neutral.
- D212. However, the site is of archaeological interest and there is the possibility that the excavations could reveal evidence that would require recording. A condition to secure archaeological investigation and monitoring would therefore be required. Apart from this proviso, I find that there would be no harm to the listed building and it is recommended that LBC should not be refused for this application if the Scheme is recommended for approval.

Conservation area consent applications

1, 4, 5, 6 and 8 Weetwood House Court, Otley Road, Leeds (13/03966/CA) (CAC001)

- D213. The application proposes *'the demolition and replacement of unlisted boundary walls, up to 2.5m from their original location within a Conservation Area.'* It has been suggested that the extent of the set back should be limited by condition to no more than 2.5m. If CAC is granted for this application, it is recommended that the application documents are amended as suggested in Annex 1 to this Appendix. The length of wall affected would be up to 62m.
- D214. Although the boundary walls are within the conservation area, the buildings they are associated with are modern residential properties and the walls themselves have no intrinsic architectural interest. However, widening the road would reduce the amount of green open space within the conservation area and this has been assessed as having a *'moderate adverse'* impact on the conservation area before mitigation is taken into account.
- D215. The mitigation proposed is said to be *'Enhanced opportunities for bus lanes and increased road safety for cyclists. Further opportunities to mitigate against loss in other areas of NGT'* and that this would result in a *'slight adverse'* impact. This, to me, does not directly address the harm that would be caused to the character and appearance of the conservation area in this location and I consider that this would remain as a *'moderate adverse'* impact. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

1 and 1A Holly Bank, Otley Road, Leeds (13/03967/CA) (CAC002)

- D216. The application proposes *'the set back of unlisted boundary walls, from up to 4.5m from their original location.'* It has been suggested that the extent of the set back should be limited by condition to no more than 4.5m.
- D217. These are attractive walls and their re-alignment would alter the relationship between the public highway and the private garden of the Holly Bank properties, creating more hardsurfacing and less green cover. The initial assessment puts the impact at moderate adverse and the proposed mitigation

is as set out as in CAC 001 above. For the same reasons I conclude that the mitigation is not directly relevant to the impact on the conservation area character and appearance and the impact should remain as '*moderate*'. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

42/44 Otley Road, Leeds LS6 2AL (13/03968/CA) (CAC003)

D218. The application proposes '*the demolition of curtilage*.' The comments on the definition of 'curtilage' as set out in the general comments on the LBC applications also apply here and it has also been suggested that the extent of the set back should be limited by condition to no more than 4m. Therefore if CAC is granted for this application, it is recommended that the application documents should be amended as suggested in Annex 1 to this Appendix.

D219. This is a low wall that would be set back with a loss of vegetation and green space in front of the houses to which it forms the boundary. The mitigation proposed is the widening of the footway and the upgrading of the access to the Arndale centre and is said to reduce the impact to '*slight adverse*'. When taken together with the works proposed in CAC004, I agree the residual impact would be '*slight adverse*'. However, it is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

40 Otley Road, Leeds LS6 2AL (13/03955/CA) (CAC004)

D220. The application proposes '*the demolition of building's southerly extension and southern curtilage*'. The comments on the definition of 'curtilage' as set out in the general comments on the LBC applications also apply here. It is also not entirely clear from the plans which parts of the building are proposed for demolition. However, it appears from the impact assessment that what is proposed is the demolition of a part single, part 2 part storey extension to the building that has a bay window at the side and the relocation of the low boundary wall to allow for road widening on the corner of Alma Road and Otley Road. Therefore, an area of the building's curtilage would be lost to the public realm.

- D221. Nevertheless, the proposal is not for the 'substantial' demolition of an unlisted building in a conservation area as considered in the 'Shimitzu' judgment. The parties consider that CAC is still required for the extent of work proposed to the main building as the proposal would amount to so much demolition as to clear the site concerned. I would disagree with that assessment because the space created would not be sufficient to allow a separate development and the majority of the existing building would remain intact. If this view is accepted, there would be no need to determine the application for CAC.
- D222. If the Secretaries of State disagree with this conclusion, my view is that the demolitions would not adversely affect the character and appearance of the conservation area. The extension is a modern addition of little architectural merit and the restoration of the building to its previous form would not be harmful.
- D223. The demolition of the wall would, however, result in the removal of all the boundary enclosure on the 2 sides of the site that face the road. Although a similar wall is located in front of 42 and 44 Otley Road, it is separated from that associated with No 40 by a driveway entrance. Similarly, there is a driveway at the end of the wall in Alma Road and the whole structure associated with the public boundaries of the site on Otley Road and Alma Road are therefore proposed for demolition. CAC is consequently required for this part of the works.
- D224. The loss of the wall would also not be harmful but its repositioning appears to be located hard against the corner of the modified building. Trees would also be lost from within the site on the road frontage, to be replaced by new planting. Without full details of the proposals, I consider that this juxtaposition could appear awkward and draw attention to the reduction in the space around the property. For this reason, I agree with the assessment that the residual effect would be '*slight adverse*'. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

5 Alma Road, Leeds LS6 2AH (13/03963/CA) (CAC005)

- D225. The application proposes *'the demolition of an extant structure within a Conservation Area (Headingley Hill, Hyde Park and Woodhouse Moor) and for land take associated with the widening of this stretch of road required for the operation of the Leeds NGT within the northern offline route. The area affected would be a total of 220m² and would affect a 27m stretch of wall with a set back of between 5 and 7m from the current location'*.
- D226. It has been suggested that the extent of the set back along Alma Road should be limited by condition to no more than 5m. If CAC is granted for this application, it is recommended that the application documents are amended as suggested in Annex 1 to this Appendix.
- D227. The application covers not only the set back along the NGT route but also the rebuilding of a wall along the eastern boundary of No 5 Alma Road with Broderick Court, to allow a ramped access to a car park at the rear of the property. This wall is in a poor condition and would benefit from rebuilding, but the proposal would result in the loss of a number of trees that are not proposed to be replaced. Overall, I consider that the residual impact would be *'slight adverse'* rather than *'neutral'* as claimed in the impact assessment. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

Boundary walls in Wood Lane, Leeds (13/03981/CA) (CAC006)

- D228. The application proposes *'the demolition of approximately a total of 55m of walling associated with the breaking through of the Leeds NGT offline route as it crosses Wood Lane'*.
- D229. The plans attached to the application mark walls to the north west and south east of No 6 Wood Lane, although the description and photographs appear to relate to walls to the north west of No 6, on either side of Wood Lane and the north/south boundary wall to the west of No 6. The wall to the south east, facing onto Shire Oak Street is included in application CAC008 and the other boundary walls mentioned are included in CAC007, considered in subsequent

paragraphs. It is therefore only the wall to the north of Wood Lane that I have considered in respect of this application, but if these 3 CAC applications are to be granted, the details on the plans and descriptions will need to be clarified.

- D230. The route of the NGT crosses Wood Lane at this point and the main impact would be caused by running the trolley vehicles and OLE through this part of the conservation area. In comparison with this, the loss of this section of wall would be slight. The wall is not of any particular architectural or historic merit but is nevertheless attractive and makes a contribution to the character and appearance of the conservation area.
- D231. The mitigation proposed is enhanced landscaping but the NGT route would result in the loss of a considerable number of trees in the immediate locality of the wall and I therefore consider that any landscaping could only be a replacement, not an enhancement. In isolation, I consider that the loss of the walls would result in a '*slight adverse*' impact on the conservation area. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

6 Wood Lane, Headingley, Leeds LS6 2AE (13/03952/CA) (CAC007)

- D232. The works proposed are '*the demolition of number 6 Wood Lane and part of its boundary wall*'. The property is a red brick house that was, according to evidence presented by the objectors, in existence at the time of the 1894 Ordnance Survey map. The building is one of the earliest in the area and, although not listed, is an attractive example of a residential property typical of the area. It is not in a particularly good condition at present and this is one of the comments given as a mitigating factor for the proposal in Table 1.1 of the application document. However, it seems that the building is in this condition because it has been under the blight of potential demolition to allow the implementation of the NGT proposal.

- D233. It is generally accepted that poor maintenance of a building that would otherwise make a positive contribution to its surroundings should not be used as a justification for demolition and I consider this to be the situation here.
- D234. The description of the building in the assessment of its significance in the application documentation is flawed in that it assumes the building was a later addition to the area. Nevertheless, the assessment acknowledges that the building makes a positive contribution to the conservation area and that its loss would have a negative impact.
- D235. However it then goes on to state that the '*slight adverse*' impact of demolition would turn to a '*moderate beneficial*' one after the Scheme is constructed. I have difficulty in reconciling these conclusions as the reasoning is apparently based only on the fact that demolition would allow NGT traffic to bypass the congestion on the main A660 road in another part of the conservation area and that the surroundings would be landscaped.
- D236. The effect of demolition within a conservation area is inevitably linked to the impact of any replacement proposals and these conclusions take little account of the impact that the off-highway section would have on this part of the conservation area. They also assume that the NGT Scheme is of overall benefit to the character and appearance of the conservation area. This is a view that is not carried through to the Supplement and it now seems agreed that there would not be an overall beneficial effect.
- D237. The walls to the Wood Lane frontage and to the western boundary have a role in defining the historic curtilage of the property and are of some age. However, if it was considered desirable to demolish No 6, the retention of these walls would not be justified on their own merits.
- D238. In respect of this application, the house, if properly maintained, would be an attractive and historic contributor to the character and appearance of the wider conservation area and I consequently consider that the overall impact of the loss of the building would be '*moderate adverse*'. However, the loss of the property would contribute to the cumulative impact on the area, which is

agreed in Table 4.7 of the Supplement to be '*significant*'. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

Shire Oak Street, Headingley, Leeds (13/03965/CA) (CAC008)

D239. The application proposes '*the demolition of two boundary walls within a Conservation Area*'. The walls, although quite attractive, are of little architectural or historic interest and would not, on their own, be necessarily worthy of retention in the event that No 6 was to be demolished and the NGT route found otherwise acceptable. I would assess the impact of their removal as '*neutral*' and recommend that there is no reason to refuse CAC for the development.

Shire Oak Road, Headingley, Leeds (13/03964/CA) (CAC009)

D240. The application proposes '*the demolition of two boundary walls within a Conservation Area and for land take, both associated with the crossing of the proposed NGT scheme with the extant roadway*'. These are low stone walls with hedge planting behind, in variable condition. They are attractive and typical of the boundary treatments found in the conservation area and their loss, together with the introduction of the NGT route would, I consider, have a '*moderate adverse*' impact. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

35a Headingley Lane, Leeds LS6 1PF (13/03980/CA) (CAC010)

D241. The application proposes '*the demolition of the northern section of the building*'. The building has a prominent stone gable end facing onto the pavement and forms part of a larger unit less affected by unsympathetic alterations than the bay proposed for removal.

D242. The comments on the need for CAC for this proposal are the same as for CAC004 and I consider that the extent of demolition would not leave sufficient space for an independent development. However, in the event that the Secretaries of State disagree with my recommendation that CAC is not

required, the effect of the demolition would remove an unsightly dormer addition and, provided careful reconstruction of the gable end was achieved, the appearance of the conservation area would be largely preserved.

- D243. There would be some loss of historic interest but the residual effect would, I agree, be '*slight adverse*'. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

***Curtilage to the south of 35a Headingley Lane, Leeds LS6 1BL
(13/03959/CA) (CAC011)***

- D244. The application *proposes 'the set back of up to 300m of non-listed curtilage along Headingley Lane. This set back is proposed to be from between 5-10m from the original location'*. It has been suggested that the extent of the set back should be limited by condition to no more than 3m apart from the area adjacent to the proposed new bus stop where the setback would be limited to 6m. If CAC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.
- D245. There is a variety of style and materials used in these sections of boundary treatments proposed for relocation. The walls are prominent and attractive structures that are typical features that help to define the character of the conservation area. However, provided the set back was restricted as proposed, and the wall reinstated to a similar standard, the effect on the appearance of the conservation area would be limited. The main impact would be from the NGT route and associated equipment which the demolition and rebuilding would facilitate. I consider the cumulative impact would be '*slight adverse*' due to this factor. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

Ruinous lodge to the north-east of 35 Headingley Lane, Leeds LS6 1BL (13/03957/CA) (CAC012)

- D246. The application proposes '*the demolition of the ruined structures*'. If CAC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.
- D247. The structure in question was a lodge associated with the former building on this site, which has been partly demolished to make way for the modern buildings of the Headingley Business Park. Although of some age, the building has lost its roof and is in a poor state of repair; however, part of the structure would be retained to maintain the historic association. At present, this section of the ruined lodge does not make a positive contribution to the conservation area and its loss would not be controversial. The impact would therefore be '*neutral*' and it is recommended that there would be no reason to refuse CAC for this application if the Scheme is recommended for approval.

31 Headingley Lane, Leeds LS6 1BL (13/03958/CA) (CAC013)

- D248. The application proposes '*the demolition of the red-bricked gatehouse building*.' This is a relatively modern building (early 20th Century) constructed at the gateway to the former Leeds Girls' High School, the site of which is now proposed for redevelopment. The building is of little architectural or historic merit and I consider it makes a neutral contribution to the conservation area. Its demolition would be non-controversial and the resulting impact also '*neutral*' and there would be no reason to refuse CAC for this application if the Scheme is recommended for approval.

Former Coach House to the north of the Girls' High School, Headingley Lane, Leeds LS6 1BN (13/03979/CA) (CAC014)

- D249. The application proposes '*the demolition of the north-eastern extent of building and curtilage*'. If CAC is granted for this application, it is recommended that the application description and the Design, Access and Heritage Statement be amended as suggested in Annex 1 to this Appendix.

- D250. This is a large building, described as a former coach house or a gym that, at one end, stands close to the boundary wall between Headingley Lane and the former Girls' High School site. The block plan shows a corner of the building removed to facilitate the introduction of the NGT route. However, the description states that approximately 2 of the 7 bays of the building would be removed.
- D251. The comments on the need for CAC for this proposal are the same as for CAC004 and I consider that the extent of demolition would not leave sufficient space for an independent development. However, in the event that the Secretaries of State disagree with my recommendation that CAC is not required, the effect of the demolition would result in the loss of part of a building that makes a positive contribution to the conservation area both historically and architecturally.
- D252. The assessment in the Heritage Impact section of the Design, Access and Heritage Statement puts the level of effect as '*significant adverse*' before mitigation but the only mitigation proposed, other than the benefits claimed for the NGT proposals, is archaeological recording of the building. This does not, in my judgment amount to mitigation but is a course of action that should be carried out wherever there is the loss of part of a heritage asset. For these reasons, I conclude that the residual impact would be at least '*moderate adverse*'. It is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

27 Headingley Lane, Leeds LS6 1BL (13/03954/CA) (CAC015)

- D253. The application proposes the demolition of a house, building and former petrol station forecourt. There is little of architectural or historic merit in the forecourt and the former garage canopy has already been taken down. The open areas of the site and its low boundary walls facing Headingley Lane are in a poor condition and presently detract from the character and appearance of the conservation area. However the building to the rear, which fronts Victoria Road is of more interest. It has been poorly maintained and is of a style that is not typical of the conservation area but it nevertheless has a

quirky charm and I do not agree that its contribution is entirely negative as claimed by the assessment in the application documents. If properly maintained, I consider that the building would make a positive contribution to the surroundings.

D254. The residual effect of the demolition is said to be '*moderate beneficial*' but as I have disagreed with the assessment of the contribution made by the building to the conservation area, I do not, therefore, consider that this would be the case. At present, I find that the loss of the building would, at best, be '*neutral*' and, if considered in isolation, there would be no reason to refuse CAC.

D255. However, this demolition must also be considered together with CAC016 and CAC017 below, as these 3 plots occupy a significant triangular tract of land close to the pivotal junction at Hyde Park Corner. The cumulative impact of these proposals will consequently be of particular importance.

2 Victoria Road, Leeds LS6 1BL (13/03953/CA) (CAC016)

D256. The works proposed are the demolition of the building, which is a 3 storey red brick double fronted house with bay windows, decorative barge boards to the gables and flat roof dormers. The main elevation faces Victoria Road, with the rear of the property on Headingley Lane. I consider that the building makes a positive contribution to the Victoria Road frontage but is less important on the Headingley Road side.

D257. The assessment concludes that the demolition of the house would be '*moderate adverse*' before mitigation but that overall the impact would be '*slight beneficial*' because of the upgrades to the road junction giving better visibility and access and the proposed landscaping of the area. The building does, nevertheless, contribute to the built form that lines the road as it runs south east towards Hyde Park Corner and I consider its loss would have a '*slight adverse*' effect. If considered in isolation, it is recommended that CAC should only be granted if the public benefits of the NGT Scheme are found to

outweigh this harm. However, as noted above, the impact will need to be assessed as a whole with the other applications.

11-25 Headingley Lane, Leeds LS6 1BL (13/03956/CA) (CAC017)

- D258. The works proposed are the demolition of a terrace of shop buildings which are described in the Headingley Hill, Hyde Park and Woodhouse Moor Conservation Area appraisal as making a positive contribution, but which are assessed as being negative in the application documents. This assessment does rate the loss of the properties as '*moderate adverse*' but this appears to be due to their commercial and retail functions rather than their contribution to the character of the surroundings.
- D259. The shops do not have any particularly special architectural qualities but they are of some age and contribute to the interesting historic development of this part of the City. They serve the function of creating an enclosed streetscape around Hyde Park Corner which, in turn, contrasts with the open vistas across Woodhouse Moor. **[D106]** Their loss, together with the buildings included in CAC015 and CAC016, would bring about a marked and, in my view, detrimental change within the heart of the conservation area.
- D260. There would be an opportunity to provide a degree of landscaping across the land remaining after the NGT road widening works but it also appears that some future building works may be envisaged to '*repair urban grain*'. There is no information available at this stage on the form this might take, so it is not possible to comment on how effective this may be. There is, however, concern that, before there are any firm proposals implemented, the remaining land would be 'left over', poorly maintained and provide little benefit in terms of landscaping opportunities. **[D113]**
- D261. The Supplement notes that there will be a residual '*minor adverse*' effect on the setting of the listed buildings at 3, 5, 7, 27 and 29 Victoria Road through the changes which include the proposed demolitions and loss of trees.
- D262. In conclusion, I consider that, when taken as a whole, the proposed demolitions would have a negative impact on the character and appearance of

the conservation area and, in the absence of detail on the final proposal for the sites, it is not possible to conclude that mitigation measures would render the proposals '*beneficial*' or even '*neutral*' in the long term. It is therefore recommended that CAC for all 3 applications should only be granted if the public benefits of the NGT Scheme are found to outweigh this harm.

Further conservation area impacts

Overview

- D263. The ES and the Supplement consider the effect of the proposals during both the construction and the operational phases. The impacts during the construction phase are understandably greater than after completion of the works, when the disruption caused by construction has ceased and the time taken to implement the landscaping and other mitigation measures can be taken into account. However, these effects will be transitory and are common to any development that takes place within or to a heritage asset.
- D264. I consider that, whilst these impacts will be considerable and could last for a significant length of time, it is the residual effects that remain once the NGT system is in operation that need to be considered in the balancing exercise for and against the proposals.
- D265. In all the individual applications set out above where there is a moderate or slight adverse residual impact, the resultant harm to the character and appearance of the particular conservation area will need to be considered together with any other harm resulting from the introduction of the NGT Scheme brought about by the loss of trees, the additional street furniture, the OLE and the widening of the roads. The totality of the harm resulting from the works applied for is that which should be weighed against the overall benefits of the proposals before CAC is granted for the individual applications. If these assessments were to be carried out only on an individual basis, it would not, in my opinion, result in an accurate reflection of the cumulative impact that the NGT Scheme would cause. **[D99]**

D266. This has been recognised in the Supplement²²³¹ and in the Applicants' submissions which agree that an assessment of any adverse impacts against the benefits of the proposals should also take into account the cumulative impact of the OLE on the character and appearance of the areas. **[D45, D46, D47]** In the following paragraphs, the assessments of the impacts on the various conservation areas as set out in the Supplement are considered.

West Park Conservation Area

D267. The route would cut through a section of the West Park Conservation Area and run adjacent to another section. There are no applications for LBC or CAC in this area but it would be affected by loss of trees and the introduction of the OLE. This cumulative impact is claimed to be '*minor adverse*' in the operational phase and not significant. In the context of the wider conservation area I agree that the majority of the heritage asset would be unaffected and the harm would consequently be very localised and minor.

Weetwood Conservation Area

D268. The NGT route would skirt the western edge of this conservation area and the impacts would arise from the setting back of walls and the consequent loss of green space, the widening of the road and the introduction of the OLE and street furniture. This cumulative impact is claimed to be '*minor adverse*' in the operational phase and not significant. In the context of the wider conservation area I agree that the majority of the heritage asset would be unaffected and the harm would consequently be localised and minor. However, the concerns about the more localised setting of the listed building at Spensfield House have been noted in preceding paragraphs.

Far Headingley Conservation Area

D269. In the Far Headingley conservation area the effects are again classified as '*minor adverse*' and not significant. The NGT route would run in front of a considerable number of buildings which, although not listed, are considered to

²²³¹ Non-Technical Summary Historic Environment Amendments & Volume 1 Main Statement Historic Environment Amendments

make a positive contribution to the conservation area and the widened road and the introduction of the OLE would in my view, result in a moderate impact on this part of the conservation area. However, as with the 2 conservation areas noted above, the overall impact on the heritage asset as a whole would remain minor.

Headingley Conservation Area

- D270. The off-highway section of the NGT route where it runs through the Headingley conservation area would, it is agreed, have a '*moderate adverse*' and significant effect. The route would cut through areas of green space associated with the listed buildings at Headingley Castle and its Lodge and would result in the demolition of a building that makes a positive contribution to the surroundings. Further impacts would occur along the other, albeit limited, section of the route within the conservation area where it would follow the road, including the road widening and the introduction of the OLE.
- D271. The extent of change to the heritage asset as a whole would be extensive and, in my view, should be categorised as being at the highest end of the '*moderate adverse*' scale.

Headingley Hill, Hyde Park and Woodhouse Moor Conservation Area

- D272. The road widening would continue along the route passing through the Headingley Hill, Hyde Park and Woodhouse Moor Conservation Area and would include an off-road section across Monument Moor. The effect is assessed as being '*minor adverse*' and not significant due to the magnitude of impact being classed as '*low*'.
- D273. However, the route would run through the most important parts of the conservation area where it would be within the settings of numerous listed buildings. Together, the OLE, its fixings to listed buildings as discussed in preceding paragraphs, the street furniture and the NGT stops, the road widening and the demolitions would result in a marked increase in visual clutter that would detract from the appearance of this historic area and have a harmful impact on its character. The NGT route would be highly visible from

the open landscape of the moor and, overall, I consider that the harm to the heritage asset would be significant and '*moderate adverse*'.

Woodhouse Lane – University Precinct Conservation Area

D274. In the Woodhouse Lane – University Precinct Conservation Area the effect is assessed as '*minor adverse*' and not significant. However, once again, the route would pass in front of many listed buildings and the OLE would be attached to 4 of them. At present there are long views up Woodhouse Lane to the listed Parkinson Building, past the Emmanuel Church and the Trinity Congressional Church, both of which are also listed and proposed for OLE fixings.

D275. The introduction of the OLE wirescape into this vista would result in an increase in the amount of street clutter, which is at present limited, and cause visual harm. For this reason I again consider that the resultant effect would be '*moderate adverse*' rather than '*minor*'.

Leeds City Centre Conservation Area

D276. The Leeds City Centre Conservation Area is a large one, divided into 3 sub-sections. It contains a high percentage of listed buildings and, of the 69 noted as being affected by the OLE for the NGT, only 13 are assessed as being subject to a '*moderate adverse*' effect. The remainder are classed as '*minor adverse*' in Table 4.5 of the updated Historic Environment Technical Appendix to the ES in the Supplement. This table sets out the impact of the OLE on the setting of the listed buildings but it is not clear why, in some cases, the magnitude of impact is set at '*low*' whereas on nearby buildings it is said to be '*moderate*'.

D277. For instance, the impact on St Anne's Roman Catholic Cathedral, a Grade II* listed building to which it is proposed to fix the OLE is '*low*' whereas at Permanent House and Headrow Buildings (Grade II and next door) the level is '*moderate*'. Further confusion arises from Table A.1 of the Annex which classes the residual effect as '*minor adverse*' for these buildings and '*moderate*'

adverse for the Cathedral. It may well be that the tables are considering different impacts but this is not readily discernable from the documents.

D278. In any event, the overall impact on this conservation area is assessed as *'moderate adverse'* but I consider that, again, the harm would be at the upper end of this category. The NGT would re-introduce vehicular traffic into a corner of Millennium Square and the wirescape and additional street furniture would affect major views within the City Centre as the route would follow some of its major thoroughfares.

Archaeology

D279. Objectors consider that insufficient investigation has taken place because no field evaluation has been carried out, despite a number of sites being referred to as *'significant'* by the consultee, the WYAAS. **[D105]** There are concerns that the *'Grampian'* condition suggested by the WYAAS is too open ended and might prove unenforceable. Without further investigation, it is claimed that the impacts on archaeological remains are unquantifiable.

D280. The Applicants have produced a document *'Known Areas of Archaeology affected by the NGT Route – February 2014'*²²³² and the Supplement²²³³ has, at Annex B, appended a table of archaeological sites which concludes that the most significant possibility of disturbance occurs where sub-surface remains might exist in locations where road widening and off-highway sections of the route would be located.

D281. The WYAAS has not objected to the proposed methods of monitoring the construction phase of the development and has agreed that the imposition of its suggested condition would ensure that an appropriate precautionary approach would be taken. **[D33]** The WYAAS has not suggested that further investigative work should be carried out prior to planning permission being granted and has not identified any areas where it considers that recording of

²²³² Document APP-8-3 Appendix 5

²²³³ Document B-13

any findings in accordance with the Scheme required by the condition might be insufficient to mitigate the impact of the development.

- D282. Although the detail of the precise location of the poles carrying the OLE equipment is not yet known, the extent of the land that would be affected by the route has been identified and, if planning permission is granted, the field investigation work would be required to be carried out before any development commences.
- D283. However, the lack of more detailed information in key areas where the NGT route would run across areas of archaeological significance such as the off-highway section at Headingley, Woodhouse/Monument Moor and Hyde Park Corner and the other areas of potential disturbance is, I would suggest, a factor that weighs against the grant of planning permission.
- D284. If the Secretaries of State are minded to approve the TWA Order and the deemed planning application, then I recommend that the suggested condition be imposed.

Overall Conclusions

- D285. It has been accepted by the Applicants that there will be a degree of harm to the various heritage assets affected by the proposals. **[D31, D43 to D49]** The harm will, in most cases, be less than substantial in NPPF terms and the Applicants appear to place much weight on this fact, but this does not mean that it would necessarily be acceptable. **[D31, D51 to D56]**
- D286. Such harm must be considered in the light of the duty in the LB&CA Act 1990 to have special regard to the desirability of preserving the listed buildings and their settings. The *Barnwell Manor*²²³⁴ judgment has confirmed that this means that '*considerable importance and weight*' must be accorded to the statutory duty when undertaking any balancing exercise in respect of whether works to listed buildings and within conservation areas should be permitted. **[D72]**

²²³⁴ Document L-APP-1

- D287. There will, of course, be a scale of impact between the '*substantial harm*' caused by complete loss of significance or total destruction of the heritage asset and the situation where the level of harm is perceptible but nevertheless slight. It is necessary to reach a conclusion on the impact of this harm, so that the appropriate weight can be given to it when the advantages of the proposals are set against all the identified disadvantages.
- D288. The information submitted with the applications and examined at the Inquiry does not meet the level of detail that would normally be expected to make such an assessment. **[D61, D62]** More detail could have been provided, in the form of structural surveys, additional illustrative material and a fuller consideration of the cumulative effects of the NGT infrastructure and streetscape alterations on the settings of listed buildings and conservation areas.
- D289. The lack of such information has led to differences of opinion on the likely residual impacts on the heritage assets; for instance, the conclusion that the addition of more street furniture would have a low impact in the conservation areas, because of existing levels of such clutter, is not consistent with the view that cumulative impacts should be taken into consideration. It is therefore unclear how some of the conclusions reached in the ES have been reached, even following the stated methodology.
- D290. The list of advantages to the heritage environment put forward by the Applicants does not, in my view, come anywhere near to outweighing the adverse impacts that they identify. **[D42]** For example, any additional longevity of rebuilt walls must be set against the reduction in historic significance caused by their repositioning and the possible loss of historic fabric, which could be extensive.
- D291. Because of the unresolved detail of the proposals, it cannot yet be concluded that the suggested streetscape improvements and urban realm enhancements would, in fact, occur to the extent that they would outweigh the additional street clutter that would result from the Scheme. These factors have not been investigated or assessed in enough detail to reach a conclusion that there

would be any improvements to the setting of listed buildings and in conservation areas.

- D292. I cannot accept that advance recording of the historic structures and archaeological remains that are proposed for demolition and disturbance can be considered an advantage or that this would result in an enhanced appreciation of the historic environment. The proposed recording is a measure that is intended to provide some compensation for the loss of significance of the historic environment and the residual impact after this process would still be harmful.
- D293. The replacement of trees in the conservation areas and in the setting of listed buildings would result in an increase in the longevity of tree cover in these areas but would also bring about the loss of a number of mature trees that still have a reasonable lifespan and a reduction in the amount of green space available for planting.
- D294. The route stretches from the northern outskirts of the City to the southern and would affect the setting of a significant number of listed buildings as well as a number of unlisted buildings within the 7 conservation areas that the NGT would pass through or bisect. The only conclusion to be drawn is, in my opinion, that there would be permanent harm to the listed buildings, their settings and the conservation areas caused by the demolition and repositioning of walls, the reduction in the sizes of some of their curtilages, the loss of trees and open space and the increase in street clutter brought about by the support poles, OLE and bus stops. The length of the route and the number of conservation areas that it would pass through means that the cumulative impacts of the Scheme would be extensively experienced and have a clear and readily perceptible harmful impact on a wide range of heritage assets.
- D295. The level of harm would vary in severity from site to site and, as noted above, in the clear majority of cases it would be '*less than substantial*' in the terms of the NPPF. Nevertheless, wherever harm occurs, the statutory duty in s16 and

s66 is engaged and must carry significant weight against the grant of LBC, CAC and planning permission.

- D296. The Applicants accept that significant adverse effects would remain after mitigation along the off-highway route in the Headingley Conservation Area, including the setting of Headingley Castle and its Lodge. There would also be significant adverse effects on the settings of the listed buildings at the Civic Hall, Leeds Museum, Leeds Town Hall, the Roman Catholic Cathedral, the statue of the Black Prince, Mill Hill Chapel, Holy Trinity Church, the Time Ball Buildings, the Corn Exchange and the Garden Gate Public House.
- D297. They also note that there would be moderate adverse impacts on Headingley Conservation Area and Leeds City Centre Conservation Area with minor adverse effects on Weetwood Conservation Area, Far Headingley Conservation Area, Headingley Hill and Hyde Park Corner and Woodhouse Moor Conservation Area and Woodhouse Lane – University Precinct Conservation Area. My views on these classifications have been noted above.
- D298. In general, I consider that the assessment of the effects of the proposal have been understated in many cases and that greater weight than suggested by the Applicants should be accorded to the harm to the heritage assets that the proposal would cause. In my view, it is also difficult to reconcile the fact that, although the very extensive additions to the information in the ES, as set out in the Supplement, found there were greater harmful impacts than originally suggested, this has made no difference to the overall conclusions.
- D299. Overall, I conclude that the cumulative residual impact of the NGT Scheme on the historic environment would be a seriously negative one. There may be instances where modifications to the route could alleviate some of the harm but as the design has yet to be finalised there were no details of any such alterations before the Inquiry.
- D300. As it stands, where identified above, the proposals would cause harm to listed buildings and their settings and fail to preserve the character and appearance of the conservation areas. In a number of cases that harm would be

significant. The provisions of the LB&CA Act 1990 are engaged and considerable importance and weight must be given to any such harm when considering the impact of the proposals and when undertaking the balancing exercise required by the NPPF. The identified harm is also contrary to the aims and objectives of CS policy P11 and UDP policies N14, N18A, N18B and N20, particularly in respect of the need for full details of replacement proposals for demolitions in conservation areas, as set out in policy N18B.

Conditions

- D301. The conditions suggested for attachment to the applications for LBC and CAC are set out in the application documents and have subsequently been amended, following discussion at the Inquiry. The amended versions are contained in Inquiry documents APP/199 and APP/204. Some of these have already been discussed above and any further comments on, and further suggested amendments to, the remainder are given in subsequent paragraphs.
- D302. The conditions for the various CAC applications are generic and relate to the time limits for commencement, the requirement to submit a method statement and, where relevant, a structural survey for the works, to ensure they are properly controlled and the need to tie in the consent with the principle development, so that they are not undertaken in isolation. Implementation conditions are also included.
- D303. The conditions suggested for the LBC applications are similarly generic, particularly for those relating to OLE fixings. They call for similar method statements and links to the main Scheme as the CAC conditions as well as approval of a scheme specific to each building that would include surveys and a structural assessment. Any scheme for an invasive survey is to be approved before it is commenced. An implementation condition is included as well as a requirement to submit a method statement for the removal of the OLE if this should be proposed in the future. Conditions for individual LBC applications also include, where appropriate, limits to the set-back distances for listed structures.

- D304. The standard time limit for the commencement of the development is 5 years and the suggested condition should be amended to read: *'The works hereby permitted shall begin within 5 years of the date of this consent'*.
- D305. A condition is needed to secure the submission of a scheme for the fixing of OLE to buildings to be submitted to the local planning authority. This is necessary to control the impact of the works on the listed building. I recommend that the suggested condition is modified by the omission of the words *'in consultation with English Heritage'* as this will be for the local planning authority to organise and a condition cannot rely on the Applicants obtaining the approval of a third party. The words *'in writing'* should be added after *'approved'*, for the avoidance of doubt. This comment also applies to the wording of conditions for the other LBC and CAC applications.
- D306. Confirmation that the works have been discussed with the building owner is necessary to ensure that all parties have been informed and have been able to comment on the final proposals before they are approved.
- D307. A condition calling for a method statement to be approved before any invasive surveys are carried out is necessary to ensure that the fabric of the building is protected as far as possible. The comment on the approval of English Heritage in the preceding paragraph is also relevant. Similarly, a condition securing the submission and approval of a method statement for any works of making good when OLE is removed is necessary for the reasons set out above.
- D308. The suggested condition requiring the OLE works to be carried out as approved is worded in a rather cumbersome manner and I recommend that it is modified by the deletion of all the words following *'in accordance with that approval'* to bring it in line with that suggested for the other LBCs and CACs. Any further modifications would then need to be the subject of an application to vary that condition.
- D309. In respect of any approvals for LBC or CAC other than those specifically relating to the fixing of OLE, a condition would be required linking the works to

the main development, as it may only be the benefits of the LTVS Order that justify them.

- D310. The details of any reinstatement works, where relevant, should be the subject of a condition requiring the submission of details to the local planning authority for approval, to ensure they are carried out in a satisfactory manner.
- D311. I recommend that all the suggested conditions, as amended, including the one relating to archaeological investigations as noted above, are necessary, relevant to the proposals and meet the other tests set out in the National Planning Policy Guidance and should be imposed if LBC or CAC is to be granted for the applications.

APPENDIX D ANNEX: SUGGESTED MODIFICATIONS TO APPLICATION DOCUMENTS

13/03880/LI: Modifications to application document LBC001 (A-09a-1):

Amend section 3 (description of proposed works) to read:

'The proposal is for the set back of 60m length of curtilage wall between 184 Otley Road and the access road to 182 Otley Road (Spenfield House). Wall to be reinstated no further than 5m back from its current position. Forms part of TWAO application A-09a-1, planning direction number LBC001 along with heritage statement report.'

Amend section 10 (demolition) to read:

'Demolition and reinstatement of approximately 60m of curtilage wall.'

13/03880/LI: Modifications to Design, Access and Heritage Statement for LBC001:

Amend paragraphs 2 & 3 of section 1.1 to read:

'The scheme affects the walling to the south of the Grade II Listed Coach House, Number 184 Otley Road. The proposal is for the set back of up to 60m of associated curtilage wall along Otley Road, Leeds. The application is located within the Weetwood Conservation Area.

The application seeks consent for the relocation of these walls to a position of up to 5m north-northwest of the current position. The application is required for the construction and operation of the Leeds New Generation Transport (NGT).'

Amend paragraph 1 of section 3 to read:

'The proposal will see the relocation of approximately 60m of boundary wall associated with a Grade II Listed Building up to 5m to the north northwest of the current location. The exact final location will be subject to approval by the local planning authority.'

In sections 1.2, 3, 5.2 and 5.4 and Appendix E, after 'curtilage' insert 'wall'.

13/03873/LI: Modifications to design, access and heritage statement accompanying application LBC004 (A-09a-4):

In sections 1.1, 1.2, 3 and Appendix E, after 'curtilage' insert 'wall'.

13/03878/LI: Modifications to application document LBC006 (A-09a-6):

Amend section 3 (description of proposed works) to read:

'The proposal is for the set back of up to 70m of associated curtilage wall along Headingley Lane and up to 65m of associated curtilage wall down the western extent of Buckingham Road, Headingley, Leeds. The curtilage wall to be reinstated no further than 5m back from its current position. Forms part of TWAO application A-09a-6, planning direction number LBC006 along with heritage statement report number TN089.'

In section 10 (demolition) after 'curtilage' add 'wall'.

13/03878/LI: Modifications to Design, Access and Heritage Statement for LBC006:

Amend paragraph 3 of section 1.1 to read:

'The application seeks consent for the relocation of the wall to a position of up to 5m to the south west of their current position. The application is required for the construction and operation of the Leeds New Generation Transport (NGT).'

Amend paragraph 1 of section 3 to read

'The proposal will see the relocation of approximately 135m of curtilage wall associated with a Grade II Listed Building to up to 5m to the south west of their current location. The exact final location of these will be subject to discussion with the Conservation Officer at Leeds City Council.'

In paragraph 2 of section 1.1 after 'curtilage' insert 'wall'.

Amend paragraph 4 of section 1.1 to read:

'As the wall is thought to be within the curtilage of the listed structure, permission for the works to be undertaken is sought through Listed Building Consent.'

In Appendix E, after 'curtilage' insert 'wall'.

13/03879/LI: Modifications of application document LBC007 (A-09a-7)

Amend section 3 (description of proposed works) to read:

'The proposal is for the set back of up to 55m of associated curtilage wall along Headingley Lane and up to 80m of associated curtilage wall down the eastern extent of Buckingham Road, Headingley, Leeds. The curtilage wall to be reinstated no further than 2m back from its current position. Forms part of TWAO application A-09a-7, planning direction number LBC007 along with heritage statement report number TN091.'

13/03879/LI: Modifications of design, access and heritage statement LBC007:

Amend paragraph 3 of section 1.1 to read:

'The application seeks consent for the relocation of the wall to a position of less than 2m to the south west of their current position. The application is required for the construction and operation of the Leeds New Generation Transport (NGT).'

Amend paragraph 1 of section 3 to read:

'The proposal will see the relocation of approximately 135m of wall associated with a Grade II Listed Building to up to 2m to the south west of the current location. The exact final location of these will be subject to discussion with the Conservation Officer at Leeds City Council.'

Amend paragraph 4 of section 1.1 to read:

'As the wall is thought to be within the curtilage of the listed structure, permission for the works to be undertaken is sought through Listed Building Consent.'

In sections 1.2, 2.2, 2.3 and 5.1 and Appendix E, after 'curtilage' insert 'wall'.

13/03877/LI: Modifications of application document LBC008 (A-09a-8):

Section 3 (description of proposed works) to be amended to read:

'The scheme affects the Grade II Listed Gate Piers of Rose Court and proposes the set back of the twin piers to the north of Rose Court, Headingley Lane, Leeds. The twin piers to be reinstated no further than 3m back from their current position. Forms part of TWAO application A-09a-8, planning direction number LBC008 along with heritage report number TN088.'

13/03877/LI: Modifications of design, access and heritage statement for LBC008:

Amend paragraph 3 of section 1.1 to read:

'The application seeks consent for the relocation of two gate piers for the reinstatement to a location no more than 3m back from their current position. The application is required for the construction and operation of the Leeds New Generation Transport (NGT).'

In section 1.2, after 'curtilage' insert 'wall'.

In Appendix E, after 'curtilage' insert 'structure'.

13/04271/LI: Modifications of application document LBC009 (A-09a-9)

In section 3 (description of proposed works) replace 'approximately 5m' with '3m'.

13/04271/LI: Modifications of design, access and heritage statement for LBC009

In paragraph 3 of section 1.1 replace '5m' with '3m'.

In paragraphs 2 and 3 of section 1.1, after 'curtilage' insert 'wall'.

In sections 1.2, 2.3, 3, 5.1 and Appendix E, after 'curtilage' insert 'wall'

13/03875/LI: Modifications of design, access and heritage statement accompanying application LBC012 (A-09a-12)

In paragraphs 3 and 4 of section 1.1, before 'curtilage' insert 'within the'.

In paragraph 4 of section 1.1. after 'curtilage' insert 'of'.

In section 1.2 after 'curtilage' insert 'wall'.

In sections 3 and 5.2, after 'curtilage' insert 'structure'.

13/03876/LI: Modifications of application document LBC017 (A-09a-17):

In sections 9 (materials) and 10 (demolition) after 'curtilage' insert 'structure'.

13/03876/LI: Modifications of design, access and heritage statement for LBC017:

In paragraph 2 of section 1.1 replace 'curtilage' with 'a curtilage wall'.

In sections 1.2, 3 and 5.4 after 'curtilage' insert 'structure'.

13/03982/LI: Modifications of application documents LBC060 (A-09c-60):

In section 3 (description of proposed works) after 'curtilage' insert 'wall'.

13/03982/LI: Modifications of design, access and heritage statement for LBC060:

In section 1.1 after '*removal of curtilage*' and after '*associated curtilage*' insert '*wall*'.

In sections 1.2, 3, 5.2 and Appendix E, after '*curtilage*' insert '*wall*'.

13/03966/CA: Modifications of application document CAC001 (A-10-1)

Amend section 3 (description of the proposal) to read:

'The application seeks consent for the demolition and replacement of unlisted boundary walls, up to 2.5m from their original location within a Conservation Area. The boundary walls to be reinstated no further than 2.5m back from their current position. Forms part of TWAO application A-10-1, planning direction number CAC001 along with heritage statement report number TN081.'

13/03967/CA: Modifications of application document CAC002 (A-10-2)

In section 4 (site address details) after '*curtilage*' insert '*wall*'.

13/03968/CA: Modifications of application document CAC003 (A-10-3):

Amend section 3 (description of the proposal) to read:

'Demolition and reinstatement of curtilage wall. The curtilage wall to be reinstated no further than 4m back from its current position. Forms part of TWAO application A-10-3, planning direction number CAC003 along with heritage statement report number TN083.'

13/03955/CA: Modifications of application document CAC004 (A-10-4)

Amend section 3 (description of the proposal) to read:

'Proposed demolition of the building's southerly extension and southern curtilage wall.'

13/03963/CA: Modifications of application document CAC005 (A-10-5):

In section 3 (description of the proposal), replace '*between 5 and 7m*' with '*no further than 5m back*'.

13/03963/CA: Modifications of design, access and heritage statement CAC005:

In sections 1.1, 2.2 and 6.4, replace '*between 5 and 7m*' with '*up to 5m*'.

In section 4 table 1.1, replace '*5-7m*' with '*5m*'.

In section 6.2, replace '*7m*' with '*5m*'.

In Appendix D, after 'curtilage' insert 'wall'.

13/03959/CA: Modifications of application document CAC011 (A-10-11):

Amend section 3 (description of the proposal) to read:

'The application seeks consent for the set back of up to 300m of non-listed curtilage wall along Headingley Lane. The wall to be reinstated no further than 3m back from its current position except in the vicinity of the proposed bus stop layby on the Headingley Business Park boundary where the reinstated wall shall be set back no further than 6m. Forms part of TWAO application A-10-11, planning direction number CAC011 along with heritage statement report number TN076.'

In section 4 (site address details) after 'curtilage' insert 'wall'.

13/03959/CA: Modifications of design, access and heritage statement accompanying application document CAC011 (A-10-11):

In section 1.1, replace 'between 5-10m from the original location' with:

'up to 3m from the original location except in the vicinity of the proposed bus stop layby on the Headingley Business Park boundary where the reinstated wall shall be set back no further than 6m.'

In section 4, replace 'between 5m and 10m' with:

'up to 3m, except in the vicinity of the proposed bus stop layby on the Headingley Business park boundary where the limit of deviation will be up to 6m.'

In section 4 table 1.1 replace '5-10m from original location' with:

'3m from original location, except in the vicinity of the proposed bus stop layby on the Headingley Business Park Boundary where wall will be set back up to 6m from original location.'

In section 3.1.1 and Appendix D, after 'curtilage' insert 'wall'.

13/03957/CA: Modifications of design, access and heritage statement accompanying application document CAC012 (A-10-12):

In section 2.3 after 'curtilage' insert 'walls'.

In section 3.1, after 'curtilage' insert 'structures'.

13/03979/CA: Modifications of application document CAC014 (A-10-14):

In section 3 (description of the proposal), after '*curtilage*' insert '*wall*'.

APPENDIX E: SUGGESTED CONDITIONS FOR LISTED BUILDING CONSENT

Reasons

The reasons for the conditions that are suggested below for the LBCs are given in paragraphs D303, D304, D305, D306, D307, D308, D309 and D310 of Appendix D to this report: Report on the Listed Building and Conservation Area Consents.

SUGGESTED CONDITIONS FOR OLE FIXING LISTED BUILDING CONSENTS

13/03914/LI (LBC003), 13/04303/LI (LBC005), 13/03890/LI (LBC010), 13/03915/LI (LBC011), 13/03942/LI (LBC013), 13/03941/LI (LBC014), 13/03944/LI (LBC015), 13/03943/LI (LBC016) 13/03933/LI (LBC018), 13/03950/LI (LBC019), 13/03892/LI (LBC020), 13/03896/LI (LBC021), 13/03897/LI (LBC022), 13/03945/LI (LBC023), 13/03930/LI (LBC024), 13/03928/LI (LBC025), 13/03907/LI (LBC026), 13/03906/LI (LBC027), 13/03929/LI (LBC028), 13/03923/LI (LBC029), 13/03927/LI (LBC030), 13/03926/LI (LBC031), 13/03936/LI (LBC032), 13/03918/LI (LBC033), 13/03920/LI (LBC034), 13/03922/LI (LBC035), 13/03925/LI (LBC036), 13/03898/LI (LBC037), 13/03895/LI (LBC038), 13/03937/LI (LBC039), 13/03938/LI (LBC040), 13/03948/LI (LBC041), 13/03946/LI (LBC042), 13/03947/LI (LBC043), 13/03913/LI (LBC044), 13/03899/LI (LBC045), 13/03940/LI (LBC046), 13/03939/LI (LBC047), 13/03935/LI (LBC048), 13/03900/LI (LBC050), 13/04330/LI (LBC051), 13/03934/LI (LBC052), 13/03894/LI (LBC054), 13/04314/LI (LBC055), 13/03912/LI (LBC056), 13/03888/LI (LBC057), 13/03889/LI (LBC058), 13/03931/LI (LBC059), 13/03949/LI (LBC061).

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of Details

2. No overhead line equipment fixings may be placed on a listed building until a written scheme for that building has been submitted to and approved by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (aa) a drawing identifying the precise fixing position or positions of the OLE fixings,
 - (a) the design, positioning and material of the overhead line equipment fixings;
 - (b) survey drawings and photographs of all external parts of the listed building to be affected by the overhead line equipment fixings;
 - (c) a report detailing the results of a structural assessment and investigations into the condition of the listed building to confirm the suitability of the proposed overhead line equipment fixing positions;

- (d) a method statement for the works; and
- (e) confirmation that the proposals have been discussed with the building owner.

Invasive surveys

3. Where an invasive survey is considered necessary to determine the position and design of the fixing, that survey shall be carried out before the scheme referred to in condition 2 above, and a method statement for that survey shall be submitted to the local planning authority for its written approval, in consultation with English Heritage, before the survey is commenced.

Removal of overhead line fixings

4. Prior to the removal of any overhead line equipment installed under this consent is removed, a method statement for making good the fixing holes shall be submitted to the local planning authority for its written approval.

Implementation of works hereby permitted

5. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval, unless otherwise approved in writing by the local planning authority.

SUGGESTED CONDITIONS FOR OTHER LISTED BUILDING CONSENTS

13/03880/LI: LBC001: The Coach House, 184, Otley Road

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:
 - (i) details of how the existing wall is to be taken down;

- (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
- (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved in writing by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The 60m length of curtilage wall between 184 Otley Road and the access road to 182 Otley Road (Spenfield House) shall be reinstated no further than 5m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No. 5 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03887/LI: LBC002: The Horse Trough opposite 62 Otley Road

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works hereby permitted shall not begin until a written scheme for the listed structure, to minimise any damage and the risk of damage to the fabric of the

structure, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:

- (a) survey drawings and photographs of all external parts of the structure to be affected by the works;
- (b) a report detailing the results of a structural assessment and investigations into the condition of the structure;
- (c) a method statement for the works
- (d) confirmation that the proposals have been discussed with the building owner.

Connection to principal development

- 3. The works hereby authorised shall not be undertaken except in connection with Work No 5 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

- 4. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03873/LI: LBC004: 62, Headingley Lane

Time Limit for Commencement of Development

- 1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

- 2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works;
 - (d) confirmation that the proposals have been discussed with the building owner.

Connection to principal development

- 3. The works hereby authorised shall not be undertaken except in connection with Work No 6 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

4. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03878/LI: LBC006: Buckingham House, Headingley Lane

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
 - (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other

reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The curtilage wall shall be reinstated no further than 5m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

8. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03879/LI: LBC007: Ford House, Headingley Lane

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
 - (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The curtilage wall shall be reinstated no further than 2m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03877/LI: LBC008: The Piers, Rose Court, Headingley Lane

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:

- (i) details of how the existing piers are to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement piers;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
- (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement piers, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of piers

5. The gate piers shall be reinstated no further than 3m back from their current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/04271/LI: LBC009: Rose Court, Headingley Lane

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local

planning authority, in consultation with English Heritage. The written scheme shall include:

- (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
- (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
- (c) a method statement for the works, including:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
- (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

- 3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

- 4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

- 5. The curtilage wall shall be reinstated no further than 3m back from its current position.

Connection to principal development

- 6. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

- 7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03875/LI: LBC012: Kingston Terrace, Woodhouse

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this beginning with the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:
 - (i) details of how the existing pier and wall are to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement pier and wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
 - (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement piers and wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The piers and curtilage wall shall be reinstated no further than 5m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03876/LI: LBC017: Old Broadcasting House, Woodhouse Lane

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:
 - (i) details of how the existing pier and wall are to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement pier and wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
 - (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement piers and wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Connection to principal development

5. The works hereby authorised shall not be undertaken except in connection with Work No 8 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

6. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03982/LI: LBC060: Braime Building, Hunslet Road

Time Limit for Commencement of Development

1. The works to a listed building hereby permitted shall begin before the expiration of five years from the date of this consent.

Approval of details

2. The works to a listed building hereby permitted shall not begin until a written scheme for that building, to minimise any damage and the risk of damage to the fabric of the building, has been submitted to and approved in writing by the local planning authority, in consultation with English Heritage. The written scheme shall include:
 - (a) survey drawings and photographs of all external parts of the listed building to be affected by the works;
 - (b) a report detailing the results of a structural assessment and investigations into the condition of the listed building;
 - (c) a method statement for the works, including:
 - (i) details of how the existing pier and wall are to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement pier and wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used; and
 - (d) confirmation that the proposals have been discussed with the building owner.

Structural survey

3. A structural assessment and investigation into the condition of the listed building shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement of Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement piers and wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Connection to principal development

5. The works hereby authorised shall not be undertaken except in connection with Work No 12 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

6. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

APPENDIX F: SUGGESTED CONDITIONS FOR CONSERVATION AREA CONSENT

Reasons

The reasons for the conditions that are suggested below for the CACs are given in paragraphs D302, D304, D305, D307, D309 and D310 of Appendix D to this report: Report on the Listed Building and Conservation Area Consents.

13/03966/CA (CAC001): 1, 4, 5, 6 and 8 Weetwood House Court

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Structural survey

3. A structural assessment and investigation into the condition of the affected structure shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The curtilage wall shall be reinstated no further than 2.5m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 4 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03967/CA (CAC002): 1 and 1A Holly Bank

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Structural survey

3. A structural assessment and investigation into the condition of the affected structure shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The curtilage wall shall be reinstated no further than 4.5m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No. 5 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03968/CA (CAC003): 42/44 Otley Road

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Structural survey

3. A structural assessment and investigation into the condition of the affected structure shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The curtilage wall shall be reinstated no further than 4m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 5 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03955/CA (CAC004): 40 Otley Road

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 5 authorised by the Leeds Trolley Vehicle System Order.

13/03963/CA (CAC005): 5 Alma Road

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this beginning with the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Structural survey

3. A structural assessment and investigation into the condition of the affected structure shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The curtilage wall shall be reinstated no further than 5m back from its current position.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 5 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03981/CA (CAC006): Boundary walls in Wood Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 6 authorised by the Leeds Trolley Vehicle System Order.

13/03952/CA (CAC007): 6 Wood Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 6 authorised by the Leeds Trolley Vehicle System Order.

13/03965/CA (CAC008): Shire Oak Street

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 6 authorised by the Leeds Trolley Vehicle System Order.

13/03964/CA (CAC009): Shire Oak Road

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 6 authorised by the Leeds Trolley Vehicle System Order.

13/03980/CA (CAC010): 35a Headingley Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Structural survey

3. A structural assessment and investigation into the condition of the affected structure shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Connection to principal development

5. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

6. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03959/CA (CAC011): Curtilage to the south of 35a Headingley Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the existing wall is to be taken down;
 - (ii) details of the care, cleaning and storage of materials for reuse in the replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Structural survey

3. A structural assessment and investigation into the condition of the affected structure shall be carried out before the scheme referred to in condition 2 is submitted to the local planning authority. The assessment and investigation shall be carried out in accordance with a method statement approved by the local planning authority, in consultation with English Heritage.

Replacement and Reinstatement Works

4. Before the works hereby authorised begin, details of the alignment, elevation and materials for the replacement wall, timing of the reinstatement works, the position and species of any trees to be removed and any proposed planting, and any other reinstatement works, shall be submitted to and approved in writing by the local planning authority.

Set-back of wall

5. The wall shall be reinstated no further than 3m back from its current position except in the vicinity of the proposed bus stop lay-by on the Headingley Business Park boundary where the reinstated wall shall be set back no further than 6m.

Connection to principal development

6. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

7. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03957/CA (CAC012): Ruinous lodge to the north east of 35 Headingley Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the demolition is to be carried out;
 - (ii) details of the care, cleaning and storage of materials for reuse in any replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Connection to principal development

3. The works hereby authorised shall not be undertaken except in connection with Work No. 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

4. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03958/CA (CAC013): 31 Headingley Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with

Work No 7 authorised by the Leeds Trolley Vehicle System Order.

13/03979/CA (CAC 014): Former Coach House to the north of the Girls' High School

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Method Statement

2. No works hereby permitted shall commence until a method statement for the works has been submitted to and approved in writing by the local planning authority. The method statement shall include:
 - (i) details of how the demolition is to be carried out;
 - (ii) details of the care, cleaning and storage of materials for reuse in any replacement wall;
 - (iii) samples of any additional facing materials; and
 - (iv) details of the mortar and techniques to be used.

Connection to principal development

3. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

Implementation of works hereby permitted

4. With respect to any conditions that require the approval of the local planning authority, the works or matters thereby approved shall be carried out in accordance with that approval.

13/03954/CA (CAC015): 27 Headingley Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

13/03953/CA (CAC016): 2 Victoria Road

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

13/03956/CA (CAC017): 11-25 Headingley Lane

Time Limit for Commencement of Development

1. The works hereby permitted shall begin before the expiration of five years from the date of this consent.

Connection to principal development

2. The works hereby authorised shall not be undertaken except in connection with Work No 7 authorised by the Leeds Trolley Vehicle System Order.

APPENDIX G: COSTS APPLICATIONS

Application by FWY for a Partial Award of Costs against the Promoters

The Written Submissions for FWY

The material points²²³⁵were:

- G1. The application is for a partial costs award in respect of two matters.
- G2. First, the application is for the costs to FWY occasioned by the submission of the late supplementary heritage information in Document B-13. The information was substantial and was submitted after the Applicants had closed the heritage part of their case. There was no good reason for the late submission. Reliance is made on the written²²³⁶ and oral submission made on behalf of FWY in resisting the application to admit the evidence.
- G3. Second, the application is for wasted costs in respect of addressing the Applicants' statement of case following the revised Business Case. The fully revised Business Case should have been ready when the application for the TWA Order was made. Although the Applicants indicated they would produce a revised case, the objectors had no alternative but to respond to the case which the Applicants were currently making in order to meet the deadline for the statement of case. No reasonable explanation has been given. The Applicants should not have embarked upon the TWA Order process until they were properly ready. That was unreasonable and it resulted in wasted costs.

The Response on behalf of the Applicants

The material points²²³⁷were:

- G4. Reference has been made to Circular 03/94, which deals with the Secretary of State's policy on the award of costs, and in particular paragraphs 3, 7(1) and 7(2) of Annex 1.

²²³⁵ Document CO-OBJ/923

²²³⁶ Document OBJ/923-502

²²³⁷ Document A-CO-OBJ/923

- G5. With regard to the submission of Document B-13, the Applicants have not acted unreasonably as it was commissioned in response to criticisms made by objectors in relation to the original heritage assessment to the effect that the original assessment did not contain sufficient information to allow the Secretary of State properly to understand the Scheme's likely heritage impacts. It was not unreasonable to provide the additional information and FWY has not identified what costs have been 'thrown away', as it would be necessary for FWY to explain why it would not have incurred these costs had the information contained in Document B-13 been provided earlier.
- G6. In terms of the revised Business Case²²³⁸, the Applicants complied with Rule 10 of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 (2006 Rules) and Rule 7 of the Transport and Works (Inquiries Procedure) Rules 2004 (2004 Rules), as it was not required to accompany the application under Rule 10, but was to be put in evidence, and was served on the Secretary of State and made available for inspection with the Applicants' statement of case as required by the 2004 Rules. Notice of the intended publication was given to FWY by the Applicants on 6 December 2013. This is just 6 days after notice was given to FWY of the requirement to serve a Statement of Case. It was therefore available at the same time as FWY served its Statement of Case. Therefore, there is no basis for FWY's contention that the revised Business Case should have been published at the time that the application for the TWA Order was made.
- G7. If, following the submission of the Applicants' Statement of Case, FWY had wished to comment on it, rule 7(8) of the 2004 Rules sets out a procedure to be followed by enabling parties to make such comments up to 6 weeks prior to the beginning of a public inquiry. FWY failed to follow the rule 7(8) procedure, and therefore avoided the costs of doing so. FWY served proofs of evidence and in those proofs of evidence considered and responded to the 2014 Business Case Review. This is a cost that it would have incurred in any event. Accordingly, the Applicants' actions in producing the revised Business Case with

²²³⁸ Document C-1

their Statement of Case was not unreasonable, and did not result in FWY incurring additional cost.

The Reply on behalf of FWY

G8. I am not aware of any reply having been submitted on behalf of FWY.

Inspector's Conclusions on the Application by FWY for a Partial Award of Costs against the Applicants

G9. I have had regard to Circular 03/94, together with the PPG in relation to the applications for LBC and CAC. In terms of the submission of Document B-13, the Applicants introduced new and amended evidence late in the proceedings, which is one of the examples given in the Circular of when applicants are at risk of an award of costs against them. The submission of this document did not cause the Inquiry to be adjourned, and FWY has not provided sufficient evidence to show that it resulted in it being unnecessarily prolonged. I held that the document was necessary evidence to assist the Secretaries of State in making their decisions²²³⁹. As such, if that document had been submitted at the same time as the other evidence, costs would have been incurred by FWY in addressing it. Furthermore, FWY has not identified any unnecessary expense that it has incurred due to this behaviour.

G10. The evidence provided shows that the revised Business Case was submitted in accordance with the Rules and that FWY had been notified of its existence in sufficient time for it to take account of the document in its Statement of Case or make comments on it prior to the Inquiry. The costs of addressing this document would have been incurred by FWY in any event, and FWY has not identified any additional costs that it has incurred as a result of the document not being submitted when the application for the TWA Order was made.

G11. In conclusion on the application for costs, I find that unreasonable behaviour by the Applicants has not been demonstrated in respect of the revised Business Case, but it has been demonstrated in relation to the late submission of

²²³⁹ Document INSP/102

Document B-13. However, neither of these matters has been shown to have resulted in unnecessary expense being incurred by FWY.

Recommendation on the Application by FWY for a Partial Award of Costs against the Applicants

G12. I RECOMMEND that the application for a partial award of costs be refused.

Application by Drummond and Churchwood Residents' Association (DCRA) for a Partial Award of Costs against the Applicants

The Written Submissions for Drummond and Churchwood RA

The material points²²⁴⁰ were:

- G13. The grounds for costs are unreasonable behaviour by the Applicants in that they introduced new/amended evidence in the form of a 370 page report late in the Inquiry proceedings after evidence giving and cross examination had taken place on the Historic Environment Report²²⁴¹, which formed part of their Environmental Statement.
- G14. The Drummond and Churchwood RA, a member of the North West Leeds Transport Forum, commissioned and funded expert advice from Mrs Caroline Hardie of Archaeo-Environment Ltd to help put its case against the proposed LTVS. Mrs Hardie produced her report²²⁴² on the Historic Environment Report as well as two rebuttal reports²²⁴³.
- G15. Subsequently an additional report of over 370 pages was submitted by the Applicants containing a large amount of new evidence on the impact of the Scheme. This became a Supplement to the Environmental Statement Historic Environment Report²²⁴⁴. As a result, the RA had to commission additional advice from Mrs Hardie on this new supplementary report and on related planning conditions that related to the heritage area.

²²⁴⁰ Document CO1-OBJ/1727

²²⁴¹ Document A-08c-7

²²⁴² Document H-1

²²⁴³ Documents DCRA-101 and DCRA-102

G16. The additional costs that have been incurred for this additional work form the claim for partial costs.

The Response on behalf of the Applicants

The material points²²⁴⁵ were:

G17. Reference has been made to Circular 03/94, which deals with the Secretary of State's policy on the award of costs, and in particular paragraphs 3, 7(1) and 7(2) of Annex 1.

G18. With regard to the submission of Document B-13, the Applicants have not acted unreasonably as it was commissioned in response to criticisms made by objectors in relation to the original heritage assessment to the effect that the original assessment did not contain sufficient information to allow the Secretary of State properly to understand the Scheme's likely heritage impacts. It was not unreasonable to provide the additional information.

G19. With regard to DCRA's complaint that Document B-13 was produced late in the Inquiry proceedings after evidence giving and cross examination had taken place on the Historic Environment Report, the resulting costs incurred in considering and responding to it would not have been avoided if the information had been provided earlier. It follows that no award of costs should be made.

If, contrary to the above, the Secretary of State was minded to make an award of costs in DCRA's favour, that award would have to be limited to additional costs incurred in responding to Document B-13 over and above any costs that would have been incurred had it been produced earlier. There was no cross examination subsequent to the production of Document B-13 and any work done on conditions would have been incurred regardless of the timing of its production. Similarly, there is no reason why DCRA should be able to recover its costs in relation to 'advice on procedure', as it objected unsuccessfully to the introduction of Document B-13 and so cannot recover its costs of objecting.

²²⁴⁴ Document B-13

²²⁴⁵ Document A-CO-OBJ/1727

Once Document B-13 was accepted there was no need to incur advice on procedure.

The Reply on behalf of DCRA

The material points²²⁴⁶ were:

- G20. The assumption that the applicants for a TWA Order would not act unreasonably because of the possibility of costs being awarded is unjustifiable. Whatever the excuses or extenuations advanced by the Applicants, Document B-13 was submitted to the Inquiry after the close of evidence and cross-examination of the Applicants' expert witness on this matter. The document contained much evidence which was relevant to the Inquiry which could not be tested, but is essential for the Inspectors and the Secretary of State to see to be able to make an informed judgment. This in itself is unreasonable.
- G21. The reasons for the late submission amount to unreasonable behaviour on the part of the Applicants. The Document was submitted within about 2 weeks of omissions from the original Historic Environment Report having been pointed out to the Inquiry. That such a substantial amount of 'new' information on such a number of sites could have been catalogued, researched, evaluated and reported, then submitted to a validation process, within that time span is not credible. It was admitted in submissions regarding the status of the Document that the information incorporated into it had been on file but had not been written up. The failure to submit this material at the proper time is therefore negligent. Its omission would have misled the Inquiry and the Secretary of State as to the extent of the impacts of the Scheme on the historic environment.
- G22. Whatever legal category the Document might be allocated to, this is unreasonable behaviour. DCRA and NWLTF have throughout the debate on NGT sought to extend their evaluation of local impacts of the Scheme to the cumulative impact on the City. The evaluation of the original Historic Environment Report by Mrs Hardie was an important contribution to that. It

was also intended to support one of the key criticisms of the Scheme made by both these objectors regarding the cumulative impact on Heritage assets justifying rejection of the TWA Order application. The new information in Document B-13 had to be evaluated in order to consider whether it weakened or strengthened the arguments. Therefore, the expert evaluation and the costs incurred in obtaining that advice from an expert were absolutely essential in supporting these objectors' cases and, in inquiry terms, necessary.

G23. The Applicants' response that the costs of preparation for cross-examination on the new evidence would have been a charge not subject to a costs application if the new information in Document B-13 had been submitted to the Inquiry at the proper time is accepted. However, it is not known whether a larger fee would have been requested if the report for examination had included the material in this document, submitted at the proper time. What is certain is that Mrs Hardie did not regard the document as a trivial extension of her first task, was obliged to respond quickly, and had to rearrange much other work to do so. She quite properly charged for her extra work and for the disruption. The whole of this second charge should be remitted in full.

Inspector's Conclusions on the Application by DCRA for a Partial Award of Costs against the Applicants

G24. I have had regard to Circular 03/94, together with the PPG in relation to the applications for LBC and CAC. In terms of the Circular, the submission of Document B-13 amounts to new and amended evidence being introduced late in the proceedings, which is one of the examples given in the Circular of when applicants are at risk of an award of costs against them. The submission of this document did not cause the Inquiry to be adjourned, and DCRA has not provided sufficient evidence to show that it resulted in it being unnecessarily prolonged. I held that the document was necessary evidence to assist the Secretaries of State in making their decisions²²⁴⁷. As such, if that document

²²⁴⁶ Document CO2-OBJ/1727

²²⁴⁷ Document INSP/102

had been submitted at the same time as the other evidence, costs would have been incurred by DCRA in addressing it. However, DCRA has indicated that the cost of the expert advice may have been greater than if the document had been submitted with the other Inquiry evidence. Therefore, the unnecessary expense that DCRA incurred due to this behaviour is the additional costs due to the late submission of this document.

G25. In conclusion on the application for costs, I find that unreasonable behaviour by the Applicants has been demonstrated in respect of the late submission of Document B-13 and this has resulted in unnecessary expense being incurred by DCRA, but limited to additional costs incurred in responding to Document B-13 over and above any costs that would have been incurred had it been produced earlier.

Recommendation on the Application by DCRA for a Partial Award of Costs against the Applicants

G26. I RECOMMEND that the application for a partial award of costs be allowed limited to those additional costs incurred in responding to Document B-13 over and above any costs that would have been incurred had it been produced earlier.