

# Trans-Pennine Routes Feasibility Study

Stage 2 Report – Annexes

February 2015

1059538/07/A



This report has been prepared for the Highways Agency and the Department for Transport by Mouchel Ltd.



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## Introduction

### Annexes

This document presents the annexes to accompany the Stage 2 Report for the trans-Pennine Routes Feasibility Study.

## 1 Annex 1 – Initial Sift Results

Initial Sifting Criteria		Qualitative assessment against identified problems	<u>Qu</u> a	alitative assessment against identified objectives	Deliverability (e.g. political, planning, timescale	Feasibility (e.g. physical constraint, land
Each option must meet the following sifting criteria to be considered further within EAST:	2	Large beneficial impact	2	Large beneficial impact	or third party issues)	availability and design standards)
1: Overall moderate impact against identified problems (Appraisal score >4)	1	Beneficial impact	1	Beneficial impact		
2: Overall moderate fit with route objectives (Appraisal score >3)	0	Neutral / marginal impact	0	Neutral / marginal impact	Deliverable in theory	Feasible in theory
3: Must be deliverable in theory	-1	Adverse impact	-1	Adverse impact	Deliverable but with challenges	Feasible but with challenges
4: Must be feasible in theory	-2	Large adverse impact	-2	Large adverse impact	Very difficult to deliver	Not feasible / significant challenges

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	ence (Route Section-				Proble Scale					(EA	Obje AST Fit Obje				Deliverability	Feasibility	Initial S	o EAST	Take to		
	Option Description	1	2	3	4	5	6 7		Total	2	3	1 5	6	Total	Denverability	reasidinty	1	2	3	4	EAST
1.0	A628 HGV Control (inc. complementary sustainable measures)	2	0	1	0	0	2 1	6	-1	1	1	I 0	2	4	Very difficult to deliver	Feasible but with challenges	<ul> <li>✓</li> </ul>	✓	×	√	×
2.0	A628 Peak Period Only HGV Control (inc. complementary sustainable measures)	2	0	1	0	0	2 1	6	-1	1	1	I 0	2	4	Very difficult to deliver	Feasible but with challenges	1	✓	x	√	x
3.0	M67 to A6018 Link Road	1	0	0	0	1	1 1	4	1	0	1	1	1	5	Deliverable but with challenges	Feasible but with challenges	×	√	√	✓	x
4.0	A57 Mottram One-Way	1	0	0	0	1	1 2	5	1	0	1	1	1	5	Deliverable but with challenges	Feasible but with challenges	<ul> <li>✓</li> </ul>	√	~	√	1
5.0	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018)	1	0	0	1	1	1 2	6	1	-1	1	2 1	1	5	Deliverable but with challenges	Feasible but with challenges	~	~	~	✓	~
6.0	A57(T) to A57 Link Road	1	0	0	0	1	1 1	4	1	0	1	1	1	5	Deliverable but with challenges	Feasible but with challenges	×	√	~	✓	x
	Bypass of Mottram, Hollingworth and Tintwistle	1	0	0	1	1	2 2	7	2	-1	1	2 1	1	6	Deliverable but with challenges	Feasible but with challenges	√	✓	1	✓	1
8.0	M67 to M1 Dual Carriageway Link Road	1	1	0	2	2	2 2	10	) 2	-2	-1	2 1	1	3	Very difficult to deliver	Not feasible / significant challenges	- ✓	×	×	×	x
9.0	M67 to M1 Trans-Pennine Tunnel	2	2	0	2	2	2 2	12	2 <b>2</b>	1	2	2 2	1	10	Very difficult to deliver	Feasible but with challenges	✓	✓	×	✓	×
10.0	A628/A616 Selected Dualling	1	0	0	1	1	1 0	4	1	-1	0	1	1	3	Very difficult to deliver	Feasible but with challenges	×	×	×	√	×
11.0	A628/A616 Dualling	2	1	0	2	2	2 0	9	1	-2	-1	1	1	1	Very difficult to deliver	Feasible but with challenges	<ul> <li>✓</li> </ul>	×	×	✓	x
	A61 Dualling	1	0	0	1	1	1 1	5	1	0	0		1		Deliverable but with challenges	Feasible but with challenges	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓	✓	- ✓
13.0	Climbing Lanes	1	0	0	1	1	1 0	4	1	-1	0	1	1	3	Deliverable but with challenges	Feasible but with challenges	×	×	✓	✓	×
14.0	Route Safety Improvements	2	0	1	0	1 (	0 0	4	0	0	0	) ()	2	2	Deliverable in theory	Feasible in theory	×	×	√	√	×
15.0	A616 Widening at Midhopestones	1	0	0	1	1	1 0	4	1	0	0	0	1	3	Deliverable but with challenges	Feasible but with challenges	×	×	✓	✓	×
16.0	A616 Langsett Widening Scheme	1	0	0	1	1	1 0	4	1	0	0	0	1	3	Deliverable but with challenges	Feasible but with challenges	×	×	✓	✓	×
17.0	A616/A628 Flouch Junction Improvement Scheme	1	0	0	1	1	1 0	4	1	0	0	0	1	3	Deliverable but with challenges	Feasible but with challenges	×	×	1	<ul><li>✓</li></ul>	×
18.0	A628 Salters Brook Scheme - Carriageway Realignment	1	0	0	· ·	1	1 0		1	0	0		1	3	Deliverable but with challenges	Feasible but with challenges	×	×	✓	✓	×
19.0	Slow Vehicle Refuges	1	0	0	-	-	1 0		1	0	-	-	1	3	Deliverable but with challenges	Feasible but with challenges	×	×	1	√	×
20.0	Technology Package	1	0	2	0	-		-	0	-	÷	) 1	-	1	Deliverable in theory	Feasible in theory	×	×	✓	✓	×
21.0	Maintenance Strategy	0	0	0	2	2 (	0 0	4	0	0	0	) 1	0	1	Deliverable in theory	Feasible in theory	×	×	<ul><li>✓</li></ul>	<ul><li>✓</li></ul>	×
22.0	A628 Peak District Tunnel	1	2	0	1	2	2 1	9	2	1	1	2 1	1	8	Very difficult to deliver	Feasible but with challenges	<ul> <li>✓</li> </ul>	✓	×	1	×
23.0	Sustainable Transport Measures	1	0	0	0	0	0 0	1	0	0	1	0 (	1	2	Deliverable but with challenges	Feasible but with challenges	×	×	✓	✓	×

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#### Problems

Accidents reduce journey time reliability, with high accident rates on some routes and a number of accident clusters
Severe weather causes road closures which reduce journey time reliability
There is a lack of technology to assist in the operation and management of the routes and provide information for travellers
Maintenance on single carriageway sections reduces journey-time reliability.
Asset condition, including the standard, age and damage to infrastructure, reduce journey-time reliability through significant maintenance operations and risk from closures
Journey-times are increased by delays at junctions and the geometry and topography of routes
Long term traffic growth will bring some urban sections of routes to their capacity
<b>Connectivity</b> – improving the connectivity between Manchester and Sheffield through reduction in journey times and improved journey-time reliability
<b>Environmental</b> – avoiding unacceptable impacts on the natural environment and landscape in the Peak District National Park, and optimising environmental opportunities
Societal – improving air quality and reducing noise impacts, and addressing the levels of severance on the Trans-Pennine routes in urban areas
Capacity – reducing delays and queues that occur during peak hours and improving the performance of junctions on the routes
<b>Resilience</b> – improving the resilience of the routes through reductions in the number of incidents and reduction of their impacts
Safety - reductions in the number of accidents and reductions of their impacts

## 2 Annex 2 – Second Sift Results

Each option must meet the following sifting criteria to be considered further within EAST: 1: Overall moderate impact against identified problems (Appraisal score >4)

- 2: Overall moderate fit with route objectives (Appraisal score >3)
- 3: Must be deliverable in theory
- 4: Must be feasible in theory

	Qualitative assessment against identified problems	9	Qualitative assessment against identified objectives	<u>Deliverability</u> (e.g. political, planning, timescale or third party issues)	<u>Feasibility</u> (e.g. physical constrain availability and design st
	Large beneficial impact Beneficial impact	2 1	Large beneficial impact Beneficial impact	party issues)	availability and design si
(	Neutral / marginal impact	0	Neutral / marginal impact	Deliverable in theory	Feasible in theory
-	Adverse impact	-1	Adverse impact	Deliverable but with challenges	Feasible but with challenge
_	Large adverse impact	-2	Large adverse impact	Very difficult to deliver	Not feasible / significant cha

Reference (Route Section-	Option Description		Problems (EAST Scale of Impact)						(	(EAST		Object vith Ot		ojecti	ives)	Deliverability	Feasibility	Initi	al Siftin to	a Prior	Take to	
Intervention)		1	2	3	4	5	6 7		1	2	3	4	5	6	Total			1	2	3	4	EAST
P7.0	Bypass of Mottram, Hollingworth and Tintwistle	1	0	0	1	1	2 2	7	2	-1	1	2	1	1	6	Deliverable but with challenges	Feasible but with challenges	✓	√	✓	1	√
7.1	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road	1	0	0	1	1	2 2	7	2	-1	1	2	1	1	6	Deliverable but with challenges	Feasible but with challenges	1	✓	<ul> <li>✓</li> </ul>	✓	- ✓
7.2	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes	1	0	0	1	1	2 2	7	2	-2	1	2	1	1	5	Deliverable but with challenges	Feasible but with challenges	✓	✓	<ul> <li>✓</li> </ul>	✓	- ✓
7.3	Bypass of Mottram, Hollingworth and Tintwistle with Route Safety Improvements	2	0	1	1	1	2 2	9	2	-1	1	2	1	2	7	Deliverable but with challenges	Feasible but with challenges	✓	✓	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>
7.4	Bypass of Mottram, Hollingworth and Tintwistle with A628 HGV Control	2	0	1	1	1	2 2	9	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	√	✓	×	✓	×
7.5	Bypass of Mottram, Hollingworth and Tintwistle with Maintenance Strategy/Technology Package	1	0	2	2	2	2 2	11	2	-1	1	2	1	1	6	Deliverable but with challenges	Feasible but with challenges	1	~	~	~	~
7.6	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and Climbing Lanes	1	0	0	1	1	2 2	7	2	-2	1	2	1	1	5	Deliverable but with challenges	Feasible but with challenges	~	1	~	✓	1
7.7	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and Route Safety Improvements	2	0	1	1	1	2 2	9	2	-1	1	2	1	2	7	Deliverable but with challenges	Feasible but with challenges	~	1	1	~	1
7.8	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and A628 HGV Control	2	0	1	1	1	2 2	9	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	~	~	×	✓	×
7.9	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	1	0	2	2	2	2 2	11	2	-1	1	2	1	1	6	Deliverable but with challenges	Feasible but with challenges	1	~	~	~	1
7.10	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes and Route Safety Improvements	2	0	1	1	1	2 2	9	2	-2	1	2	1	2	6	Deliverable but with challenges	Feasible but with challenges	✓	~	~	~	~
7.11	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes and A628 HGV Control	2	0	1	1	1	2 2	9	1	-2	1	2	1	2	5	Very difficult to deliver	Feasible but with challenges	~	1	×	✓	×
7.12	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes and Maintenance Strategy/Technology Package	1	0	2	2	2	2 2	11	2	-2	1	2	1	1	5	Deliverable but with challenges	Feasible but with challenges	~	1	1	~	~
7.13	Bypass of Mottram, Hollingworth and Tintwistle with Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 2	9	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	~	1	×	~	×
7.14	Bypass of Mottram, Hollingworth and Tintwistle with Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	2	-1	1	2	1	2	7	Deliverable but with challenges	Feasible but with challenges	~	1	~	~	~
7.15	Bypass of Mottram, Hollingworth and Tintwistle with A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	~	1	×	✓	×
7.16	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes and Route Safety Improvements	2	0	1	1	1	2 2	9	2	-2	1	2	1	2	6	Deliverable but with challenges	Feasible but with challenges	1	~	~	~	~
7.17	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes and A628 HGV Control	2	0	1	1	1	2 2	9	1	-2	1	2	1	2	5	Very difficult to deliver	Feasible but with challenges	1	~	×	✓	×
7.18	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package	1	0	2	2	2	2 2	11	2	-2	1	2	1	1	5	Deliverable but with challenges	Feasible but with challenges	~	✓	✓	1	✓
7.19	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 2	9	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	~	~	×	✓	×
7.20	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	2	-1	1	2	1	2	7	Deliverable but with challenges	Feasible but with challenges	1	~	~	~	4
7.21	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	✓	~	×	✓	×
7.22	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 2	9	1	-2	1	2	1	2	5	Very difficult to deliver	Feasible but with challenges	1	1	×	✓	×
7.23	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	2	-2	1	2	1	2	6	Deliverable but with challenges	Feasible but with challenges	4	1	1	1	~
7.24	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	1	-2	1	2	1	2	5	Very difficult to deliver	Feasible but with challenges	1	~	×	1	×
7.25	Bypass of Mottram, Hollingworth and Tintwistle with Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	1	-1	1	2	1	2	6	Very difficult to deliver	Feasible but with challenges	1	~	×	✓	×
7.26	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 2	9	1	-2	1	2	1	2	5	Very difficult to deliver	Feasible but with challenges	1	~	×	✓	×
7.27	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	2 2	12	2	-2	1	2	1	2	6	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	~

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7.28	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	1	-2	2 1	1 2	2	1	2	5	Very difficult to deliver	Feasible but with challenges	~	~	×	~	×
7.29	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	1	-1	I 1	1 2	2	1	2	6	Very difficult to deliver	Feasible but with challenges	~	~	×	~	×
7.30	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	1	-2	2 1	1 2	2	1	2	5	Very difficult to deliver	Feasible but with challenges	~	~	×	~	×
7.31	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	1	-2	2 1	1 2	2	1	2	5	Very difficult to deliver	Feasible but with challenges	~	~	×	~	×

#### Problems

1	Accidents reduce journey time reliability, with high accident rates on some routes and a number of accident clusters
2	Severe weather causes road closures which reduce journey time reliability
3	There is a lack of technology to assist in the operation and management of the routes and provide information for travellers
4	Maintenance on single carriageway sections reduces journey-time reliability.
5	Asset condition, including the standard, age and damage to infrastructure, reduce journey-time reliability through significant maintenance operations and risk from closures
6	Journey-times are increased by delays at junctions and the geometry and topography of routes
7	Long term traffic growth will bring some urban sections of routes to their capacity

#### Objectives

1	Connectivity - improving the connectivity between Manchester and Sheffield through reduction in journey times and improved journe
2	Environmental – avoiding unacceptable impacts on the natural environment and landscape in the Peak District National Park, and environmental opportunities
3	Societal - improving air quality and reducing noise impacts, and addressing the levels of severance on the Trans-Pennine routes in
4	Capacity - reducing delays and queues that occur during peak hours and improving the performance of junctions on the routes
5	Resilience – improving the resilience of the routes through reductions in the number of incidents and reduction of their impacts
6	Safety – reductions in the number of accidents and reductions of their impacts

ourney-time reliability
nd optimising
in urban areas

Each option must meet the following sifting criteria to be considered further within EAST:

3:

4:

: Overall moderate im	the following sifting criteria to be considered further within EAST: pact against identified problems (Appraisal score >4) with route objectives (Appraisal score >3)	1 E	Beneficia	eneficial al impac / margin	r t				1 [	Benefi	cial im	icial imp npact irginal ir				Deliverable in theory	Feasible in theory					
3: Must be deliverable				impact						Advers		0	ιρασι			Deliverable but with challenges	Feasible but with challenges					
E Must be feasible in t				dverse ir								se impa	ct			Very difficult to deliver	Not feasible / significant challenges					
			- <b>J</b>							- J-												
Reference (Route Section-	Option Description		(EA	Prol ST Sca	blems le of In	npact)			(EA	AST Fi		jectives Other	Objec	tives)		Deliverability	Feasibility	Initi		g Criteria EAST	Prior	Take to
Intervention)		1	2 3	4	5	6	7	Total	1	2	3	4 5	6	5	Total			1	2	3	4	EAST
P5.0	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018)	1	0 0	1	1	1	2	6	1	-1	1	2 1	1	I 5	5	Deliverable but with challenges	Feasible but with challenges	~	1	~	~	~
5.1	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road	1	0 0	1	1	1	2	6	1	-1	1	2 1	1	1 5	5	Deliverable but with challenges	Feasible but with challenges	1	~	*	~	×
5.2	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes	1	0 0	1	1	1	2	6	1	-2	1	2 1	1	4	4	Deliverable but with challenges	Feasible but with challenges	~	~	1	~	~
5.3	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Route Safety Improvements	2	0 1	1	1	1	2	8	1	-1	1	2 1	2	2 6	6	Deliverable but with challenges	Feasible but with challenges	~	1	~	~	✓
5.4	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A628 HGV Control	2	0 1	1	1	2	2	9	-1	-1	1	2 1	2	2 4	4	Very difficult to deliver	Feasible but with challenges	~	✓	×	~	×
5.5	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Maintenance Strategy/Technology Package	1	0 2	2	2	1	<mark>2</mark> 1	10	1	-1	1	2 1	1	1 5	5	Deliverable but with challenges	Feasible but with challenges	✓	✓	~	~	~
5.6	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road and Climbing Lanes	1	0 0	1	1	1	2	6	1	-2	1	2 1	1	4	4	Deliverable but with challenges	Feasible but with challenges	~	1	~	~	1
5.7	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road and Route Safety Improvements	2	0 1	1	1	1	2	8	1	-1	1	2 1	2	2 6	6	Deliverable but with challenges	Feasible but with challenges	1	~	~	~	*
5.8	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road and A628 HGV Control	2	0 1	1	1	2	2	9	-1	-1	1	2 1	2	2 4	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	×
5.9	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	1	0 2	2	2	1	2 1	10	1	-1	1	2 1	1	I 5	5	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	*
5.10	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes and Route Safety Improvements	2	0 1	1	1	1	2	8	1	-2	1	2 1	2	2 5	5	Deliverable but with challenges	Feasible but with challenges	1	~	*	~	*
5.11	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes and A628 HGV Control	2	0 1	1	1	2	2	9	-1	-2	1	2 1	2	2 3	3	Very difficult to deliver	Feasible but with challenges	~	×	×	1	×
5.12	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes and Maintenance Strategy/Technology Package	1	0 2	2	2	1	2 1	10	1	-2	1	2 1	1	I 4	4	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	*
5.13	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Route Safety Improvements and A628 HGV Control	2	0 1	1	1	2	2	9	-1	-1	1	2 1	2	2 4	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	*
5.14	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Route Safety Improvements and Maintenance Strategy/Technology Package	2	0 2	2	2	1	<b>2</b> 1	11	1	-1	1	2 1	2	2 6	6	Deliverable but with challenges	Feasible but with challenges	1	~	*	~	*
5.15	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A628 HGV Control and Maintenance Strategy/Technology Package	2	0 2	2	2	2	2 1	12	-1	-1	1	2 1	2	2 4	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	*
5.16	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes and Route Safety Improvements	2	0 1	1	1	1	2	8	1	-2	1	2 1	2	2 5	5	Deliverable but with challenges	Feasible but with challenges	*	~	~	~	*
5.17	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes and A628 HGV Control	2	0 1	1	1	2	2	9	-1	-2	1	2 1	2	2 3	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	×
5.18	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package	1	0 2	2	2	1	<b>2</b> 1	10	1	-2	1	2 1	1	4	4	Deliverable but with challenges	Feasible but with challenges	*	~	~	~	*

### Qualitative assessment against identified problems Qualitative assessment against identified objectives Deliverability (e.g. political, planning, timescale or third party issues) Feasibility (e.g. physical constraint, land availability and design standards) 2 Large beneficial impact 2 Large beneficial impact

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5.19	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2	2	9	-1	-1	1	2	1	2	2	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	
5.20	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1	2	11	1	-1	1	2	1	2	2	6	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	
5.21	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-1	1	2	1	2	2	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	
5.22	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2	2	9	-1	-2	1	2	1	2	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	
5.23	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1	2	11	1	-2	1	2	1	2	2	5	Deliverable but with challenges	Feasible but with challenges	~	~	*	~	
5.24	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-2	1	2	1	2	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	
5.25	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-1	1	2	1	2	2	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	
5.26	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2	2	9	-1	-2	1	2	1	2	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	
5.27	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1	2	11	1	-2	1	2	1	2	2	5	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	
5.28	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-2	1	2	1	2	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	
5.29	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-1	1	2	1	2	2	4	Very difficult to deliver	Feasible but with challenges	~	~	×	~	
5.30	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-2	1	2	1	2	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	
5.31	Dual Carriageway Link Road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-2	1	2	1	2	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	

Problems	
1	Accidents reduce journey time reliability, with high accident rates on some routes and a number of accident clusters
2	Severe weather causes road closures which reduce journey time reliability
3	There is a lack of technology to assist in the operation and management of the routes and provide information for travellers
4	Maintenance on single carriageway sections reduces journey-time reliability.
5	Asset condition, including the standard, age and damage to infrastructure, reduce journey-time reliability through significant maintenance operations and risk from closures
6	Journey-times are increased by delays at junctions and the geometry and topography of routes

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Long term traffic growth will bring some urban sections of routes to their capacity

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1	Connectivity - improving the connectivity between Manchester and Sheffield through reduction in journey times and improved journey
2	Environmental – avoiding unacceptable impacts on the natural environment and landscape in the Peak District National Park, and environmental opportunities
3	Societal - improving air quality and reducing noise impacts, and addressing the levels of severance on the Trans-Pennine routes in
4	Capacity - reducing delays and queues that occur during peak hours and improving the performance of junctions on the routes
5	Resilience – improving the resilience of the routes through reductions in the number of incidents and reduction of their impacts
6	Safety – reductions in the number of accidents and reductions of their impacts

journey-time reliability and optimising s in urban areas

Each option must meet the following sifting criteria to be considered further within EAST:

1: Overall moderate impact against identified problems (Appraisal score >4)

2: Overall moderate fit with route objectives (Appraisal score >3)

3: Must be deliverable in theory

4: Must be feasible in theory

<u>Q</u>	ualitative assessment against identified problems	<u>c</u>	Qualitative assessment against identified objectives	<u>Deliverability</u> (e.g. political, planning, timescale or third party issues)	<u>Feasibility</u> (e.g. physical constraint, land availability and design standards)
2	Large beneficial impact Beneficial impact	2	Large beneficial impact Beneficial impact		
0	Neutral / marginal impact	0	Neutral / marginal impact	Deliverable in theory	Feasible in theory
-1	Adverse impact	-1	Adverse impact	Deliverable but with challenges	Feasible but with challenges
-2	Large adverse impact	-2	Large adverse impact	Very difficult to deliver	Not feasible / significant challenges

Reference (Route Section-	Option Description		(1	F EAST S	robler Scale o		act)		(	EAST F		ectives Other O	bjective	s)	Deliverability	Feasibility	Initia		Criteria AST	Prior	Take
Intervention)		1	2	3	4 !	5 6	j 7	Total	1	2	3	4 5	6	Total	Deriverability	reasibility	1	2	3	4	EAST
P4.0	A57 Mottram One-Way	1	0	0	0	1 1	2	5	1	0	1	1 1	1	5	Deliverable but with challenges	Feasible but with challenges	1	~	✓	<ul><li>✓</li></ul>	✓
4.1	A57 Mottram One-Way with A57(T) to A57 Link Road	1	0	0	0	1 1	2	5	1	0	1	1 1	1	5	Deliverable but with challenges	Feasible but with challenges	<ul><li>✓</li></ul>	1	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓
4.2	A57 Mottram One-Way with Climbing Lanes	1	0	0	1	1 1	2	6	1	-1	1	1 1	1	4	Deliverable but with challenges	Feasible but with challenges	✓	<ul> <li>✓</li> </ul>	✓	✓	✓
4.3	A57 Mottram One-Way with Route Safety Improvements	2	0	1	0	1 1	2	7	1	0	1	1 1	2	6	Deliverable but with challenges	Feasible but with challenges	1	<ul> <li>✓</li> </ul>	✓	<ul><li>✓</li></ul>	<ul><li>✓</li></ul>
4.4	A57 Mottram One-Way with A628 HGV Control	2	0	1	0	1 2	2 2	8	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	<ul><li>✓</li></ul>	1	×	<ul> <li>✓</li> </ul>	x
4.5	A57 Mottram One-Way with Maintenance Strategy/Technology Package	1	0	2	2 2	2 1	2	10	1	0	1	1 1	1	5	Deliverable but with challenges	Feasible but with challenges	<ul><li>✓</li></ul>	1	✓	<ul><li>✓</li></ul>	✓
4.6	A57 Mottram One-Way with A57(T) to A57 Link Road and Climbing Lanes	1	0	0	1 1	1 1	2	6	1	-1	1	1 1	1	4	Deliverable but with challenges	Feasible but with challenges	✓	<ul> <li>✓</li> </ul>	✓	✓	✓
4.7	A57 Mottram One-Way with A57(T) to A57 Link Road and Route Safety Improvements	2	0	1	0	1 1	2	7	1	0	1	1 1	2	6	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	✓
4.8	A57 Mottram One-Way with A57(T) to A57 Link Road and A628 HGV Control	2	0	1	0	1 2	2 2	8	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	✓	✓	×	✓	×
4.9	A57 Mottram One-Way with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	1	0	2	2	2 1	2	10	1	0	1	1 1	1	5	Deliverable but with challenges	Feasible but with challenges	1	4	1	1	~
4.10	A57 Mottram One-Way with Climbing Lanes and Route Safety Improvements	2	0	1	1 '	1 1	2	8	1	-1	1	1 1	2	5	Deliverable but with challenges	Feasible but with challenges	✓	√	<ul> <li>✓</li> </ul>	<ul><li>✓</li></ul>	✓
4.11	A57 Mottram One-Way with Climbing Lanes and A628 HGV Control	2	0	1	1	1 2	2 2	9	-1	-1	1	1 1	2	3	Very difficult to deliver	Feasible but with challenges	✓	×	×	✓	x
4.12	A57 Mottram One-Way with Climbing Lanes and Maintenance Strategy/Technology Package	1	0	2	2 2	2 1	2	10	1	-1	1	1 1	1	4	Deliverable but with challenges	Feasible but with challenges	~	✓	✓	✓	✓
4.13	A57 Mottram One-Way with Route Safety Improvements and A628 HGV Control	2	0	1	0 ·	1 2	2 2	8	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	✓	✓	×	√	x
4.14	A57 Mottram One-Way with Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2 2	2 1	2	11	1	0	1	1 1	2	6	Deliverable but with challenges	Feasible but with challenges	~	√	✓	✓	✓
4.15	A57 Mottram One-Way with A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2 2	2 2	2 2	12	-1	1	1	1 1	1	4	Very difficult to deliver	Feasible but with challenges	~	~	x	✓	×
4.16	A57 Mottram One-Way with A57(T) to A57 Link Road, Climbing Lanes and Route Safety Improvements	2	0	1	1	1 1	2	8	1	-1	1	1 1	2	5	Deliverable but with challenges	Feasible but with challenges	1	4	~	1	×
4.17	A57 Mottram One-Way with A57(T) to A57 Link Road, Climbing Lanes and A628 HGV Control	2	0	1	1 '	1 2	2 2	9	-1	-1	1	1 1	2	3	Very difficult to deliver	Feasible but with challenges	1	×	×	~	×
4.18	A57 Mottram One-Way with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package	1	0	2	2 2	2 1	2	10	1	-1	1	1 1	1	4	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	×
4.19	A57 Mottram One-Way with A57(T) to A57 Link Road, Route Safety Improvements and A628 HGV Control	2	0	1	0	1 2	2 2	8	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	✓	*	×	×	×
4.20	A57 Mottram One-Way with A57(T) to A57 Link Road, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2 1	2	11	1	0	1	1 1	2	6	Deliverable but with challenges	Feasible but with challenges	1	4	~	×	~
4.21	A57 Mottram One-Way with A57(T) to A57 Link Road, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2 2	2 2	12	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	1	4	×	1	×
4.22	A57 Mottram One-Way with Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1 '	1 2	2 2	9	-1	-1	1	1 1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	1	×
4.23	A57 Mottram One-Way with Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2 2	2 1	2	11	1	-1	1	1 1	2	5	Deliverable but with challenges	Feasible but with challenges	~	✓	~	✓	~
4.24	A57 Mottram One-Way with Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2 2	2 2	2 2	12	-1	-1	1	1 1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	~	×
4.25	A57 Mottram One-Way with Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2 2	2 2	2 2	12	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	1	1	×	1	×
4.26	A57 Mottram One-Way with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1 2	2 2	9	-1	-1	1	1 1	2	3	Very difficult to deliver	Feasible but with challenges	1	×	×	1	×
4.27	A57 Mottram One-Way with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2 2	2 1	2	11	1	-1	1	1 1	2	5	Deliverable but with challenges	Feasible but with challenges	~	4	1	×	~
4.28	A57 Mottram One-Way with A57(T) to A57 Link Road, Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2 2	2 2	12	-1	-1	1	1 1	2	3	Very difficult to deliver	Feasible but with challenges	1	×	×	×	×
4.29	A57 Mottram One-Way with A57(T) to A57 Link Road, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2 2	2 2	12	-1	1	1	1 1	2	5	Very difficult to deliver	Feasible but with challenges	1	1	×	×	×

ottram One-Way with Climbing Lanes, Route Safety Improvements, A628 ontrol and Maintenance Strategy/Technology Package	2	0	2	2	2	2	2	12	-1	-1	1	1	1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	1	×
ottram One-Way with A57(T) to A57 Link Road, Climbing Lanes, Route Improvements A628 HGV Control and Maintenance Strategy/Technology le	2	0	2	2	2	2	2	12	-1	-1	1	1	1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	*	×

Problems	
1	Accidents reduce journey time reliability, with high accident rates on some routes and a number of accident clusters
2	Severe weather causes road closures which reduce journey time reliability
3	There is a lack of technology to assist in the operation and management of the routes and provide information for travellers
4	Maintenance on single carriageway sections reduces journey-time reliability.
5	Asset condition, including the standard, age and damage to infrastructure, reduce journey-time reliability through significant maintenance operations and risk from closures
6	Journey-times are increased by delays at junctions and the geometry and topography of routes

Objectives	
1	Connectivity – improving the connectivity between Manchester and Sheffield through reduction in journey times and improved journey-time reliability
2	Environmental – avoiding unacceptable impacts on the natural environment and landscape in the Peak District National Park, and optimising environmental opportunities
3	Societal - improving air quality and reducing noise impacts, and addressing the levels of severance on the Trans-Pennine routes in urban areas
4	Capacity – reducing delays and queues that occur during peak hours and improving the performance of junctions on the routes
5	Resilience – improving the resilience of the routes through reductions in the number of incidents and reduction of their impacts
6	Safety – reductions in the number of accidents and reductions of their impacts

Each option must meet the following sifting criteria to be considered further within EAST:

1: Overall moderate impact against identified problems (Appraisal score >4)

2: Overall moderate fit with route objectives (Appraisal score >3)

3: Must be deliverable in theory

4: Must be feasible in theory

Qu	alitative assessment against identified problems	Q	ualitative assessment against identified objectives	Deliverability (e.g. political, planning, timescale or third party issues)	Feasibility (e.g. physical constraint, land availability and design standards)
2	Large beneficial impact	2	Large beneficial impact		and dooign standardoy
1	Beneficial impact	1	Beneficial impact		
0	Neutral / marginal impact	0	Neutral / marginal impact	Deliverable in theory	Feasible in theory
-1	Adverse impact	-1	Adverse impact	Deliverable but with challenges	Feasible but with challenges
-2	Large adverse impact	-2	Large adverse impact	Very difficult to deliver	Not feasible / significant challenges

Reference (Route Section-		Problems (EAST Scale of Impact)								(EA	AST Fit	Object t with Ot			ctives)	Delivershiller	Frenchiller	Initia		l Criteria EAST	Prior	Take
Section- Intervention)	Option Description	1	2	3	4	5	6 7	7	Total	1	2	3 4	5	6	Total	Deliverability	Feasibility	1	2	3	4	EAST
P12.0	A61 Dualling	1	0	0	1	1	1 1	1 :	5	1	0	0 1	1	1	4	Deliverable but with challenges	Feasible but with challenges	√	√	√	√	√
12.1	A61 Dualling with A57(T) to A57 Link Road	1	0	0	1	1	1 1	1 :	5	1	0	1 1	1	1	5	Deliverable but with challenges	Feasible but with challenges	1	✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
12.2	A61 Dualling with Climbing Lanes	1	0	0	1	1	1 1	1 ;	5	1	-1	0 1	1	1	3	Deliverable but with challenges	Feasible but with challenges	✓	×	√	<ul> <li>✓</li> </ul>	×
12.3	A61 Dualling with Route Safety Improvements	2	0	1	1	1	1 1	1	7	1	0	0 1	1	2	5	Deliverable but with challenges	Feasible but with challenges	✓	<ul> <li>✓</li> </ul>	✓	1	<ul><li>✓</li></ul>
12.4	A61 Dualling with A628 HGV Control	2	0	1	1	1	2 1	1 8	В	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	✓	<ul> <li>✓</li> </ul>	×	<ul> <li>✓</li> </ul>	×
12.5	A61 Dualling with Maintenance Strategy/Technology Package	1	0	2	2	2	1 1	1 9	9	1	0	0 1	1	1	4	Deliverable but with challenges	Feasible but with challenges	✓	<ul> <li>✓</li> </ul>	✓	1	<ul> <li>✓</li> </ul>
12.6	A61 Dualling with A57(T) to A57 Link Road and Climbing Lanes	1	0	0	1	1	1 1	1 !	5	1	-1	1 1	1	1	4	Deliverable but with challenges	Feasible but with challenges	✓	<ul> <li>✓</li> </ul>	<ul><li>✓</li></ul>	1	<ul> <li>✓</li> </ul>
12.7	A61 Dualling with A57(T) to A57 Link Road and Route Safety Improvements	2	0	1	1	1	1 1	1	7	1	0	1 1	1	2	6	Deliverable but with challenges	Feasible but with challenges	✓	<ul><li>✓</li></ul>	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>
12.8	A61 Dualling with A57(T) to A57 Link Road and A628 HGV Control	2	0	1	1	1	2 1	1 8	В	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	✓	✓	×	√	×
12.9	A61 Dualling with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	1	0	2	2	2	1 1	1 9	9	1	0	1 1	1	1	5	Deliverable but with challenges	Feasible but with challenges	1	~	~	×	1
12.10	A61 Dualling with Climbing Lanes and Route Safety Improvements	2	0	1	1	1	1 1	1	7	1	-1	0 1	1	2	4	Deliverable but with challenges	Feasible but with challenges	√	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
12.11	A61 Dualling with Climbing Lanes and A628 HGV Control	2	0	1	1	1	2 1	1 8	8	-1	-1	1 1	1	2	3	Very difficult to deliver	Feasible but with challenges	1	×	×	✓	×
12.12	A61 Dualling with Climbing Lanes and Maintenance Strategy/Technology Package	1	0	2	2	2	1 1	1 9	9	1	-1	0 1	1	1	3	Deliverable but with challenges	Feasible but with challenges	√	×	√	✓	×
12.13	A61 Dualling with Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 1	1 8	В	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	✓	✓	×	<ul> <li>✓</li> </ul>	×
12.14	A61 Dualling with Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1 1	1 1	0	1	0	0 1	1	2	5	Deliverable but with challenges	Feasible but with challenges	~	~	~	×	~
12.15	A61 Dualling with A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 1	1 1	1	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	~	1	×	×	×
12.16	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes and Route Safety Improvements	2	0	1	1	1	1 1	1	7	1	-1	1 1	1	2	5	Deliverable but with challenges	Feasible but with challenges	~	~	~	~	1
12.17	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes and A628 HGV Control	2	0	1	1	1	2 1	1 8	8	-1	-1	1 1	1	2	3	Very difficult to deliver	Feasible but with challenges	1	×	×	✓	×
12.18	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package	1	0	2	2	2	1 1	1 !	9	1	-1	1 1	1	1	4	Deliverable but with challenges	Feasible but with challenges	~	*	~	×	1
12.19	A61 Dualling with A57(T) to A57 Link Road, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 1	1 4	В	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	×	4	×	× .	×
12.20	A61 Dualling with A57(T) to A57 Link Road, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1 1	1 1	0	1	0	1 1	1	2	6	Deliverable but with challenges	Feasible but with challenges	~	~	~	✓	1
12.21	A61 Dualling with A57(T) to A57 Link Road, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 1	1 1	1	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	~	~	×	~	×
12.22	A61 Dualling with Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 1	1 8	В	-1	-1	1 1	1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	× .	×
12.23	A61 Dualling with Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1 1	1 1	0	1	-1	0 1	1	2	4	Deliverable but with challenges	Feasible but with challenges	✓	~	~	✓	~
12.24	A61 Dualling with Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 1	1 1	1	-1	-1	1 1	1	2	3	Very difficult to deliver	Feasible but with challenges	✓	×	×	<	×
12.25	A61 Dualling with Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 1	1 1	1	-1	1	1 1	1	2	5	Very difficult to deliver	Feasible but with challenges	✓	✓	×	<	×
12.26	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and A628 HGV Control	2	0	1	1	1	2 1	1 4	в	-1	-1	1 1	1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	<	×
12.27	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	2	0	2	2	2	1 1	1 1	0	1	-1	1 1	1	2	5	Deliverable but with challenges	Feasible but with challenges	~	4	~	✓	*
12.28	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2 1	1 1	1	-1	-1	1 1	1	2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	<	×

12.29	A61 Dualling with A57(T) to A57 Link Road, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	1	11	-	-1	1	1	1	1 2	5	Very difficult to deliver	Feasible but with challenges	~	×	×	<ul> <li>✓</li> </ul>	×
12.30	A61 Dualling with Climbing Lanes, Route Safety Improvements, A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	1	11	-	-1	-1	1	1	1 2	3	Very difficult to deliver	Feasible but with challenges	~	×	×	✓	×
12.31	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements A628 HGV Control and Maintenance Strategy/Technology Package	2	0	2	2	2	2	1	11	-	-1	-1	1	1	1 2	3	Very difficult to deliver	Feasible but with challenges	1	×	×	~	×

#### Problems

 1
 Accidents reduce journey time reliability, with high accident rates on some routes and a number of accident clusters

 2
 Severe weather causes road closures which reduce journey time reliability

 3
 There is a lack of technology to assist in the operation and management of the routes and provide information for travellers

 4
 Maintenance on single carriageway sections reduces journey-time reliability.

 5
 Asset condition, including the standard, age and damage to infrastructure, reduce journey-time reliability through significant maintenance operations and risk from closures

 6
 Journey-times are increased by delays at junctions and the geometry and topography of routes

 7
 Long term traffic growth will bring some urban sections of routes to their capacity

Objectives	
1	Connectivity – improving the connectivity between Manchester and Sheffield through reduction in journey times and improved journey-time reliability
2	Environmental – avoiding unacceptable impacts on the natural environment and landscape in the Peak District National Park, and optimising environmental opportunities
3	Societal - improving air quality and reducing noise impacts, and addressing the levels of severance on the Trans-Pennine routes in urban areas
4	Capacity – reducing delays and queues that occur during peak hours and improving the performance of junctions on the routes
5	Resilience – improving the resilience of the routes through reductions in the number of incidents and reduction of their impacts
6	Safety – reductions in the number of accidents and reductions of their impacts

### 3 Annex 3 – EAST Results

	Overall						Econ	omic			Man	agerial			F		Commercial	
Initiue Ref. No.	Description	Scale of impact	Fit with wider transport and government objectives	Fit with other objectives Degree of consensus over outcomes?	Economic Growth	Carbon emissions	Socio-distributional impacts and the regions	Local environment	Well being	Expected VfM Category	Implementation timetable	Public acceptability	Practical feasibility	what is the quality of the supporting evidence?	Affordability Capital Cost (£m)?	Revenue Costs (£m)?	Overall cost risk	Flexibility of option
7.27	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	5	3	3 2	5. Green	3. Amber	5. Green	1. Red	5. Green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.18	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package	5	3	3 2	5. Green	3. Amber	5. Green	1. Red	5. Green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.23	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	5	3	3 2	4. Amber/green	3. Amber	4. Amber/green	1. Red	5. Green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.0	Bypass of Mottram, Hollingworth and Tintwistle	4	2	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.1	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road	4	2	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.3	Bypass of Mottram, Hollingworth and Tintwistle with Route Safety Improvements	4	2	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.5	Bypass of Mottram, Hollingworth and Tintwistle with Maintenance Strategy/Technology Package	4	3	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.7	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and Route Safety Improvements	4	2	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.9	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	4	3	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.14	Bypass of Mottram, Hollingworth and Tintwistle with Route Safety Improvements and Maintenance Strategy/Technology Package	4	3	3 3	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.20	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Route Safety Improvements and Maintenance Strategy/Technology Package	4	3	3 3	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	2. High 2-4	6. 5-10 years	3	2	2	2 07. 100-250	Don't know	1.High risk	3
7.2	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes	4	2	3 2	4. Amber/green	3. Amber	4. Amber/green	1. Red	4. Amber/green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.6	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road and Climbing Lanes	4	2	3 2	4. Amber/green	3. Amber	4. Amber/green	1. Red	4. Amber/green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.10	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes and Route Safety Improvements	4	2	3 2	4. Amber/green	3. Amber	4. Amber/green	1. Red	5. Green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.12	Bypass of Mottram, Hollingworth and Tintwistle with Climbing Lanes and Maintenance Strategy/Technology Package	4	3	3 2	4. Amber/green	3. Amber	4. Amber/green	1. Red	5. Green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2
7.16	Bypass of Mottram, Hollingworth and Tintwistle with A57(T) to A57 Link Road, Climbing Lanes and Route Safety Improvements	4	2	3 2	5. Green	3. Amber	5. Green	1. Red	5. Green	2. High 2-4	6. 5-10 years	2	2	2	2 07. 100-250	Don't know	1.High risk	2

	Overall							E	conomic			Mana					Commercial			
Unique Ref. No.	Description	Scale of impact	Fit with wider transport and government objectives	Fit with other objectives	Degree of consensus over outcomes?	Economic Growth	Carbon emissions	Socio-distributional impacts and the regions	Local environment	Well being	Expected VfM Category	Implementation timetable	Public acceptability	Practical feasibility	while the quality of the supporting evidence?	Affordability	Capital Cost (£m)?	Revenue Costs (£m)?	Overall cost risk	Flexibility of option
5.27	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes, Safety Treatment and Maintenance Strategy/Technology Package.	4	3	3	2	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	3
5.16	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018, a single carriageway A57(T) to A57 link road between A57(T) at Mottram Moor to A57 at Woolley Bridge/Brookfield, with Climbing lanes and road safety improvements on A628/A616.	4	2	3	2	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.18	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package.	4	3	3	2	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	3
5.23	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes, Safety Treatment and Maintenance Strategy/Technology Package.	4	3	3	2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	4. Low 1-1.5	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	3
5.1	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting with single carriageway A57(T) to A57 link road provided between A57(T) Mottram Moor and A57 at Woolley Bridge/Brookfield.	3	2	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.7	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018, with single carriageway A57(T) to A57 link road between A57(T) at Mottram Moor and A57 at Woolley Bridge/Brookfield and road safety improvements on A628/A616.	3	2	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	5. Green	3. Medium 1.5-2	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.9	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package.	3	3	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	3
5.14	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Safety Treatment and Maintenance Strategy/Technology Package.	3	3	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	5. Green	4. Low 1-1.5	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	3
5.20	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with A57(T) to A57 Link Road, Safety Treatment and Maintenance Strategy/Technology Package.	3	3	3	2	5. Green	3. Amber	5. Green	3. Amber	5. Green	3. Medium 1.5-2	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	3
5.2	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018, with Climbing lanes provided on A628/A616.	3	2	3	2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.6	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018, with single carriageway A57(T) to A57 road provided between A57(T) at Mottram Moor and A57 at Woolley Bridge/Brookfield and provision of Climbing lanes on A628/A616.	3	2	3	2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.10	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018, with Climbing lanes and road safety improvements on A628/A616.	3	2	3	2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	4. Low 1-1.5	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.12	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Climbing Lanes and Maintenance Strategy/Technology Package.	3	3	3	2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	2	2	2	2 0	7. 100-250	Don't know	1.High risk	3
	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018.	2	2	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.3	Dual carriageway link road between M67 & A57 at Mottram Moor including a tunnel under Roe Cross and a spur connecting to A6018, with safety improvements on A628/A616.	2	2	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	5. Green	4. Low 1-1.5	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	2
5.5	Dual carriageway link road M67 to A57 Mottram Moor (tunnel under Roe Cross and spur connecting to A6018) with Maintenance Strategy/Technology Package.	2	3	3	2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3	2	2	2 0	7. 100-250	Don't know	1.High risk	3

## Sort Criteria (High to Low) 1. Scale of Impact

2. Practical Feasibility

3. Affordability

	Overall						Ec	conomic			Mana	ageri	al			Commercial		
Unique Ref. No.	Description	Scale of impact	Fit with wider transport and government objectives	Fit with other objectives Degree of consensus over outcomes?	Economic Growth	Carbon emissions	Socio-distributional impacts and the regions	Local environment	Well being	Expected VfM Category	Implementation timetable	Public acceptability	Practical feasibility	What is the quality of the supporting evidence?	Affordability Capital Cost (£m)?	Revenue Costs (£m)?	Overall cost risk	Flexibility of option
4.27	A57 Mottram One-Way with A57(T) to A57 Link Road, Overtaking Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	4	3	3 2	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	3	2	3 06. 50-100	Don't know	1.High risk	2
4.2	A57 Mottram One-Way with A57(T) to A57 Link Road, Overtaking Lanes and Maintenance Strategy/Technology Package	4	3	3 2	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	3	2	3 06. 50-100	Don't know	1.High risk	2
4.2	A57 Mottram One-Way with A57(T) to A57 Link Road, Route Safety Improvements and Maintenance Strategy/Technology Package	4	3	3 2	5. Green	3. Amber	5. Green	3. Amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	3	2	3 06. 50-100	Don't know	1.High risk	3
4.1	A57 Mottram One-Way with A57(T) to A57 Link Road.	3	2	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	2	4	2	4 05. 25-50	Don't know	1.High risk	3
4.3	A57 Mottram One-Way with Route Safety Improvements	3	2	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	5. Green	4. Low 1-1.5	5. 2-5 years	2	4	2	4 04. 10-25	Don't know	1.High risk	3
4.2	A57 Mottram One-Way with Overtaking Lanes	3	2	3 2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	2	3	2	4 05. 25-50	Don't know	1.High risk	2
4.7	A57 Mottram One-Way with A57(T) to A57 Link Road and Route Safety Improvements.	3	2	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	3	2	4 05. 25-50	Don't know	1.High risk	3
4.9	A57 Mottram One-Way with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	3	3	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	2	3	2	4 05. 25-50	Don't know	1.High risk	3
4.10	A57 Mottram One-Way with Overtaking Lanes and Route Safety Improvements.	3	2	3 2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	4. Low 1-1.5	6. 5-10 years	2	3	2	4 05. 25-50	Don't know	1.High risk	2
4.12	A57 Mottram One-Way with Overtaking Lanes and Maintenance Strategy/Technology Package	3	3	3 2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	2	3	2	4 05. 25-50	Don't know	1.High risk	2
4.14	A57 Mottram One-Way with Route Safety Improvements and Maintenance Strategy/Technology Package	3	3	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	5. Green	4. Low 1-1.5	5. 2-5 years	2	3	2	4 05. 25-50	Don't know	1.High risk	3
4.23	A57 Mottram One-Way with Overtaking Lanes, Route Safety Improvements and Maintenance Strategy/Technology Package	3	3	3 2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	3	2	4 05. 25-50	Don't know	1.High risk	2
4.6	A57 Mottram One-Way with A57(T) to A57 Link Road and Overtaking Lanes.	3	2	3 2	4. Amber/green	3. Amber	4. Amber/green	2. Red/amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	2	3	2	3 06. 50-100	Don't know	1.High risk	2
4.16	A57 Mottram One-Way with A57(T) to A57 Link Road, Overtaking Lanes and Route Safety Improvements.	3	2	3 2	5. Green	3. Amber	5. Green	2. Red/amber	5. Green	3. Medium 1.5-2	6. 5-10 years	2	3	2	3 06. 50-100	Don't know	1.High risk	2
4	A57 Mottram One-Way	2	2	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	3. Amber	4. Low 1-1.5	5. 2-5 years	2	4	2	5 04. 10-25	Don't know	1.High risk	3
4.5	A57 Mottram One-Way with Maintenance Strategy/Technology Package	2	3	3 2	4. Amber/green	3. Amber	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	5. 2-5 years	2	4	2	4 04. 10-25	Don't know	1.High risk	3

#### Sort Criteria (High to Low)

1. Scale of Impact

2. Practical Feasibility

3. Affordability

	Overall							Econo	mic			Ма	nagerial				Commercial	
Unique Ref. No.	Description	Scale of impact	Fit with wider transport and government objectives	Fit with other objectives	Degree of consensus over outcomes?	Economic Growth	Carbon emissions	Socio-distributional impacts and the regions	Local environment	Well being	Expected VfM Category	Implementation timetable	Public acceptability Practical feasibility	What is the quality of the supporting evidence?	Affordability Capital Cost (£m)?	Revenue Costs (£m)?	Overall cost risk	Flexibility of option
12.27	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes, Safety Improvements and Maintenance Strategy/Technology Package	3	3	3	2	5. Green	4. Amber/green	4. Amber/green	2. Red/amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3 4	2	3 06. 50-100	Don't know	1.High risk	2
12.18	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes and Maintenance Strategy/Technology Package	3	3	3	2	5. Green	4. Amber/green	4. Amber/green	2. Red/amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3 4	2	3 06. 50-100	Don't know	1.High risk	2
12.3	A61 Dualling with Safety Improvements	3	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3 4	2	3 05. 25-50	Don't know	1.High risk	2
12.7	A61 Dualling with A57(T) to A57 Link Road and Safety Improvements	3	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3 4	2	3 05. 25-50	Don't know	1.High risk	2
12.9	A61 Dualling with A57(T) to A57 Link Road and Maintenance Strategy/Technology Package	3	3	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3 4	2	3 05. 25-50	Don't know	1.High risk	2
12.14	A61 Dualling with Safety Improvements and Maintenance Strategy/Technology Package	3	3	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3 4	2	3 05. 25-50	Don't know	1.High risk	2
12.1	A61 Dualling with A57(T) to A57 Link Road	3	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	2 4	2	3 05. 25-50	Don't know	1.High risk	2
12.20	A61 Dualling with A57(T) to A57 Link Road, Safety Improvements and Maintenance Strategy/Technology Package	3	3	3	2	5. Green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	3 4	2	2 06. 50-100	Don't know	1.High risk	2
12.10	A61 Dualling with Climbing Lanes and Safety Improvements	3	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	2. Red/amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	2 3	2	3 05. 25-50	Don't know	1.High risk	2
12.23	A61 Dualling with Climbing Lanes, Safety Improvements and Maintenance Strategy/Technology Package	3	3	3	2	4. Amber/green	4. Amber/green	4. Amber/green	2. Red/amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	2 3	2	3 05. 25-50	Don't know	1.High risk	2
12.6	A61 Dualling with A57(T) to A57 Link Road and Climbing Lanes	3	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	2. Red/amber	4. Amber/green	4. Low 1-1.5	6. 5-10 years	2 3	2	2 06. 50-100	Don't know	1.High risk	2
12.16	A61 Dualling with A57(T) to A57 Link Road, Climbing Lanes and Safety Improvements	3	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	2. Red/amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	2 3	2	2 06. 50-100	Don't know	1.High risk	2
12.0	A61 Dualling	2	2	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3 4	2	3 05. 25-50	Don't know	1.High risk	1
12.5	A61 Dualling with Maintenance Strategy/Technology Package	2	3	3	2	4. Amber/green	4. Amber/green	4. Amber/green	3. Amber	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3 4	2	3 05. 25-50	Don't know	1.High risk	2

#### Sort Criteria (High to Low)

1. Scale of Impact

2. Practical Feasibility

3. Affordability

	Overall						Ма	nageria	I		Financial						
Unique Ref. No.	Description	Fit with wider transport and government objectives	Fit with other objectives	Degree of consensus over outcomes?	Economic Growth	Carbon emissions	Socio-distributional impacts and the regions	Local environment	Well being	Expected VfM Category	Implementation timetable	Public acceptability	Practical reasibility What is the quality of the	supporting evidence? Affordability	Capital Cost (£m)?	Revenue Costs (£m)?	Overall cost risk
13	HGV Control Scheme with Complimentary Sustainable Transport Measures	4	2	2	3. Amber	3. Amber	3. Amber	5. Green	4. Amber/green	3. Medium 1.5-2	6. 5-10 years	3	2 2	2	03. 5-10	Don't know	1.High risk

#### Sort Criteria (High to Low)

1. Scale of Impact

2. Practical Feasibility

3. Affordability