

## Management of traffic during construction

This factsheet outlines the emerging framework for the assessment, control and management of matters that will affect the road network, such as construction traffic and temporary measures affecting traffic that will be necessary during the construction of the Proposed Scheme. It also outlines the proposed process by which affected residents, businesses and others will be informed of how construction activities could impact on the road network and existing traffic, as well as how construction traffic flows would be controlled and managed in their area.

# 1 Introduction

- 1.1.1 High Speed Two (HS2) is the Government's proposal for a new, high speed north-south railway. The proposal is being taken forward in phases. Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route to Crewe. The Western Leg of Phase 2b comprises an extension of the network to Manchester and a connection to the West Coast Main Line at Golborne, and is referred to as the Western Leg hybrid Bill. The Eastern Leg of Phase 2b currently comprises an extension of the network from the West Midlands through the East Midlands to Leeds.
- 1.1.2 HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works to a Development Agreement made with the Secretary of State for Transport.
- 1.1.3 The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act (2017). In July 2017, the Government introduced a hybrid Bill to Parliament to seek powers for the construction and operation of Phase 2a.
- 1.1.1 In February 2020, the Government announced its intention to draw up an Integrated Rail Plan. This will recommend a way forward on scoping, phasing and sequencing the delivery of HS2 Phase 2b, Northern Powerhouse Rail, Midlands Rail Hub and other proposed rail investments across the north. At the same time, the Government asked HS2 Ltd to prepare the Western Leg hybrid Bill, provided it does not prejudice any recommendations or decisions that will be taken in this plan, which will be published by the end of the year.
- 1.1.2 It is intended to deposit a Western Leg hybrid Bill seeking powers to construct and operate this phase in Parliament in early 2022 or sooner if possible (the Proposed Scheme). The work to produce the Bill will include an Environmental Impact Assessment (EIA), the results of which will then be reported in an Environmental Statement (ES). The ES would be submitted alongside the Bill when it is introduced to Parliament. As was the case with Phase One and Phase 2a, when the Bill is introduced to Parliament the Secretary of State will also publish draft Environmental Minimum Requirements (EMRs). The EMRs will set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.1.3 A series of information papers were produced for the Phase One and Phase 2a hybrid Bills, explaining the commitments made in those Bills and EMRs. It is the Secretary of State's intention to follow a similar process for the Western Leg Bill. These information papers will be used to provide information about

the Proposed Scheme itself, the powers contained in the Bill and how decisions on the Proposed Scheme have been reached. It is currently proposed that these information papers for the Western Leg of Phase 2b will be published at the time the Bill is introduced in Parliament.

- 1.1.4 The Secretary of State for Transport will be ‘the Promoter’ of the Western Leg Bill. The Promoter will also eventually appoint a body responsible for delivering the Proposed Scheme under the powers to be granted by the Bill. This body will be known as the ‘nominated undertaker’. There may well be more than one nominated undertaker. However, any and all nominated undertakers will be bound by the obligations contained in the Bill, the policies established in the Western Leg EMRs and any commitments provided in the Western Leg information papers.
- 1.1.5 These Western Leg factsheets have been produced to provide information on the emerging proposals for measures to manage the design process for the Proposed Scheme and to control impacts which may arise from the construction and operation of the Proposed Scheme. These measures may then be applied to the Western Leg as commitments made through the eventual Bill, EMRs or information papers.

## **2 Overview**

- 2.1.1 The purpose of this factsheet is to outline the emerging framework for the assessment, control and management of matters that will affect the road network, such as construction traffic and temporary measures affecting traffic that will be necessary during the construction of the Proposed Scheme. It also outlines the expected process by which affected residents, businesses and others will be informed of how construction activities could impact on the road network and existing traffic, as well as how construction traffic flows would be controlled and managed in their area.

## **3 Construction traffic impacts**

- 3.1.1 The impact of construction traffic on local roads is likely to be a particular concern for residents who live or work near the line of route for the Proposed Scheme. HS2 Ltd is committed to ensuring that the adverse effects of such impacts are minimised, as far as reasonably practicable.
- 3.1.2 Construction traffic consists of the delivery of equipment and materials, and the movement of excavated materials. Along the whole line of route, the majority of construction traffic movements are likely to be due to the movement of the quantities of excavated materials arising from tunnelling and earthworks. Consistent with the HS2 Environmental Policy of reducing

waste and maximising the proportion of waste diverted from landfill, the Proposed Scheme aims to reduce the amount of material excavated and reuse excavated material as far as reasonably practicable. For more information see Phase 2b Western Leg Factsheets: Excavated material and waste management and Borrow Pits. It is expected that the majority of material that will be excavated across the Proposed Scheme will be reused within the design of the Proposed Scheme, such as for the construction of earthworks.

3.1.3 Where it is necessary to move excavated material and it is appropriate and reasonably practicable to do so, examples of how this may be achieved are:

- by moving excavated material along the construction corridor (land required for the construction of the railway) on dedicated site haul routes, so as to reduce impacts on the road network;
- using rail transport for the movement of materials and waste in bulk; and
- where removal from the site by road is necessary, moving excavated material by public highway along designated lorry routes, using the strategic road network (A roads and motorways) where reasonably practicable so to minimise the use of local roads.

3.1.4 As well as the movement of construction materials, construction activities will require the movement of the workforce who will deliver the Proposed Scheme. In order to minimise private car movements, contractors will be required to prepare workforce travel plans. These will encourage workers to use sustainable modes of transport or to otherwise reduce the number of cars and encourage contractors to consider how to link worksites with public transport, where reasonably practicable, to reduce the impact of workforce travel on local residents and businesses.

## **4 Assessment of environmental impacts of construction traffic**

4.1.1 The ES will identify the environmental impacts of construction traffic. It will forecast the level of light goods vehicle (less than 3.5t) and heavy goods vehicle (over 3.5t) (lorry) construction traffic for each construction site, as well as construction workforce car traffic. The number and frequency of lorry movements and the duration of busy periods will be forecast using estimated quantities of materials to be transported and the likely construction programme. Lorry movements for each construction site will be assigned to routes that provide the most suitable links from worksites to the main road network, in order to minimise the environmental effects as far as this is reasonably practicable. This assessment will be based on a reasonable worst-

case scenario and, therefore, will represent a cautious assessment of the likely environmental effects.

4.1.2 The assessment of construction traffic will focus on the following issues:

- any temporary increase in construction traffic on a route that causes delays and congestion for road users or has a severance effect for non-motorised users (e.g. pedestrians and cyclists), in particular making it harder for them to cross the road;
- changes in potential accident rate and safety, parking and loading, and public transport interchange resulting from construction traffic; and
- changes in noise levels and air quality as a result of additional vehicular traffic.

4.1.3 The assessment of construction traffic will also look at increased travel time or delays that could be caused by temporary closures of roads and public rights of way around construction sites.

4.1.4 Criteria will be developed to identify significant impacts based on estimated increases in traffic levels resulting from construction traffic movements. These will take account of current guidance and standards, as well as criteria developed for recent major railway projects, in particular the HS2 Phase One and Phase 2a, Channel Tunnel Rail Link (High Speed One) and Crossrail.

4.1.5 Where proposed worksites would be near each other and operating at the same time, cumulative traffic impacts on local roads will be assessed. Where appropriate, this assessment will be extended to consider the possible cumulative impacts on the wider road network.

4.1.6 Estimated numbers of construction traffic and workforce car movements to and from the worksites will form the basis for the assessment of community impacts and noise and air quality impacts arising from construction traffic. Predicted changes in road traffic noise and air quality will be described in the ES. The reports will also give information on worksite locations and proposed designated routes for construction traffic.

## **5 Control and management of construction traffic to mitigate impacts**

5.1.1 It is expected that the following measures for controlling construction traffic and works to the highway will be applied to the Proposed Scheme:

- processes for qualifying local planning authorities to approve highway routes used by specified numbers of large goods vehicles (i.e. those over 7.5t) within a specified period;
- processes for local highway authorities (road authorities in Scotland) to approve specified new or altered worksite accesses to and from a highway; and
- processes for consulting or seeking consent from local highway authorities (road authorities in Scotland) for specified works within a highway.

5.1.2 The eventual Environmental Minimum Requirements (EMRs)<sup>1</sup> for the Proposed Scheme, including the Code of Construction Practice (CoCP), together with the measures described above, are intended to ensure that the impacts of the Proposed Scheme, including those relating to construction traffic, would not exceed those that will be assessed in the ES. In particular, the CoCP is expected to require the nominated undertaker to ensure that pedestrian access to premises be maintained, where reasonably practicable, and appropriate measures would be implemented to ensure the local community, economy and transport networks can continue to operate effectively. Where this is not reasonably practicable, alternative measures would be identified to maintain continued public access, especially for pedestrians and cyclists, to routes in the vicinity of the construction sites.

5.1.3 The draft CoCP will be included as an appendix to the ES. Its expected purpose is to provide a consistent approach to the management of construction activities throughout the construction of the Proposed Scheme. It will evolve and will be subject to refinement and amendment as necessary, as the Proposed Scheme's design and assessment, and parliamentary processes, develop. It is expected that the draft CoCP will be finalised for the Proposed Scheme when the Phase 2b Bill is enacted.

5.1.4 The emerging proposal for the draft CoCP is to include the requirement for the nominated undertaker to prepare a Route-wide Traffic Management Plan (RTMP) in liaison with highway and traffic authorities (road authorities in Scotland) and the emergency services. As appropriate, the plan is expected to include:

- the means of managing and monitoring lorry flows;
- the requirement for vehicle and driver safety;
- requirements for preparing workforce travel plans;
- the strategy for design and consultation for traffic management (including the signing strategy for emergency service access and lorry wayfinding); and

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<sup>1</sup> Further details on the EMRs are given in the Phase 2b Factsheet: Control of environmental impacts

- the requirements for protecting highways.

5.1.5 The draft CoCP is also expected to require the nominated undertaker to ensure that local traffic management plans (LTMPs) are prepared by contractors in liaison with the relevant highway and traffic authorities (road authorities in Scotland) and the emergency services. As appropriate, these plans would include:

- the contractors' construction traffic flow assumptions;
- the local routes to be used by large goods vehicles (approved where applicable), including lorry holding areas required for construction of the Proposed Scheme; and
- significant works affecting roads and public rights of way, including temporary and permanent closures and diversions.

5.1.6 The potential impact of road-based construction traffic is expected to be reduced by a number of measures such as ensuring suitable access arrangements along rural roads, monitoring carriageway conditions on B class roads and below, implementing appropriate controls through the use of a Vehicle Management System, limiting hours of site operation and the control of routes for large goods vehicles, when there are more than 24 movements per day. Contractors would also be required to consider and, where reasonably practicable, mitigate noise generated by road-going construction traffic.

5.1.7 The draft CoCP will also include measures to seek to minimise mud from construction sites being spread by construction vehicles onto the highway, controls on vehicle parking (including parking by the nominated undertaker and contractor staff) and controls on the transfer of excavated material and waste to approved disposal sites. It is expected that, as per the controls imposed in the Phase One and Phase 2a Bills, the Phase 2b Bill would require measures to control road mud to be approved by the relevant planning authorities under the planning regime if not set out in class approvals issued by the Secretary of State.

5.1.8 The planning of the works will take into consideration the affected residential, commercial, industrial and farming premises, and specifically their requirements for access and servicing (including delivery, collection and maintenance). Access and servicing would be maintained, as far as reasonably practicable, within the constraints of the works and the need to ensure the safety of the public; this may involve diversions, temporary traffic controls and the use of temporary carriageways and footways. As per Phase One and Phase 2a Bills, it is expected that a general commitment to maintain reasonable pedestrian access to occupied premises throughout any period of temporary closure would be included in the Phase 2b Bill.

## 6 Traffic management measures

6.1.1 The construction works for the Proposed Scheme will affect other forms of transport. A range of temporary traffic management measures will likely be required, as appropriate, to facilitate the construction works and mitigate the potential impacts. These measures would vary and have a variety of impacts for different users and could potentially include:

- changes for pedestrians, cyclists and equestrians:
  - realignment or narrowing of footways to maintain pedestrian routes;
  - realignment or narrowing of carriageway cycle lanes, combined footways/cycleways, off-road cycle tracks and bridleways/byways to maintain cycle access;
  - signed diversions for where there is a temporary closure of roadside footways and public rights of way (i.e. footpaths, bridleways and byways) where it is not possible to maintain pedestrian and cycle routes; and
  - signed diversions for equestrians where narrowing, realignment or temporary closure of bridleways/byways is required.
- changes for public transport users:
  - alterations to railway station entrances and exits and circulation of rail passengers within stations; and
  - diversion of bus routes and suspension and relocation of bus stops and stands.
- changes for general vehicular traffic:
  - road closures with signed diversions;
  - lane closures;
  - two-way traffic temporarily using a single lane, including under traffic signal control;
  - temporary road and junction layouts;
  - introduction or removal of traffic regulation measures (such as one-way streets, banned turns and weight restrictions);
  - temporary traffic-calming measures;
  - changes to traffic signal timings;
  - temporary speed limits; and
  - suspension and (where practicable) relocation or reallocation of parking bays.

6.1.2 All temporary traffic management would be implemented and maintained in accordance with relevant guidance and codes, such as Chapter 8 of the



Traffic Signs Manual, and with Safety at Street Works and Road Works (both published by the Department for Transport). Traffic management would have due regard for the needs of vulnerable road users.

## 7 Consultation

- 7.1.1 During the development of the Proposed Scheme, highway authorities (road authorities in Scotland) along the route of the Proposed Scheme will be continually consulted with in relation to local and route wide traffic issues resulting from the Proposed Scheme. This consultation will continue throughout the development of the ES.
- 7.1.2 Following submission of the Phase 2b Bill to Parliament, highway authorities (road authorities in Scotland) along the route of the Proposed Scheme will be consulted, with the expectation they will be invited to attend a highways forum, which will act as a focus for consultation and liaison on highways and traffic issues that are route-wide. It will consider general construction traffic issues and the procedures for consultation and obtaining any necessary consents once construction commences and which will be set out in the RTMP.
- 7.1.3 Liaison is expected to continue on a more local basis prior to and during construction to discuss specific day-to-day issues around construction traffic management as they arise. This is likely to involve the nominated undertaker and/or contractor(s), highway authority officers (road authority officer in Scotland) responsible for traffic management, highway maintenance, street lighting, traffic signals, walking, cycling and public transport services (as well as utility company representatives when necessary).
- 7.1.4 During construction, regular local traffic liaison meetings are expected to be arranged with highway authorities (road authorities in Scotland), bus operators, taxi and trade representation (as appropriate), and the police - other emergency services would be included, as appropriate. These meetings would provide an opportunity for contractors to present proposals for future works affecting the highway, including methods of construction and proposed programme, and for a review of the associated traffic management requirements. This would allow the highway authorities (or road authorities in Scotland) to carry out their network co-ordination duties.
- 7.1.5 Some traffic management proposals may require Traffic Regulation Orders under the Road Traffic Regulation Act 1984 to cover measures such as the introduction of one-way streets, banned turns and temporary speed limits. These would be discussed at the liaison meetings. Applications for these

orders would be made to the relevant traffic authority by contractors and advertised locally in the normal way.

- 7.1.6 The nominated undertaker is expected to require contractors to communicate regularly with parties affected by the works. Local residents and businesses would be informed - appropriately and in advance - of the dates and durations of any closures of roads or public right of way, and would be provided with details of diversion routes at least two weeks in advance or when final details are available. Advance warning signs of road closures would be provided for users of roads and public of rights of way.

## **8 More information**

- 8.1.1 Further factsheets and details on the Proposed Scheme can be found at: [www.hs2.org.uk/phase2b](http://www.hs2.org.uk/phase2b)



