In Parliament – Session 2021 - 2022



## High Speed Rail (Crewe – Manchester)

### **Background information and data**

### Waste and material resources

BID WM-002-00000

Route-wide policy review and benchmarks

M299

# HS2

# High Speed Rail (Crewe – Manchester)

### **Background information and data**

### Waste and material resources

BID WM-002-00000

### Route-wide policy review and benchmarks



High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited Two Snowhill Snow Hill Queensway Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

A report prepared for High Speed Two (HS2) Limited:

### ARUP+ ERM | FOSTER + PARTNERS | JACOBS



High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2022, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v3.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3 **OCL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing 100% recycled fibre.

#### **Background Information and Data**

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

### Contents

1	Introduction		2
2	Loca	l Policy Framework	3
	2.1	North West	3
	2.2	Scotland	19
3	8 References		21
Anr	Annex A - Construction waste benchmarks for railway projects		

### 1 Introduction

- 1.1.1 This report presents a description of the local policy framework applicable to waste and material generation and management associated with the Proposed Scheme and provides waste benchmarks for railway projects.
- 1.1.2 Local policy is defined as that which has been adopted by local councils and county councils along the route of the Proposed Scheme.
- 1.1.3 Local policy is used in the waste and material resources assessment to inform the local and regional waste arisings baseline and future baseline. Waste strategies and forecasts developed by waste planning authorities in their respective waste plans, have been used to develop a forecast of the quantity of waste likely to be generated in the construction and operation of the Proposed Scheme, in the areas through which the route of the Proposed Scheme passes. In addition, information presented in local policy is used to develop a forecast with regard to the rate at which waste is likely to be diverted from landfill in the future.
- 1.1.4 Building Research Establishment (BRE), Construction waste benchmarks for railway projects (2013)<sup>1</sup>, sets out average performance indicators for waste arisings for railway projects, based on relevant data in BRE's SMARTWaste database. This is set out in Annex A.
- 1.1.5 Environmental Statement, Volume 3, Route-wide effects, Section 15<sup>2</sup> should be referred to for details of the waste and material resources assessment. This report supports the national and regional policy framework summaries provided in Environmental Statement, Volume 3, Route-wide effects, Section 15.

<sup>&</sup>lt;sup>1</sup> Building Research Establishment (2013), *Construction waste benchmarks for railway projects, Client report number 284-945*.

<sup>&</sup>lt;sup>2</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Volume 3, Route-wide effects, Section 15.* Available online at: <u>https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement.</u>

#### **Background Information and Data**

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

### **2 Local Policy Framework**

### 2.1 North West

### **Cheshire East Council**

- 2.1.1 The Cheshire Replacement Minerals Local Plan 1999<sup>3</sup> provides planning policy on the location of mineral development within Cheshire East and Cheshire West and Chester. Various 'Preferred Areas' for the future provision of sand, gravel, and silica are identified. All policies in the Minerals Local Plan were saved under the Secretary of State's Direction in 2007. Some of the saved policies in the Minerals Local Plan Strategy<sup>4</sup>, adopted in 2017.
- 2.1.2 The Cheshire Replacement Waste Local Plan<sup>5</sup> was adopted by Cheshire County Council on 12 July 2007. The plan aims to improve the sustainability of waste management activities within the County. It establishes policies to assess planning applications for waste management facilities and identifies potentially suitable sites at which such facilities could be developed. Since the Local Plan was adopted, Cheshire County was split into two new unitary authorities in 2009, Cheshire East and Cheshire West and Chester.
- 2.1.3 Policy 10 ('Minimising Waste During Construction and Development') requires a waste audit to be submitted as part of the planning application for certain developments, these include: residential developments of 50 or more dwellings; and all significant transport, leisure, recreation, tourism, and community facilities.
- 2.1.4 Policy 11A ('Development and Waste Recycling') requires certain developments to allow for the provision of facilities for source separation and/or storage of wastes generated on-site. Affected developments include new dwellings; retail, business, industrial, distribution, storage, transport, leisure, recreation, tourism, or community facilities; and any other new developments that have a need to store waste prior to collection.
- 2.1.5 Policy 11B ('Development and Waste Recycling') requires major developments of certain categories to provide 'Bring Systems' (e.g. bottle banks, textile bins, and other waste drop off facilities for use by the public). Such developments include facilities with more than 5,000m<sup>2</sup> of floor space, major transport, leisure, recreation, tourist, and community facilities, public car parks with more than 100 parking spaces, and any other developments which frequently attract a significant number of people.

<sup>&</sup>lt;sup>3</sup> Cheshire County Council (1999), *The Cheshire Replacement Minerals Local Plan*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/strategic-planning/en-ldf-crepmlp-99.pdf</u>.

<sup>&</sup>lt;sup>4</sup> Cheshire East Council (2017), *Cheshire East Local Plan – Local Plan Strategy 2010-2030*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/local-plan/local-plan-strategy-web-version-1.pdf</u>.

<sup>&</sup>lt;sup>5</sup> Cheshire County Council (2007), *Cheshire Waste Replacement Local Plan*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/saved-and-other-policies/en-ldf-wastelocplan.pdf</u>.

- 2.1.6 The Minerals Sites and Areas Assessment for Cheshire East 2015<sup>6</sup>, includes information on allocated mineral sites and their reserves.
- 2.1.7 The Cheshire East Local Plan is the Statutory Development Plan for Cheshire East and is the basis for setting out planning policies and allocating sites for development. It will comprise four key documents, all of which are currently in draft:
  - the Local Plan Strategy;
  - the Site Allocations and Development Policies Document;
  - the Minerals and Waste Development Plan Document; and
  - the Crewe Hub Area Action Plan.
- 2.1.8 The Local Plan also includes saved policies from previous Local Plans in addition to a number of other supporting documents, including Neighbourhood Development Plans, Authority Monitoring Reports and the Local Development Scheme. Supplementary planning documents may also be produced to provide guidance on the implementation of key policies.
- 2.1.9 The Cheshire East Local Plan Strategy 2010-2030 was adopted on 27 July 2017. It sets out the overall vision and planning strategy for development in the borough. It lays out specific planning policies focused on ensuring that development meets the needs of the area and identifies strategic sites allocated for development. The vision of the Local Plan Strategy states that waste will be minimised, managed sustainably and used as a resource wherever possible.
- 2.1.10 Policy SE 11 ('Sustainable Management of Waste') states that the needs of Cheshire East will be met though the identification of suitable sites and areas to accommodate new or enhanced waste management infrastructure, which will be achieved through the production of a Waste Development Plan Document (DPD).
- 2.1.11 A Site Allocations and Development Policies Document (SADPD)<sup>7</sup> was submitted to the Secretary of State for examination on 29 April 2021. The SADPD will form the second part of the Local Plan, providing further detailed and non-strategic planning policies and land allocations in line with the strategy set out in the Local Plan Strategy.
- 2.1.12 The Cheshire East Council website<sup>8</sup> refers to the revised HS2 Phase 2 Safeguarding Directions having been issued. These came into effect on 23 June 2020. The following was

<sup>&</sup>lt;sup>6</sup> CgMs Consulting for Cheshire East Council (2015), *Mineral Sites and Areas Assessment*. Available online at: https://www.cheshireeast.gov.uk/planning/spatial-planning/research\_and\_evidence/minerals-backgroundevidence.aspx.

<sup>&</sup>lt;sup>7</sup> Cheshire East Council (2021), *Site Allocations and Development Policies Document*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/cheshire\_east\_local\_plan/site-allocations-and-policies/site\_allocations\_and\_policies.aspx</u>.

<sup>&</sup>lt;sup>8</sup> Cheshire East Council (2017), *Local Plan Strategy 2010-2030 - HS2 Phase 2 Safeguarding Zones*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/cheshire\_east\_local\_plan/local-planstrategy/local\_plan\_strategy.aspx</u>.

stated on the website: 'as revised Safeguarding Directions were issued after the adoption of the Local Plan Strategy, the maps in the Plan will not be updated but an up-to-date map of all the safeguarding zones within the borough relating to HS2 Phases 2a (West Midlands to Crewe) and 2b (Crewe to Manchester and West Midlands to Leeds) can be viewed on the government's Safeguarding information and maps for HS2 page'<sup>9</sup>.

- 2.1.13 The new Minerals and Waste DPD for Cheshire East is currently in development; the first consultation ended on 5 June 2017. In addition, a Site Allocations and Development Policies Document is being developed; the consultation on the Site Allocations and Development Policies Document: Issues Paper ended in April 2017. A report on the Publication Draft Site Allocations and Development Policies Document Policies Document Policies Document was considered by the Cabinet meeting on 6 August 2019. Consultation on the publication draft closed on 30 September 2019. As of May 2021, the new Minerals and Waste DPD is yet to have been adopted.
- 2.1.14 The Cheshire East Waste Needs Assessment Update 2017<sup>10</sup> includes capacity information by waste management method, as well as a capacity gap analysis of different wastes treatment systems, and information on the landfill void availability in the county. The report provides an understanding of the waste that requires management in Cheshire East for the period up to 2030. Supporting documents that cover the management requirements and provide forecasts of waste arisings for different waste types within the council's catchment area have also been produced, including for construction, demolition, and excavation waste (CDEW), commercial and industrial (C&I) waste, hazardous waste, and other wastes.
- 2.1.15 The Minerals and Waste DPD Issues Paper 2017<sup>11</sup> includes maps of local mineral resources and mineral extraction sites, and provides background information on local policy.
- 2.1.16 The Cheshire East Local Aggregate Assessment 2018<sup>12</sup> outlines the local supply and demand for aggregates. It includes a list of operating mineral extraction sites. As of 31 December 2017, there are 14 permitted sites, 12 of which have planning permission until at least 2026.
- 2.1.17 The North West Aggregate Working Party Annual Monitoring Report 2019<sup>13</sup> includes information on aggregate sites and relevant aggregate planning permissions within the region. The report provides data for each of the sub-regions in the North West: Cheshire

<sup>&</sup>lt;sup>9</sup> UK government (2020), *Safeguarding information and maps for HS2*. Available online at: <u>https://www.gov.uk/government/collections/safeguarding-information-and-maps-for-hs2</u>.

<sup>&</sup>lt;sup>10</sup> BPP Consulting for Cheshire East Council (2018), *Cheshire East Waste Needs Assessment Update 2017: Main Report*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/waste/cheshireeast-wna-2018.pdf</u>.

<sup>&</sup>lt;sup>11</sup> Cheshire East Council (2017), *Cheshire East Local Plan – Minerals and Waste DPD Issues Paper*. Available online at: <u>https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s54791/2017-03-</u>27%20MW%20Issues%20Paper%20SPB%20Appendix%20A.pdf.

<sup>&</sup>lt;sup>12</sup> Cheshire East Council (2019), *Cheshire East Local Plan Strategy - Local Aggregate Assessment* 2018. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/cheshire-east-laa2018-final.pdf</u>.

<sup>&</sup>lt;sup>13</sup> Cheshire West and Chester Council (2019), *North West Aggregate Working Party Annual Monitoring Report* 2019, *incorporating data from January to December 2018*. Available online at:

http://www.meas.org.uk/media/10116/NW-Aggregates-Working-Party-Monitoring-Report-2019.pdf.

East, Cheshire West and Chester, Cumbria, Greater Manchester, Merseyside, Halton, Warrington, and Lancashire.

- 2.1.18 The Cheshire East Local Plan Authority Monitoring Report 2019/20<sup>14</sup> includes information on:
  - waste arisings and the quantity of waste recycled, recovered or sent for disposal;
  - the capacity of new waste management facilities within the area;
  - permitted aggregate landbank reserves; and
  - new mineral supplies in the area.
- 2.1.19 In planning for changes related to the arrival of the Proposed Scheme, Cheshire East Council is preparing a Crewe Hub Area Action Plan (CHAAP) Publication Draft for consultation. This document provides the planning framework to facilitate and manage the development of the Crewe Hub Station. The consultation was originally anticipated during spring 2020. Following consultation, the CHAAP would be reviewed by the council and submitted to the Secretary of State. The original timetable identified that the CHAAP is to be adopted by summer 2021. The CHAAP builds upon the Crewe Station Hub Area Action Plan (CSHAAP). The CHAAP has been the subject to previous consultations. The most recent consultation on the CHAAP development strategy and further options<sup>15</sup> was undertaken from 22 July 2019 to 3 September 2019. The Cheshire East Council website<sup>16</sup> states that 'prior to the introduction of lockdown measures at the end of March, the council published its Regulation 19 version of the CHAAP that sets the ambition to bring jobs, regeneration and environmental improvements to Crewe, building on the opportunity presented by the arrival of HS2. Much has changed since March 2020 with the securing of £14.1 million of government investment through the Future High Streets Fund, commencement of development at the Royal Arcade and the finalisation of the (soon to be opened) Crewe Market Hall and in the light of the Covid-19 situation, and wider progress in Crewe, the council continues to review the detail of the CHAAP. The plan is being looked at again to make sure that its policies and proposals are deliverable and continue to reflect the ambition for transformation change in the town and we expect to be able to update on the document later in the year.'

<sup>16</sup> Cheshire East Council, *Strategic Planning Update: CHAAP*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/spatial-planning-update.aspx</u>.

<sup>&</sup>lt;sup>14</sup> Cheshire East Council (2021), Cheshire East Local Plan - Authority Monitoring Report 2019/20. Available online at: <u>https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s83907/2019-</u> <u>20%20AMR%20Appendix%201.pdf</u>.

<sup>&</sup>lt;sup>15</sup> Cheshire East Council (2019), *Crewe Station Hub Area Action Plan: Development Strategy and Further Options*. Available online at:

https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s70438/Crewe%20Hub%20Development%20 Strategy%20and%20Further%20Options%20July%2019.pdf.

2.1.20 The Cheshire East Local Development Scheme 2020-2022<sup>17</sup>, which took effect from 16 February 2021, describes the timetable and the programme of work that was set out to prepare all necessary documentation for the Cheshire East Local Plan up to 2022.

### **Cheshire West and Chester Council**

- 2.1.21 The Cheshire Replacement Waste Local Plan and the Cheshire Replacement Minerals Local Plan 1999 are discussed previously; see Cheshire East Council.
- 2.1.22 The Cheshire West and Chester Local Plan (Part One) Strategic Policies 2015<sup>18</sup> lays out general strategic policies, including ENV 8 ('Managing Waste'), which safeguards three sites for waste management development, to help meet the Borough's predicted needs at year 2030. The policy is designed to accommodate the borough's local needs and does not consider significant infrastructure development projects such as the Proposed Scheme. The document also mentions that, at the time it was written, there was only one operational landfill within Chester West and Chester.
- 2.1.23 The Cheshire West and Chester Waste Needs Assessment Update 2016<sup>19</sup> includes forecasts of waste arisings within the borough's catchment area, as well as a capacity gap analysis of different waste treatment systems, and information on the availability of landfill.
- 2.1.24 The North-West Aggregate Working Party Annual Monitoring Report 2019<sup>13</sup> includes information on aggregate sites and relevant aggregate planning permissions within the region.
- 2.1.25 The Cheshire West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies<sup>20</sup> was adopted on 18 July 2019. It includes requirements for Cheshire West and Chester Council to maintain a minimum seven-year landbank for sand and gravel extraction on permitted reserves within the plan area. The document refers to 'Safeguarding Directions' produced by the Secretary of State for development affecting the route of the Proposed Scheme and associated works for HS2 Phase 2b: The Western Leg (Crewe to Manchester) and Eastern Leg (West Midlands to Leeds). It states that the council will consult HS2 Ltd prior to determining any application for planning permission falling within paragraph 2 of the Safeguarding Directions.

<sup>&</sup>lt;sup>17</sup> Cheshire East Council (2021), *Cheshire East Local Plan – Local Development Scheme 2020-2022*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/cheshire east local plan/local development scheme.aspx</u>.

<sup>&</sup>lt;sup>18</sup> Cheshire West and Chester Council (2017), *Cheshire West & Chester Council Local Plan Part One: Strategic Policies*. Available online at: <u>http://consult.cheshirewestandchester.gov.uk/file/3310073</u>.

<sup>&</sup>lt;sup>19</sup> Anthesis Consulting for Cheshire West and Chester Council (2016), *Cheshire West and Chester Waste Needs Assessment Update 2016*. Available online at:

http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/minerals\_and\_waste/wna?tab=files.

<sup>&</sup>lt;sup>20</sup> Cheshire West and Chester Council (2019), *Cheshire West and Chester Council Local Plan Part Two: Land Allocations and Detailed Policies*. Available online at:

https://cheshirewestandchester.objective.co.uk/portal/cwc\_ldf/adopted\_cwac\_lp/parttwo\_adopted?tab=files.

- 2.1.26 The area safeguarded by the Safeguarding Directions has been considered in the preparation of the policies and land allocations contained within the Local Plan (Part Two). The document states that as the route of the Proposed Scheme is still to be considered in Parliament under the hybrid Bill procedures, and the Proposed Scheme is likely to come forward well beyond the end of the plan period (2030), a specific policy on the Proposed Scheme has not been included in the Local Plan at this stage.
- 2.1.27 The Cheshire West and Chester Local Aggregates Assessment 2019<sup>21</sup> provides information on local aggregates facilities, including: planning permission dates; site capacities; information on local supply and demand; and import and export data.
- 2.1.28 The Cheshire West and Chester Annual Monitoring Report 2020<sup>22</sup> outlines the Council's current waste management capacity by type and provides a list of aggregate and mineral facilities within the area. The report contains figures relating to the supply and sale of primary-won sand, landbank requirements, and information on local mineral and waste safeguarded areas.

### Warrington Borough Council

- 2.1.29 The Waste and Mineral Background Paper 2012<sup>23</sup> provides local waste arisings, existing and planning-approved waste treatment facilities and mineral operations, non-hazardous landfill void, and CDEW landfill void.
- 2.1.30 Policy MP8 ('Waste') of the Warrington Local Plan Core Strategy 2014<sup>24</sup> encourages waste minimisation in new developments, the use of recycled materials, the sustainable transportation of waste and the preparation of site waste management plans. The policy also states that the council intends to bring forward a waste local plan to safeguard sites/areas appropriate for future waste management development. At the time of writing, no waste plan has yet been published.
- 2.1.31 Policy MP9 ('Minerals') of the Warrington Local Plan Core Strategy 2014 identifies several preferred sites and areas for mineral extraction, as well as encouraging the use of recycled and secondary aggregate as an alternative to primary aggregate wherever possible.

http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/minerals\_and\_waste/laa?tab=files.

<sup>&</sup>lt;sup>21</sup> Cheshire West and Chester Council (2019), *Cheshire West and Chester Council Local Plan - Local Aggregate Assessment 2019*. Available online at:

<sup>&</sup>lt;sup>22</sup> Cheshire West and Chester Council (2020), *Cheshire West and Chester Local Plan Annual Monitoring Report* 2020. Available online at: <u>http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/mon/</u>.

<sup>&</sup>lt;sup>23</sup> Warrington Borough Council (2012), *Local Plan - Waste and Minerals Background Report*. Available online at: <u>http://www.programmeofficers.co.uk/posl/documents/Warrington/CD5/CD5.4.pdf</u>.

<sup>&</sup>lt;sup>24</sup> Warrington Council (2014), *Local Plan Core Strategy - Adopted July 2014*. Available online at: <u>https://www.warrington.gov.uk/adopted-local-plan-2014</u>.

- 2.1.32 The North West Aggregate Working Party Annual Monitoring Report 2019<sup>13</sup> includes information on aggregate sites and relevant aggregate planning permissions within the region.
- 2.1.33 The Warrington Borough Council Waste Study and Policy Review 2017<sup>25</sup> provides baseline evidence to support the policy approach in the local plan review which the Council is currently undertaking, to guide future waste development in the borough. This report details the steps required to identify and assess potential waste sites to inform the selection of waste allocations in the Local Plan.
- 2.1.34 A supporting document to the local plan review, the Warrington Borough Council Waste Arisings and Capacity Requirements Report 2017<sup>26</sup> assesses the need for future waste management capacity (until 2037) in addition to providing forecasts for various waste streams, including CDEW and Commercial Industry Waste (C&I), and for different recycling scenarios.
- 2.1.35 The Warrington Borough Council Minerals Resource Study and Policy Review 2017<sup>27</sup> provides guidance on future minerals development in the district. The document provides information on the following:
  - current mineral extraction activity in Warrington;
  - the methodology for identifying future minerals extraction;
  - mineral safeguarding; and
  - policy recommendations, to ensure the Local Plan complies with the National Planning Policy Framework.
- 2.1.36 The Greater Manchester, Merseyside and Halton, Warrington Joint Local Aggregate Assessment 2019<sup>28</sup> includes figures on aggregate production, sales, and import in and export out from the respective catchment areas.
- 2.1.37 Warrington Borough Council is currently undertaking a local plan review, which is based on the need for Warrington to accommodate new homes and jobs over the next 20 years, as part of the council's 'New City' aspirations. Consultation on the draft Local Plan closed on 17 June 2019. A period of consultation related to the preparation of the Preferred Development

09/waste\_study\_and\_policy\_review\_final\_report\_may\_2017\_0.pdf.

09/waste\_needs\_assessment\_final\_report\_may\_2017.pdf.

<sup>&</sup>lt;sup>25</sup> Urbanvision (2017), *Warrington Borough Council Waste Study and Policy Review 2017*. Available online at: https://www.warrington.gov.uk/sites/default/files/2019-

<sup>&</sup>lt;sup>26</sup> Warrington Borough Council (2017), *Waste Arisings and Capacity Requirements Report 2017*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-</u>

<sup>&</sup>lt;sup>27</sup> Warrington Borough Council (2017), *Minerals Resource Study and Policy Review*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-09/warrington\_minerals\_study\_mar\_2017\_0.pdf</u>.

<sup>&</sup>lt;sup>28</sup> Association of Greater Manchester Authorities, Merseyside authorities, including Halton, and the unitary authority of Warrington (2019), *Joint Local Aggregate Assessment*. Available online at: <u>https://www.knowsley.gov.uk/knowsleycouncil/media/Documents/LC30-Joint-Local-Aggregate-Assessment.pdf</u>.

Option Document has also been completed. The Warrington Proposed Submission Version Local Plan 2013-2037<sup>29</sup> was published in March 2019. The plan outlines the overall vision, objectives and planning strategy for development in the borough. It contains strategic planning policies which serve as the basis for assessing individual planning applications, and identifies strategic sites and areas allocated for development. Submission of the Local Plan for its examination was delayed until later in 2021 according to the Warrington Borough Council website<sup>30</sup>.

- 2.1.38 Policy ENV1 ('Waste Management') outlines the approach on how development should respond to waste issues across the borough. It emphasises the need to provide appropriate and sustainable sites and areas for waste management infrastructure. When considering applications for non-waste related development, and in accordance with Policy INF3 ('Utilities and Telecommunications'), the council will ensure that any potential impact on existing waste management infrastructure, and on sites and areas allocated for waste management, is acceptable and does not impede the implementation of the waste hierarchy and/or the efficient operation of such facilities.
- 2.1.39 The Warrington Borough Council Annual Monitoring Report 2020<sup>31</sup> includes information on permitted aggregate landbank reserves and quantities of CDEW generated in the sub-region.
- A new work programme was proposed for the preparation of a single Local Plan incorporating waste issues that would see a new plan adopted in the autumn/winter
  2020. According to the Warrington Borough Council website<sup>30</sup>, the submission of the new Local Plan for its examination was delayed until later in 2021.

### **Greater Manchester Combined Authority**

- 2.1.41 The Preferred Approach Report 2010<sup>32</sup> outlines the process used for the selection of new mineral developments and includes information on three potential sites.
- 2.1.42 The Greater Manchester Joint Waste Development Plan (GMJWDP)<sup>33</sup> April 2012 sets out a waste planning strategy for the ten boroughs of Greater Manchester, to 2027. The GMJWDP aims to enable the adequate provision of waste management facilities in appropriate locations for all local waste streams. The policies included in the GMJWDP primarily focus on

<sup>&</sup>lt;sup>29</sup> Warrington Borough Council (2019), *Warrington Proposed Submission Version Local Plan 2013-2037*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-</u>09/proposed submission version local plan v4.pdf.

<sup>&</sup>lt;sup>30</sup> Warrington Borough Council, *Emerging Local Plan*. Available online at: <u>https://www.warrington.gov.uk/localplan</u>.

<sup>&</sup>lt;sup>31</sup> Warrington Borough Council (2021), *Warrington Borough Council Local Plan - Annual Monitoring Report 2020*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2021-03/amr\_2020\_final\_report.pdf</u>.

<sup>&</sup>lt;sup>32</sup> Association of Greater Manchester Authorities (2010), *Preferred Approach Report*.

<sup>&</sup>lt;sup>33</sup> Association of Greater Manchester Authorities (2012), *The Greater Manchester Joint Waste Development Plan.* Available online at:

https://secure.manchester.gov.uk/downloads/download/4804/greater\_manchester\_joint\_waste\_developme\_nt\_plan\_documents.

waste management developments, rather than infrastructure projects, so are not of direct relevance to the Proposed Scheme.

- 2.1.43 The author for the GMJWDP was the Association of Greater Manchester Authorities, which was superseded by the Greater Manchester Combined Authority (GMCA) in 2011. The GMCA encompasses the Metropolitan Boroughs of Bolton, Bury, Oldham, Rochdale, Stockport, Tameside, Trafford, and Wigan, as well the city councils of Manchester and Salford. The Proposed Scheme passes through Manchester City Council and Trafford Council. The GMJWDP includes waste arisings estimates up to 2027, predicted landfill void across the plan area, waste management site selection criteria, and lists and maps of potential waste management sites.
- 2.1.44 The Greater Manchester Minerals Plan 2013<sup>34</sup> replaces and unifies various policies and plans previously used by the ten Manchester authorities. The plan contains crushed rock, and sand and gravel apportionment figures for the area from 2005–2020, and lists active quarries, landbank requirements, and information on local mineral safeguard areas. From 26 April 2013 the Minerals Plan became part of the statutory development plan for Manchester.
- 2.1.45 Policy 9 ('Sustainable Transport of Minerals') of the Greater Manchester Minerals Plan 2013 encourages developers to transport minerals via the most sustainable available method (i.e. water or rail), whenever feasible.
- 2.1.46 Policy 11 ('Protecting existing mineral site/infrastructure') prohibits development that is likely to have an unacceptable impact on the continuation of mineral working or the continued operation of the mineral infrastructure, unless the applicant can clearly demonstrate that either the affected mineral infrastructure is no longer required, or the need for the proposed development outweighs the need to continue mineral working and/or retaining the mineral infrastructure.
- 2.1.47 The North-West Aggregate Working Party Annual Monitoring Report 2019<sup>13</sup> includes information on aggregate sites and relevant aggregate planning permissions within the region.
- 2.1.48 The Greater Manchester, Merseyside and Halton, Warrington Joint Local Aggregate Assessment 2019<sup>28</sup> includes figures on aggregate production, sales, and import in and export out from the respective catchment areas. Information for the rest of Greater Manchester can be found in the annual monitoring reports of each individual authority.
- 2.1.49 The Greater Manchester Joint Minerals Development Plan Authority Monitoring Report 2019/2020<sup>35</sup> includes regional landbank figures for the years 2017-2018, permitted

 <sup>&</sup>lt;sup>34</sup> Association of Greater Manchester Authorities (2013), *The Greater Manchester Minerals Plan*. Available online at: <u>https://www.greatermanchester-ca.gov.uk/media/1995/the\_minerals\_plan\_april\_2013\_final.pdf</u>.
 <sup>35</sup> Capita (2020), *Greater Manchester Joint Minerals Development Plan Authority Monitoring Report 2019-2020*. Available online at: <u>https://www.wigan.gov.uk/Council/Strategies-Plans-and-Policies/Planning/Local-plan/GM-Joint-Minerals-Development-Plan.aspx</u>.

aggregate reserves in 2018, and contains updates on how planning applications during the monitoring period (01 April 2019 to 31 March 2020) impact the mineral plan core output indicators. An application was received in 2018 for the extension of time to Buckton Vale Quarry up to 2042. This application was approved in December 2020 and will be reported in the next iteration of the Authority Monitoring Report. Aside from this, there were no other relevant planning applications for mineral extraction permitted during the monitoring period.

- 2.1.50 On 23 October 2020, the GMCA published Greater Manchester's Plan for Homes, Jobs and the Environment<sup>36</sup>. The plan was presented to the ten Council Leaders of the GMCA on 30 October 2020, with public consultations taking place from 1 December 2020 to 26 January 2021. Presentation to the UK Government was planned for 2021, with an aim to adopt the plan in 2022.
- 2.1.51 Policy GM-S 7 ('Resource Efficiency') focuses on resource efficiency, and states that by 2038, GMCA will:
  - develop and implement the Resource Strategy for Greater Manchester which promotes overall reduction in the level of waste produced and supports resource efficiency in order to gain the maximum value from the things we produce;
  - ensure the design of all new development incorporates storage space to facilitate efficient recycling and where appropriate, processing of waste on-site;
  - recognise the role of existing infrastructure in managing Greater Manchester's waste and protecting such facilities to ensure adequate waste management capacity is maintained; and
  - use sustainable design and construction techniques to reduce carbon emissions, adapt and future proof to the impact of climate change, reduce and recycle waste and minimise water use.

### **Manchester City Council**

2.1.52 Manchester City Council is an independent waste collection authority and part of the GMCA. The GMCA took on the duties of the Waste Disposal Authority from 1 April 2018, replacing the Greater Manchester Waste Disposal Authority, which no longer exists. Consequently, Manchester City Council does not have any independent waste policy documents.

<sup>&</sup>lt;sup>36</sup> Greater Manchester Combined Authority (2020), *Greater Manchester's Plan for Homes, Jobs and the Environment: Greater Manchester Spatial Framework Publication Plan 2020.* Available online at: <u>https://www.greatermanchester-ca.gov.uk/media/3663/221020-agma-issue-opt.pdf</u>.

### **Trafford Council**

- 2.1.53 Trafford Council is part of the GMCA; consequently, the documentation mentioned previously for GMCA also applies to Trafford. Trafford Council is an independent waste collection authority, with waste treatment and disposal managed by the GMCA.
- 2.1.54 Trafford Council's Unitary Development Plan (adopted June 2006)<sup>37</sup> includes a section containing strategic waste disposal policies (Chapter 17). No figures on waste management capacity are provided. However, a site at Red Moss, in Bolton has been identified as a potential landfill site (this has not been categorised as hazardous, non-hazardous or inert within the document). It is stated that this is the only such site identified by the Greater Manchester Waste Disposal Authority. The waste policies featured in the plan focus on waste management and civic amenity site developments and are not pertinent to rail infrastructure developments. Most of the Unitary Development Plan policies are no longer operational as they have been superseded by the following Local Plan documents:
  - Core Strategy (January 2012)<sup>38</sup>;
  - Greater Manchester Joint Waste Plan (April 2012)<sup>33</sup>; and
  - Greater Manchester Joint Minerals Plan (April 2013)<sup>34</sup>.
- 2.1.55 Policy L6 ('Waste') of Trafford Council's Local Plan: Core Strategy 2012<sup>38</sup> recognises the need for Trafford to make an appropriate contribution towards enabling Greater Manchester to meet its waste management needs, including those requirements identified in the GMJWDP. The core strategy aims to enable the adequate provision of waste management facilities in appropriate locations for all local waste streams. As with the GMJWDP, the policies included in the core strategy primarily focus on waste management developments, rather than infrastructure projects, so are not of direct relevance to the Proposed Scheme.
- 2.1.56 The Trafford Land Allocations Plan 2014<sup>39</sup> provides information on various proposed developments but does not identify areas or sites for waste management or mineral extraction. These sites are set out in the GMJWDP and the Greater Manchester Joint Minerals DPD respectively.
- 2.1.57 The Trafford Council's Local Development Scheme 2020-2023<sup>40</sup> sets out the programme for the preparation of new planning policy documents up to 2023 together with a description of the purpose of each document.

```
<sup>38</sup> Trafford Council (2012), Trafford Local Plan: Core Strategy. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/docs/core-strategy-adopted-final.pdf</u>.
```

<sup>&</sup>lt;sup>37</sup> Trafford Council (2006), *Unitary Development Plan*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/unitary-development-plan.aspx</u>.

<sup>&</sup>lt;sup>39</sup> Trafford Council (2014), *Local Plan: Land Allocations - Consultation Draft*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/docs/lap-consultation-draft-policy-text-jan-</u>2014.pdf.

<sup>&</sup>lt;sup>40</sup> Trafford Council (2020), *Local Development Scheme 2020-2023*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/docs/Local-Development-Scheme-2020-2023.pdf</u>.

2.1.58 The new Trafford Local Plan is currently being prepared. It will guide development in the borough and form the basis of decision-making in the planning process. Planning policies that meet the needs of the borough will be set and suitable sites allocated for development. Public consultation on the Regulation 18 Issues Paper was undertaken from 23 July to 14 September 2018. The First Draft Local Plan Consultation (Regulation 18) took place between 4 February and 18 March 2021 and will be followed by a Publication Local Plan Consultation (Regulation 19), anticipated in autumn 2022. Adoption of the plan was originally anticipated in spring 2023, as outlined in the Local Development Scheme, but this date is likely to be pushed back in line with delays to previous stages.

### **Metropolitan Borough of Wigan**

- 2.1.59 Wigan is a Unitary Authority and thus both a waste collection authority and waste disposal authority and is therefore separate to the GMCA. Wigan is, however, included in the Greater Manchester Joint Waste Development Plan April 2012.
- 2.1.60 Wigan Council's Waste Strategy 2009 2030<sup>41</sup> includes the following waste related targets:
  - stabilise municipal waste growth to 1% by 2010 and reduce it to 0% by 2020;
  - achieve recycling and composting targets of 45% by 2015 and 50% by 2020;
  - recover 67% of waste by 2015 and 75% by 2020; and
  - reduce biodegradable municipal waste landfilled to levels consistent with those set for Wigan Council by Landfill Allowance Trading Scheme.
- 2.1.61 The waste strategy also includes waste arising projections, appraisal criteria, demographic figures, and a policy summary.
- 2.1.62 Policy CP 14 ('Waste') of the Wigan Local Plan Core Strategy 2013<sup>42</sup> encourages provision for recycling within larger residential developments and requires the preparation of site waste management plans for major developments. It requires proposals for the development of waste management facilities to demonstrate that any waste arisings are dealt with as far up the waste hierarchy as is practicable and encourages working with other authorities to identify and safeguard waste management sites.
- 2.1.63 The Wigan Authority Monitoring Report 2018/19<sup>43</sup> provides information to assess planning policy performance within the adopted development plan. The borough's development plan currently comprises the Wigan Local Plan Core Strategy, which was adopted in September

<sup>&</sup>lt;sup>41</sup> Wigan Council (2009), *Waste Strategy 2009-2030*. Available online at: <u>https://www.wigan.gov.uk/Docs/PDF/Council/Strategies-Plans-and-Policies/Waste/Waste-strategy-2009-30.pdf</u>.

<sup>&</sup>lt;sup>42</sup> Wigan Council (2013), Wigan Local Plan Core Strategy 2013. Available online at: <u>https://www.wigan.gov.uk/Docs/PDF/Council/Strategies-Plans-and-Policies/Planning/Adopted-Core-Strategy.pdf</u>.

<sup>&</sup>lt;sup>43</sup> Wigan Council (2020), Authority Monitoring Report 2018/19. Available online at: <u>https://www.wigan.gov.uk/Docs/PDF/Council/Strategies-Plans-and-Policies/Planning/Local-plan/Wigan-Authority-Monitoring-Report.pdf</u>.

2013, together with a number of saved Unitary Development Plan policies (adopted 2006), the Greater Manchester Joint Waste Development Plan (2012) and the Greater Manchester Minerals Plan (2013).

### Lancashire County Council

- 2.1.64 The Joint Lancashire Core Strategy DPD 2009<sup>44</sup> was adopted in March 2009, and prepared by the joint authorities of Blackburn with Darwen Borough Council, Blackpool Council and Lancashire County Council. It sets out the vision, aims and objectives of the Minerals and Waste Local Plan, and outlines the strategic policies required to deliver the vision until 2021.
- 2.1.65 The vision of the Joint Lancashire Core Strategy DPD states that:
  - by 2021, residents, businesses and developers alike will be actively minimising waste and regarding waste as a resource;
  - new waste facilities will be located to reduce the need to transport wastes unnecessarily and to support self-sufficiency and local ownership in waste management; and
  - all new developments will embrace waste minimisation and recycling in their design and construction techniques.
- 2.1.66 Objective 9 ('Identifying Capacity for Managing our Waste') supports the need to provide a sufficient capacity of waste management facilities, including landfill needed for final disposal, that prioritises waste reduction, then reuse, recycling and recovery so that the plan area will be net self-sufficient in waste management capacity by 2021.
- 2.1.67 Objective 10 ('Achieving Sustainable Waste Management') supports the need to identify and safeguard sites to deliver sustainable waste management to allow waste to be dealt with as close to its point of generation as possible, whilst conserving and enhancing Lancashire's environmental assets.
- 2.1.68 Policy CS2 ('Minimising the need for Mineral Extraction') states that all new developments will be expected to include measures to:
  - reduce, reuse, recycle and recover the waste they produce during construction and demolition, where possible on-site;
  - maximise the use of recycled and secondary materials, and the reuse of other building materials, within the development; and
  - maximise the potential for recovering and recycling construction materials at the end of the development's life, through the design of, and specification of materials used in, the development.

<sup>&</sup>lt;sup>44</sup> Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2009), *Joint Lancashire Minerals and Waste Development Framework – Core Strategy DPD*. Available online at: <a href="https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/">https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/</a>.

- 2.1.69 A network of sites for fixed recycling facilities will be identified across the plan area, with sufficient capacity and conveniently located to maximise recycling of construction, demolition, industrial and quarry wastes. Policy CS2 requires temporary recycling facilities to be situated at larger sites of construction, demolition and highway projects with on-site reuse of these materials wherever possible.
- 2.1.70 Policy CS6 ('Promoting Waste Minimisation and Increasing Waste Awareness') identifies the need for all major development proposals to include details of measures to reduce the potential amounts of waste generated during construction and to provide for the segregation of any waste arisings to be taken off-site. On-site waste management solutions will be encouraged during construction, particularly for the creation of green infrastructure, to reduce the amount of waste taken off-site.
- 2.1.71 Policy CS6 places an emphasis on improving waste prevention and maximising reuse, recycling and composting, supported by a network of facilities providing flexibility for different technologies.
- 2.1.72 Policy CS7 ('Managing our Waste as a Resource') states that proposals for all new development will be required to provide suitable facilities for the handling, storage and collection of segregated wastes arising from the permanent use of the development.
- 2.1.73 The following recycling, composting and recovery targets have been identified in the Core Strategy:
  - recycle 40% of C&I waste by 2015 and 45% by 2020;
  - recover value from 25% of C&I waste by 2020;
  - recycle 55% of construction and demolition (C&D) waste by 2015 and 60% by 2020; and
  - recover value from 35% of C&D waste by 2020.
- 2.1.74 Policy CS8 ('Identifying Capacity for Managing our Waste') states that in order to achieve the targets set, it is necessary for there to be adequate and timely provision of suitable waste facilities across the plan area. The Council recognises the commercial and geographical realities of some cross-boundary movements of waste, and that it might be reasonable to expect some of these movements to continue. The aim is for the plan area to be net self-sufficient in waste management capacity by 2021. Following this approach, Policy CS8 identifies the waste management capacity requirements for different facility types until 2021, based on the targets identified in Policy CS7.
- 2.1.75 The Joint Lancashire Site Allocation and Development Management Policies (2013) document<sup>45</sup> outlines site-specific policies and allocations, and detailed development management policies for minerals and waste planning in the areas covered by Blackburn with Darwen Borough Council, Blackpool Council and Lancashire County Council. It identifies

<sup>&</sup>lt;sup>45</sup> Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2013), *Joint Lancashire Minerals and Waste Local Plan – Site Allocation and Development Management Policies*. Available online at: <u>https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/#siteallocations</u>.

with Darwen Borough Council, Blackpool Council and Lancashire County Council. It identifies specific locations for development and shows the extent of site allocations and safeguarding areas.

- 2.1.76 The Joint Lancashire Local Waste Assessment (2017)<sup>46</sup> contains an assessment of permitted waste management capacity in the plan area, and includes projections of waste arisings.
- 2.1.77 The Joint Lancashire Minerals and Waste Development Scheme 2014-2020<sup>47</sup> describes the approach to producing the planning policy documents that make up the Minerals and Waste Local Plan. This includes a review of the Minerals and Waste Core Strategy and the Minerals and Waste Site Allocation and Development Management Policies Local Plan, with consultation on the scope and publication of the Minerals and Waste Local Plan having been concluded in 2014 and 2018 respectively.
- 2.1.78 The Local planning policy for minerals and waste page of the Lancashire County Council website<sup>48</sup> stated that the development scheme (for minerals and waste) and its local plan review timetable is now out of date. The original timetable identified that a further consultation would take place in the spring/summer 2020, prior to submission to the Secretary of State for examination in autumn/winter 2020. This was to be confirmed when the development scheme was revised and published in the spring/summer 2020. As of May 2021, there was no indication that these goals had been achieved.
- 2.1.79 The Joint Lancashire Local Aggregate Assessment 2019<sup>49</sup> provides information on permitted aggregate sites, including: planning permission dates; operators; information on local supply and demand; and import and export data.
- 2.1.80 The Joint Lancashire Monitoring Report 2020<sup>50</sup> provides information on permitted aggregate reserves, landbank requirements in addition to waste and mineral planning permissions granted.

<sup>&</sup>lt;sup>46</sup> Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2017), *Joint Lancashire Local Waste Assessment*. Available online at: <u>https://www.lancashire.gov.uk/media/714234/local-waste-assessment-2016.pdf</u>.

<sup>&</sup>lt;sup>47</sup> Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2018), *Joint Lancashire Minerals and Waste Development Scheme 2014-2020*. Available online at: <a href="https://www.lancashire.gov.uk/media/906398/full-development-scheme.pdf">https://www.lancashire.gov.uk/media/906398/full-development-scheme.pdf</a>.

<sup>&</sup>lt;sup>48</sup> Lancashire County Council (2021), *Local planning policy for minerals and waste.* Available online at: <u>https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/</u>.

<sup>&</sup>lt;sup>49</sup> Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2019), *Joint Lancashire Local Aggregate Assessment 2019*. Available online at:

https://www.lancashire.gov.uk/media/914148/joint-lancashire-local-aggregate-assessment-2018.pdf.

<sup>&</sup>lt;sup>50</sup> Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2020), *Monitoring Report*. Available online at: <u>https://www.lancashire.gov.uk/media/918147/annual-report.pdf</u>.

#### **Background Information and Data**

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

### Cumbria

- 2.1.81 The Cumbria Minerals and Waste Local Plan 2015-2030<sup>51</sup> (CMWLP) was adopted on 6 September 2017 by Cumbria County Council, which is the local minerals and waste planning authority. The CMWLP replaces the Cumbria Minerals and Waste Development Framework's Core Strategy and Generic Development Control Policies, both of which were formally adopted in 2009. The CMWLP sets out the vision for waste management and mineral development within Cumbria, outside of the Lake District and Yorkshire Dales National Parks, and outlines the strategic, development control and site allocations policies that underpin this.
- 2.1.82 The CMWLP's overall strategy states that by 2030:
  - the timely provision of appropriate waste management facilities will have been ensured in the right locations, as close to the points of generation as is practicable; and
  - initiatives will have been successful in changing behaviours in order to meet, or exceed, targets for driving wastes up the waste hierarchy and minimising wastes sent to landfill.
- 2.1.83 Policy SP2 ('Provision for waste') reflects the need to ensure that sufficient provision is ensured for the management of all of Cumbria's wastes, whilst accepting that limited cross boundary movements of waste will occur.
- 2.1.84 Policy SP3 ('Waste capacity') identifies that the need for construction and demolition, or excavation, waste arising from infrastructure projects will be assessed and proposals considered against relevant policies in the CMWLP.
- 2.1.85 Policy SP8 ('Minerals safeguarding') addresses safeguarding mineral resources, mineral sites and associated infrastructure from other developments.
- 2.1.86 Cumbria County Council's Authority Monitoring Report 2018<sup>52</sup> contains information on waste and mineral planning permissions granted.
- 2.1.87 Cumbria County Council's Minerals and Waste Development Scheme (2018-2022)<sup>53</sup> describes the approach and the programme of work that will be undertaken to monitor and review the CMWLP. A decision will then be taken before September 2022 as to whether a formal revision of the adopted plan is required.

<sup>&</sup>lt;sup>51</sup> Cumbria County Council (2017), *Cumbria Minerals and Waste Local Plan 2015-2030*. Available online at: <u>https://www.cumbria.gov.uk/eLibrary/Content/Internet/538/755/1929/4298491253.pdf</u>.

<sup>&</sup>lt;sup>52</sup> Cumbria County Council (2020), *Authority Monitoring Report 2018*. Available online at: <u>https://www.cumbria.gov.uk/elibrary/content/internet/538/755/1929/4392117427.pdf</u>.

<sup>&</sup>lt;sup>53</sup> Cumbria County Council (2018), *Minerals and Waste Development Scheme (2018-2022)*. Available online at: <u>https://cumbria.gov.uk/elibrary/Content/Internet/538/755/1929/43315141541.PDF</u>.

- 2.1.88 The Joint Cumbria Waste Needs Assessment Update 2019<sup>54</sup> includes forecasts of waste arisings within the County's catchment area, in addition to capacity and throughput data for waste facilities in 2017.
- 2.1.89 The Cumbria and Lake District Joint Annual Local Aggregates Assessment 2019<sup>55</sup> provides a detailed assessment of the current permitted reserves, available landbanks, local supply and demand, and import and export data in Cumbria.

### 2.2 Scotland

### **Dumfries and Galloway**

- 2.2.1 The Dumfries and Galloway Area Waste Plan<sup>56</sup> dated March 2003 presents the strategic plan to manage waste in Dumfries and Galloway and Ayrshire, in line with the principles and objectives of Scotland's National Waste Strategy.
- 2.2.2 The Local Development Plan 2 (LDP2)<sup>57</sup> was adopted on 3 October 2019 and replaces the 2014 Local Development Plan. It provides the planning framework for the Dumfries and Galloway region and sets out strategic policies which provide guidance on all aspects of development in the region to realise the vision for the next 20 years.
- 2.2.3 The plan identifies that the Dumfries and Galloway Council is working towards implementing the national Zero Waste Plan objectives in accordance with the waste hierarchy of prevention, preparation for reuse, recycling, other recovery and disposal and the council's Waste Management Strategy. It is also in accordance with Annex B to the Scottish Government's Zero Waste Management Plan which indicates that additional waste management infrastructure capacity will be required to deal with 100,000 tonnes of mixed waste in Dumfries and Galloway.
- 2.2.4 The locations of existing and proposed waste management facilities are identified in proposals maps in the plan.
- 2.2.5 Policy IN3 ('New Waste Management Infrastructure') states that proposals for new waste management facilities or extensions to existing facilities will be supported where they deliver

https://cumbria.gov.uk/elibrary/Content/Internet/538/755/1929/4379018936.PDF.

<sup>&</sup>lt;sup>54</sup> Cumbria County Council and Lake District National Park Authority (2019), *Joint Cumbria Waste Needs* Assessment Update 2019. Available online at:

<sup>&</sup>lt;sup>55</sup> Cumbria County Council and Lake District National Park Authority (2019), *Joint Annual Local Aggregates* Assessment 2019 (incorporating figures for 2018). Available online at:

https://www.cumbria.gov.uk/eLibrary/Content/Internet/538/755/1929/4378110518.pdf.

<sup>&</sup>lt;sup>56</sup> Scottish Environment Protection Agency (2003), *Ayrshire, Dumfries and Galloway Area Waste Plan.* Available online at: <u>https://www.south-ayrshire.gov.uk/documents/awp\_full.pdf</u>.

<sup>&</sup>lt;sup>57</sup>Dumfries and Galloway Council (2019), *Local Development Plan 2*). Available online at: <u>https://www.dumgal.gov.uk/media/21885/Adopted-Local-Development-Plan-</u> <u>2/pdf/Adopted\_LDP2\_OCTOBER\_2019\_web\_version.pdf?m=637060550180970000</u>.

the objectives outlined in the Zero Waste Plan to move waste as high up the waste hierarchy as possible.

- 2.2.6 Policy IN4 ('Protection of Existing Waste Management Infrastructure') addresses the importance of safeguarding waste management facilities to ensure that future waste management needs are met.
- 2.2.7 Policy IN6 ('Waste Management Requirements for New Development') states that any new planning application must be supported by a Site Waste Management Plan, and that all new developments will be required to provide appropriate space in the development to accommodate appropriate recycling facilities.
- 2.2.8 Supplementary planning guidance documents have also been produced by the Dumfries and Galloway Council, which directly relate to policies in the Local Development Plan 2. One such guidance document on new waste management infrastructure<sup>58</sup> provides further detail on Policy IN3 while another<sup>59</sup> provides information on mineral resources in Dumfries and Galloway.

<sup>&</sup>lt;sup>58</sup> Dumfries and Galloway Council (2015), *New Waste Management Infrastructure - Supplementary Guidance*. Available online at: <u>https://www.dumgal.gov.uk/media/15875/New-Waste-Management-Infrastructure/pdf/New\_waste\_management\_infrastructure.pdf</u>.

<sup>&</sup>lt;sup>59</sup> Dumfries and Galloway Council (2018), *Mineral Resources - Draft Supplementary Guidance - January 2018*. Available online at: <u>https://www.dumgal.gov.uk/media/19760/LDP2-Draft-Supplementary-Guidance-Mineral-Resources/pdf/Draft\_Mineral\_Resources\_SG\_January\_2018.pdf</u>.

### **3 References**

Anthesis Consulting for Cheshire West and Chester Council (2016), *Cheshire West and Chester Waste Needs Assessment Update 2016*. Available online at: <a href="http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/minerals\_and\_waste/wna?tab=files.">http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/minerals\_and\_waste/wna?tab=files.</a>

Association of Greater Manchester Authorities (2010), *Preferred Approach Report*.

Association of Greater Manchester Authorities (2012), *The Greater Manchester Joint Waste Development Plan*. Available online at:

https://secure.manchester.gov.uk/downloads/download/4804/greater\_manchester\_joint\_wa ste\_development\_plan\_documents.

Association of Greater Manchester Authorities (2013), *The Greater Manchester Minerals Plan*. Available online at: <u>https://www.greatermanchester-</u> ca.gov.uk/media/1995/the minerals plan april 2013 final.pdf.

Association of Greater Manchester Authorities, Merseyside authorities, including Halton, and the unitary authority of Warrington (2019), *Joint Local Aggregate Assessment*. Available online at: <u>http://www.meas.org.uk/media/9095/190830-GM-MH-and-W-LAA-2018\_FIN\_RAT.pdf</u>.

BPP Consulting for Cheshire East Council (issued in 2017 and updated in 2018), *Cheshire East Waste Needs Assessment Update 2017: Main Report*. Available online at: <a href="https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/waste/cheshire-east-wna-2018.pdf">https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/waste/cheshire-east-wna-2018.pdf</a>.

Capita (2020), *Greater Manchester Joint Minerals Development Plan Authority Monitoring Report* 2019-2020. Available online at: <u>https://www.wigan.gov.uk/Council/Strategies-Plans-and-</u>Policies/Planning/Local-plan/GM-Joint-Minerals-Development-Plan.aspx.

CgMs Consulting for Cheshire East Council (2015), *Mineral Sites and Areas Assessment*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/research\_and\_evidence/minerals-background-evidence.aspx</u>.

Cheshire County Council (1999), *The Cheshire Replacement Minerals Local Plan*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/strategic-planning/en-ldf-crepmlp-99.pdf</u>.

Cheshire County Council (2007), *Cheshire Waste Replacement Local Plan*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/saved-and-other-policies/en-ldf-wastelocplan.pdf</u>.

Cheshire East Council (2017), *Cheshire East Local Plan – Local Plan Strategy 2010-2030*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/local-plan/local-planstrategy-web-version-1.pdf.</u>

#### Background Information and Data

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

Cheshire East Council (2017), *Cheshire East Local Plan Minerals and Waste DPD Issues Paper*. Available online at:

https://moderngov.cheshireeast.gov.uk/documents/s54504/Draft%20MW%20Issues%20Pap er%20for%20SPB%20combined%20v4.pdf.

Cheshire East Council (2019), *Cheshire East Local Plan Strategy - Local Aggregate Assessment 2018*, Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/cheshire-east-laa2018-final.pdf</u>.

Cheshire East Council (2019), *Crewe Station Hub Area Action Plan: Development Strategy and Further Options*. Available online at:

https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s70438/Crewe%20Hub%20D evelopment%20Strategy%20and%20Further%20Options%20July%2019.pdf.

Cheshire East Council (2020), *Cheshire East Local Plan - Authority Monitoring Report 2018/19*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/cheshire-east-local-plan-authority-monitoring-report-2018-19.pdf</u>.

Cheshire East Council (2021), *Cheshire East Local Plan – Local Development Scheme 2020-2022*. Available online at: <u>https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/local-development-scheme-2020-2022-final-draft.pdf</u>.

Cheshire East Council (accessed on 14 June 2021), *Local Plan Strategy 2010-2030 - HS2 Phase 2 Safeguarding Zones*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/cheshire\_east\_local\_plan/local-plan-strategy/local\_plan\_strategy.aspx</u>.

Cheshire East Council (accessed 14 June 2021), *Strategic Planning Update: CHAAP*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-planning/spatial-planning-update.aspx</u>.

Cheshire East Council (updated in 2021), *Site Allocations and Development Policies Document*. Available online at: <u>https://www.cheshireeast.gov.uk/planning/spatial-</u> <u>planning/cheshire\_east\_local\_plan/site-allocations-and-</u> <u>policies/site\_allocations\_and\_policies.aspx</u>.

Cheshire West and Chester Council (2017), *Cheshire West & Chester Council Local Plan - Local Aggregate Assessment 2017*. Available online at: <u>http://consult.cheshirewestandchester.gov.uk/file/4818959</u>.

Cheshire West and Chester Council (2017), *Cheshire West & Chester Council Local Plan Part One: Strategic Policies*. Available online at: <u>http://consult.cheshirewestandchester.gov.uk/file/3310073</u>.

Cheshire West and Chester Council (2019), *Cheshire West and Chester Council Local Plan - Local Aggregate Assessment 2019*. Available online at:

http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/minerals\_and\_waste/laa?tab=fil es.

#### **Background Information and Data**

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

Cheshire West and Chester Council (2019), *Cheshire West and Chester Council Local Plan Part Two: Land Allocations and Detailed Policies*. Available online at: https://cheshirewestandchester.objective.co.uk/portal/cwc\_ldf/adopted\_cwac\_lp/parttwo\_ad

<u>opted?tab=files</u>.

Cheshire West and Chester Council (2019), *North West Aggregate Working Party Annual Monitoring Report 2019, incorporating data from January to December 2018.* Available online at: <u>http://www.meas.org.uk/media/10116/NW-Aggregates-Working-Party-Monitoring-Report-</u> <u>2019.pdf.</u>

Cheshire West and Chester Council (2020), *Cheshire West and Chester Local Plan Annual Monitoring Report 2020*. Available online at: <u>http://consult.cheshirewestandchester.gov.uk/portal/cwc\_ldf/mon/</u>.

Cumbria County Council and Lake District National Park Authority (2018), *Joint Annual Local Aggregates Assessment 2018*. Available online at: <u>https://www.cumbria.gov.uk/elibrary/Content/Internet/538/755/1929/4343217368.pdf</u>.

Cumbria County Council and Lake District National Park Authority (2019), *Joint Cumbria Waste Needs Assessment Update 2019*. Available online at: https://cumbria.gov.uk/elibrary/Content/Internet/538/755/1929/4379018936.PDF.

Cumbria County Council (2017), *Cumbria Minerals and Waste Local Plan 2015-2030*. Available online at:

https://www.cumbria.gov.uk/eLibrary/Content/Internet/538/755/1929/4298491253.pdf.

Cumbria County Council (2018), *Minerals and Waste Development Scheme (2018-2022)*. Available online at:

https://cumbria.gov.uk/elibrary/Content/Internet/538/755/1929/43315141541.PDF.

Cumbria County Council (2020), *Authority Monitoring Report 2018*. Available online at: <a href="https://www.cumbria.gov.uk/elibrary/content/internet/538/755/1929/4392117427.pdf">https://www.cumbria.gov.uk/elibrary/content/internet/538/755/1929/4392117427.pdf</a>

Dumfries and Galloway Council (2015), *New Waste Management Infrastructure - Supplementary Guidance*. Available online at: <u>https://www.dumgal.gov.uk/media/15875/New-Waste-Management-Infrastructure/pdf/New\_waste\_management\_infrastructure.pdf</u>.

Dumfries and Galloway Council (2018), *Mineral Resources - Draft Supplementary Guidance - January 2018*. Available online at: <u>https://www.dumgal.gov.uk/media/19760/LDP2-Draft-Supplementary-Guidance-Mineral-Resources SG January 2018.pdf</u>.

Dumfries and Galloway Council (2019), *Local Development Plan 2*. Available online at: <u>https://www.dumgal.gov.uk/media/21885/Adopted-Local-Development-Plan-</u>2/pdf/Adopted\_LDP2\_OCTOBER\_2019\_web\_version.pdf?m=637060550180970000.

Greater Manchester Combined Authority (2020), *Greater Manchester's Plan for Homes, Jobs and the Environment: Greater Manchester Spatial Framework Publication Plan 2020.* Available

online at: <u>https://www.greatermanchester-ca.gov.uk/media/3663/221020-agma-issue-opt.pdf</u>.

High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Volume 3, Route-wide effects, Section 15.* Available online at: <u>https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-</u> <u>environmental-statement</u>.

Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council, (2009), *Joint Lancashire Minerals and Waste Development Framework – Core Strategy DPD*. Available online at: <u>https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/</u>.

Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council, (2013), *Joint Lancashire Minerals and Waste Local Plan – Site Allocation and Development Management Policies*. Available online at

https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/#siteallocations.

Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2017), *Joint Lancashire Local Waste Assessment*. Available online at: https://www.lancashire.gov.uk/media/714234/local-waste-assessment-2016.pdf.

Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2018), *Joint Lancashire Minerals and Waste Development Scheme 2014-2020*. Available online at: <a href="https://www.lancashire.gov.uk/media/906398/full-development-scheme.pdf">https://www.lancashire.gov.uk/media/906398/full-development-scheme.pdf</a>.

Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2019), *Joint Lancashire Local Aggregate Assessment 2019*. Available online at: <a href="https://www.lancashire.gov.uk/media/914148/joint-lancashire-local-aggregate-assessment-2018.pdf">https://www.lancashire.gov.uk/media/914148/joint-lancashire-local-aggregate-assessment-2018.pdf</a>.

Lancashire County Council, Blackpool Council and Blackburn with Darwen Borough Council (2020), *Monitoring Report*. Available online at: <a href="https://www.lancashire.gov.uk/media/918147/annual-report.pdf">https://www.lancashire.gov.uk/media/918147/annual-report.pdf</a>.

Lancashire County Council (accessed 14 June 2021), *Local planning policy for minerals and waste*. Available online at: <u>https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/</u>.

Scottish Environment Protection Agency (2003), *Ayrshire, Dumfries and Galloway Area Waste Plan*. Available online at: <u>https://www.south-ayrshire.gov.uk/documents/awp\_full.pdf</u>.

Trafford Council (Adopted 2006), *Unitary Development Plan*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/unitary-development-plan.aspx</u>.

Trafford Council (2012), *Trafford Local Plan: Core Strategy*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/docs/core-strategy-adopted-final.pdf</u>.

Trafford Council (2014), *Local Plan: Land Allocations- Consultation Draft*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/docs/lap-consultation-draft-policy-text-jan-2014.pdf</u>.

Trafford Council (2020), *Local Development Scheme 2020-2023*. Available online at: <u>https://www.trafford.gov.uk/planning/strategic-planning/docs/Local-Development-Scheme-2020-2023.pdf</u>.

UK Government (updated on 7 October 2020), *Safeguarding information and maps for HS2*. Available online at: <u>https://www.gov.uk/government/collections/safeguarding-information-and-maps-for-hs2</u>.

Urbanvision (2017), *Warrington Borough Council Waste Study and Policy Review 2017*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-</u>09/waste study and policy review final report may 2017 0.pdf.

Warrington Borough Council (2012), *Local Plan - Waste and Minerals Background Report*. Available online at:

http://www.programmeofficers.co.uk/posl/documents/Warrington/CD5/CD5.4.pdf.

Warrington Borough Council (2014), *Local Plan Core Strategy- Adopted July 2014*. Available online at: <u>https://www.warrington.gov.uk/adopted-local-plan-2014</u>.

Warrington Borough Council (2017), *Minerals Resource Study and Policy Review*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-</u>09/warrington\_minerals\_study\_mar\_2017\_0.pdf.

Warrington Borough Council (2017), *Waste Arisings and Capacity Requirements Report 2017*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-</u>09/waste needs assessment final report may 2017.pdf.

Warrington Borough Council (2019), *Warrington Proposed Submission Version Local Plan 2013-2037*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2019-09/proposed\_submission\_version\_local\_plan\_v4.pdf</u>.

Warrington Borough Council (accessed on 14 June 2021), *Emerging Local Plan*. Available online at: <u>https://www.warrington.gov.uk/localplan</u>.

Warrington Borough Council (2021), *Warrington Borough Council Local Plan - Annual Monitoring Report 2020*. Available online at: <u>https://www.warrington.gov.uk/sites/default/files/2021-03/amr\_2020\_final\_report.pdf</u>.

Wigan Council (2009), *Waste Strategy 2009-2030*. Available online at: <u>https://www.wigan.gov.uk/Docs/PDF/Council/Strategies-Plans-and-Policies/Waste/Waste-strategy-2009-30.pdf</u>.

Wigan Council (2013), *Wigan Local Plan Core Strategy 2013*. Available online at: <u>https://www.wigan.gov.uk/Docs/PDF/Council/Strategies-Plans-and-</u><u>Policies/Planning/Adopted-Core-Strategy.pdf</u>.

#### Background Information and Data

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

Wigan Council (2020), *Authority Monitoring Report 2018/19*. Available online at:

https://www.wigan.gov.uk/Docs/PDF/Council/Strategies-Plans-and-Policies/Planning/Localplan/Wigan-Authority-Monitoring-Report.pdf.

#### Background Information and Data

Waste and material resources BID WM-002-00000 Route-wide policy review and benchmarks

### Annex A - Construction waste benchmarks for railway projects

bre

#### Construction waste benchmarks for railway projects

Prepared for: Andrew Dunwoody Arup

15<sup>th</sup> February 2013

Client report number 284-945



#### Prepared by

2

Name Maggie Blackwell

Position Senior Consultant

Signature MBlaulicell

#### Approved on behalf of BRE

Name Katherine Adams

Position Principal Consultant

Date 15<sup>th</sup> February 2013



Signature

BRE Garston WD25 9XX T + 44 (0) 1923 664000 F + 44 (0) 1923 664010 E <u>enquiries@bre.co.uk</u> www.bre.co.uk

This report is made on behalf of BRE. By receiving the report and acting on it, the client - or any third party relying on it - accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence).



#### **Executive Summary**

3

Arup require information on construction waste arisings and waste management methods for railway projects. This is to assist in the proposed HS2 railway project. BRE's SMARTWaste database contains data on over 8000 completed construction projects (including approximately 300 completed railway projects) and these can be used to produce benchmarks of waste arisings and waste management methods.

Average performance indicators for waste arisings (tonnes)/£100K project value have been produced for railway projects both overall and by waste type. In addition, benchmarks for standard, good and best practice have been produced. Similarly, for waste management routes, the average reused, recycled and recovered has been calculated together with benchmarks for diversion of waste from landfill.





#### Contents

Introduction	5
Description of the project	6
Findings	7
Conclusion	13

© Building Research Establishment Ltd 2013

4



#### Introduction

Arup requires information on construction waste arisings and waste management methods for railway projects. BRE's SMARTWaste database contains data on over 8000 completed construction projects and these can be used to produce benchmarks of waste arisings and waste management methods.

SMARTWaste is a web-based tool to help users prepare, implement and review site waste management plans. It also allows users to measure waste arisings and waste management routes. It can be accessed at <u>www.smartwaste.co.uk</u>. The tool was developed in 2008 to coincide with the introduction of the Site Waste Management Plan legislation and since that time data on over 13,000 projects (including over 8,000 completed projects) has been collected. For each project a large amount of data is collected including:

- Project value
- Project floor area
- Location (by region)
- Project type (e.g. new build, refurbishment, fit-out, demolition)
- Client type
- Construction type (e.g. frame type)
- Project classification (e.g. residential, education, healthcare, commercial office, commercial retail etc.)
- Waste arisings by waste product type
- Waste management methods used



#### **Description of the project**

Data is available in the SMARTWaste database for 300 completed railway projects. Of these, approximately half of the projects have reported waste arisings in tonnes and these have been used to produce the benchmarks.. For some railway projects, it can be difficult to assign floor areas to the projects so the performance indicators are based on project value, i.e. tonnes/£100K. Aggregated data obtained from completed SMARTWaste projects was subject to a number of logical and statistical tests, to ensure that the data used to produce the performance indicator (tonnes/£100K) is valid.

Initially all projects that meet the following criteria were selected.

- The waste arising must be more than 1 tonne.
- The project value must be greater than £1.

Performance indicators of tonnes waste (based on construction phase waste excluding soils) per £100K project value were calculated for these projects and further statistical analysis carried out to remove any potential outliers. It has been assumed that projects with performances indicators below the  $5^{th}$  percentile and above the  $95^{th}$  percentile are potential outliers and these so only projects with performance indicators that fall between the  $5^{th}$  percentile and the  $95^{th}$  percentile were used for further analysis.

For projects that passed these logical tests, a count of the number of plausible results, the average, standard deviation and median of the results was obtained for the tonnes waste/£100K project value. In addition, benchmarks for Standard, Good and Best practice were produced as follows:

- Best practice is results in the lowest quartile of the performance indicator
- Good practice is the second quartile of the performance indicator (i.e. between the median and the lowest quartile)
- Standard practice is results between the average and the median.



#### Findings

Waste arising/£100K project value

Railway projects that were completed by 31/12/12 that passed the above statistical criteria were used to produce the figures for waste arisings/£100K. These were broken down into different project types as shown in the Table 1 below.

	Number of completed SMARTWaste Plan Railway projects
All projects	114
Railways	71
Stations	32
Bridges	8
Tunnels	3

Table 1: Number of projects used in determination of performance indicators

The mean of the performance indicators for completed railway projects are shown in Table 2.

	Average Tonnes waste/£100K project value			
	Construction tonnes/£100K	Excavation tonnes/£100K	Demolition tonnes/£100K	Total tonnes/£100K
All projects	26.4	1.9	17.3	45.7
Railways	34.4	2.0	14.8	51.2
Stations	14.1	0.8	28.2	43.1
Bridges	6.0	6.8	1.5	14.3
Tunnels	24.5	0.0	0.0	24.5

Table 2: Mean tonnes/£100K project value for completed railway projects



The performance indicators for all railway projects have been used to produce figures for Standard, Good and Best practice. Standard practice is performance between the median and the average, good practice is between the median and the upper quartile and best practice is performance in the upper quartile.

	Tonnes waste/£100K project value		
	Standard	Good	Best
Construction phase	6.1 - 26.4	2.5 - 6.1	<2.5
Excavation phase	1.9 – 6.4	0.7 – 1.9	<0.7
Demolition phase	4.6 – 17.3	1.7 – 4.6	<1.7
Overall	8.9 – 45.7	4.4 - 8.9	<4.4

Table 3: Standard, good and best performance indicators for waste arisings from all rail projects



#### Waste arisings by waste product

The waste arisings were analysed in more detail to give overall performance indicators for specific waste products. These are show in Table 4.

Waste product	Average tonnes/£100K
Soils (17 05 04)	17.1
Concrete (17 01 01)	16.0
Mixed (17 09 04)	4.6
Other (20 03 01)	2.9
Inert (17 01 07)	2.2
Metals (17 04 07)	1.0
Timber (17 02 01)	0.7
Asphalt and tar (17 03 02)	0.3
Bricks (17 01 02)	0.2
Insulation (17 06 04)	0.2
Canteen/office/adhoc waste (20 03 01)	0.1
Gypsum (17 08 02)	0.1
Packaging (15 01 06)	0.1
Electrical and electronic equipment (20 01 36)	0.0
Plastics (17 02 03)	0.0
Hazardous (17 09 03*)	0.0
Binders (17 01 01)	0.0
Tiles and Ceramics (17 01 03)	0.0
Furniture ( 20 03 07)	0.0
Liquids (16 10 02)	0.0
Oils (13 01 13*)	0.0

Table 4: Performance indicators for individual waste products from rail projects



Chart 1: Summary of top 10 waste products for rail projects



#### Waste management routes

These projects were analysed to determine the waste management methods used. The overall percentages reused, recycled, recovered and diverted from landfill for all waste arisings were calculated.

Waste management route	Average %	
Reused	1.4	
Recycled	32.1	
Recovered	27.0	
Landfilled	39.5	
Diverted from landfill	60.5	

Table 5: Waste management routes for waste arisings from rail projects



Chart 2: Waste management routes for waste from rail projects



Benchmarks for diversion of waste from landfill for rail projects were also calculated with performance in the top quartile being best practice, the next quartile good practice and between the average and the median is standard practice.

	Standard	Good	Best
Diversion of waste from landfill (as a percentage)	60.5 - 61.7	61.7 – 97.1	>97.1

Table 6: Benchmarks for diversion of waste from landfill for rail projects



#### Conclusion

Performance indicators for waste arisings (tonnes)/£100K project value have been calculated for completed railway projects both overall and for specific waste types. These can be used to help forecast waste arisings and set targets for similar projects.

In addition, details of waste management routes used for waste arising from railway projects have been calculated and these can also be used to inform waste management decisions on future projects. The benchmarks for diversion of waste from landfill can be used to help set targets for waste management.

### hs2.org.uk

#### High Speed Two (HS2) Limited

Two Snowhill Snow Hill Queensway Birmingham B4 6GA Freephone: 08081 434 434 Minicom: 08081 456 472 Email: HS2enquiries@hs2.org.uk