

# MetroWest\*

#### **Portishead Branch Line (MetroWest Phase 1)**

TR040011

Applicant: North Somerset District Council
6.25, Environmental Statement, Volume 4, Technical Appendices, Appendix 16.1:
Transport Assessment, (Part 5 of 18) – Appendix A, TA Scoping Report
The Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009, Regulation 5(2)(a)
Planning Act 2008

Author: CH2M

**Date: November 2019** 





















PORTISHEAD BRANCH LINE DCO SCHEME (METROWEST PHASE 1)
ENVIRONMENTAL IMPACT ASSESSMENT

# Transport Assessment Appendix A Scoping Report and Meeting Notes

Prepared for

West of England Councils

June 2018





1 The Square Temple Quay Bristol BS1 6DG

# **Document History**

Portishead Branch Line DCO Scheme (MetroWest Phase 1)

**Transport Assessment** 

Appendix A: Scoping Report and Meeting Notes

**Reference Number:** 674946.CS.70.01/TA

Client Name: West of England Councils

#### This document has been issued and amended as follows:

Version	Date	Description	Created by	Verified by	Approved by
01	February 2016	Draft	ÁK	HS	HS
02	April 2016	Final Draft	ÁK	HS	HS
03	June 2018	Final	ÁK	HS	HS

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#### SECTION 1

# **Scoping Report**

PORTISHEAD BRANCH LINE DCO SCHEME (METROWEST PHASE 1)
ENVIRONMENTAL IMPACT ASSESSMENT

# Transport Assessment Scoping Report

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# **Document History**

# Portishead Branch Line DCO Scheme (MetroWest Phase 1) Transport Assessment Scoping Report

**Reference Number:** 674946.CS.70.01/TA

Client Name: West of England Councils

#### This document has been issued and amended as follows:

Version	Date	Description	Created by	Verified by	Approved by
01	July 2015	Draft for review	JE	HS	HS
02	October 2015	Draft Final	JE	HS	HS
03	November 2015	Final	JE	HS	HS

# Acronyms and Abbreviations

ALCRM All Level Crossing Model
ASR Appraisal Summary Report
DCO Development Consent Order
DfT Department for Transport
EAST Early Appraisal Sifting Tool

EIA Environmental Impact Assessment
GBATS Greater Bristol Multi-Modal Model
GTA Guidance for Transport Assessment

HE Highways England

LEP Local Enterprise Partnership
LTPP Long Term Planning Process

LWRMTK Level Crossing Risk Management Toolkit

NMU Non Motorised User

NPPF National Planning Policy Framework

NR Network Rail

NRTS National Rail Travel Survey
NSC North Somerset Council

NSIP Nationally Significant Infrastructure Project

ORR Office of Rail and Road

PDFH Passenger Demand Forecasting Handbook

PROW Public Right of Way
RDM Rail Demand Model
RUS Rail Utilisation Strategy

SPD Supplementary Planning Document

TA Transport Assessment

TAG Transport Appraisal Guidance (Department for Transport)

TPH Trains per Hour

#### Addendum

This version of the Scoping Report (dated November 2015) has been updated in the following areas since the previous versions in July and October 2015.

Section 1.2 – Specific reference to the scoping discussions that were held.

Section 1.3 – Titles of the structure headings have been amended

Section 2.4 - Reference to the DCO red line as of July 2015

Section 2.5 – Additional text to the congestion and journey time from Pill added

Section 2.6.5 – The potential layout drawing for Portishead Station has been updated with the iteration used in the June to August 2015 public consultation

Sections 2.66 and 2.7 – Text added stating the number of cycle spaces have yet to be finalised

Section 3.3 – Local policies and strategies have been updated to reflect recently adopted documents and emerging strategies that may have a bearing in the future

Section 4.3 – Reference to the committed developments being sourced from the GBATS4 model

Section 4.4.2 – New reference to M5 J19 and the extent of the proposed assessment

Section 4.5 - Figures updated

Section 4.5 – Specific reference to A369/St Georges Hill

Section 4.6.2 – Parking survey information updated to reflect a later survey undertaken in September 2015

Section 4.9.3 – The proposed methodology for the walking and cycling assessment has been updated

Section 4.10 – Figure updated and reference to the Barons Close pedestrian crossing updated to reflect its temporary closure since summer 2015 and it will not be possible to undertake a pedestrian count

Section 5.3.1 – Section slightly amended to reflect that GBATS4 outputs will be used less in the production of the TA

Section 5.7.4 – Section amended to reflect feedback that what the Construction Traffic Management Plan (CTMP) should include.

### Introduction

#### 1.1 Background

CH2M has been appointed to provide a Transport Assessment (TA) in support of the MetroWest Phase 1 line proposal to reopen the Portishead line with stations at Portishead and Pill. The overall MetroWest Phase 1 scheme entails a half hourly rail services for the Severn Beach line, for local stations between Bristol Temple Meads and Bath Spa together with the re-Portishead line. The Portishead line was closed in 1964 under the Beeching cuts, although the line was used for freight trains serving heavy industry in Portishead, until 1985.

The scheme involves re-building 5km of disused railway between Portishead and Pill and upgrade works to the existing Portbury Freight Line (Parson Street Junction to Portbury Dock Junction). This aspect of the scheme is deemed to be a Nationally Significant Infrastructure Project (NSIP), under the Planning Act 2008, and therefore requires a Development Consent Order (DCO) for powers to build and operate. As part of the DCO process, an Environmental Statement will be submitted which includes a need for a TA.

#### 1.2 The Scoping Report

This document aims to scope the proposed approach and methodology that will be utilised for the TA. It provides, where appropriate, the extent of the proposed study area for the analysis of the impacts arising from the scheme proposals. This report also provides an overview of the approach that may be undertaken to assess the wider cumulative impacts of the scheme that fall outside the DCO application area. The report also supports the EIA scoping and baseline reports that were submitted to the Planning Inspectorate.

An initial version of this Scoping Report was produced in July 2015 and submitted to the appropriate local highway development control teams for comment. Meetings were held with Bristol City Council (BCC), North Somerset Council NSC) and Highways England (HE) in August and September 2015. This version of the Scoping Report has been updated to reflect the comments from these discussions together with feedback from other stakeholders.

It is important to stress, nevertheless, at the point of production (October 2015) that the options for the scheme are being developed and refined as part of the business case process. This means some of the detail for the final proposed scheme are unknown at present and as a result, this document will allude to an indicative and likely approach for these matters.

#### 1.3 Structure

This document is structured as follows:

- **Section 2 Overview and approach** This section provides the background to the scheme and the approach and structure that will be used for the TA. There is specific reference to the current policy guidance relating to the preparation and assessment of TAs.
- **Section 3 Policy background** This section outlines the national and local policy that will be examined and are pertinent to this particular scheme.
- Section 4 Proposed Study area and existing conditions This section outlines the proposed study area (based on the competing options) and the approach that will be used to assess existing conditions. This includes the proposed survey areas for traffic flows, parking, pedestrian and cycling movements.
- Section 5 Assessment of impacts This section describes the proposed approach to the
  assessment of impacts. This will outline the proposed methodology, where necessary, and the

impacts that will be examined. The section will also highlight some of the mitigation measures that could be recommended by the TA.

• Section 6 Cumulative impacts – This final section considers some of the wider impacts arising from the scheme outside the immediate DCO application area. This includes the approach to be used in assessing the highway impacts of increased level crossing closures within the City of Bristol.

### Overview and Approach

#### 2.1 Introduction

This section of the Scoping Report seeks to provide a short background to the scheme and the approach and structure that will be used for the proposed TA. The section also outlines the current policy relating to the preparation of TAs following the formal archiving of the Guidance for Transport Assessments (GTA) in 2014.

#### 2.2 The MetroWest Programme

MetroWest (formerly known as the Greater Bristol Metro) is an ambitious programme that will transform the provision of local rail services across the West of England. MetroWest comprises a mix of schemes entailing both infrastructure and service enhancement. MetroWest is being jointly promoted and developed by the four West of England councils (Bath and North East Somerset, Bristol City, North Somerset and South Gloucestershire Councils).

The MetroWest programme will address the core issue of transport network resilience, through targeted investment to increase both the capacity and accessibility of the local rail network. The MetroWest concept is to deliver an enhanced local rail offer for the sub-region comprising:

- Existing and disused rail corridors feeding into Bristol;
- Broadly half-hourly service frequency (with some variations possible);
- Cross-Bristol service patterns (i.e. Bath to Severn Beach); and
- A Metro-type service appropriate for a city region of 1 million population.

#### The programme includes:

- MetroWest Phase 1 half-hourly local service for the Severn Beach line, Bath to Bristol line
  and a reopened Portishead line with stations at Portishead and Pill, led by North Somerset
  Council on behalf of the four councils;
- MetroWest Phase 2 half-hourly service for the Yate to Bristol line and an hourly service for a reopened Henbury line, with stations at Henbury, North Filton, and possibly Ashley Hill and Horfield, led by South Gloucestershire Council on behalf of the four councils;
- Further additional station openings subject to separate business cases; and
- Other potential enhancements including the feasibility of extending electrification across the West of England network.

The MetroWest programme is to be delivered over the next five to ten years during Network Rail Control Period 5 (2014 to 2019) and Control Period 6 (2019 to 2024). The MetroWest programme will also extend the benefits of strategic transport interventions that are either in the process of being delivered or have been delivered by the West of England councils. These include the three MetroBus schemes (Ashton Vale to Temple Meads, South Bristol Link and North Fringe to Hengrove Package), Bath Package, Weston Package and the Local Sustainable Transport Fund programme. The delivery of these projects, together with the MetroWest programme, will result in better modal integration between rail, bus and active modes, providing an important step towards seamless modal transfer at key hubs across the West of England.

The MetroWest programme has the full backing of the West of England Local Enterprise Partnership (LEP). The West of England LEP, together with the Executive Members for Transport of the four councils, who collectively comprise the West of England Joint Transport Board, has determined that MetroWest Phase 1 and Phase 2 are its highest priorities for devolved DfT funding.

#### 2.3 MetroWest Phase 1

MetroWest Phase 1 will introduce new / enhanced rail passenger services across Bristol with a service pattern between Portishead, Bath Spa and Severn Beach, with intermediate stops. This will entail upgrading the existing freight only line between Parson Street junction and Portbury Dock junction (Pill), reinstatement of the current disused line between Portbury Dock junction and Portishead, and various minor works to facilitate the operation of the Phase 1 train services. A new station will be required at Portishead and the former station at Pill will be re-opened.

The following engineering works have been proposed, in order to deliver MetroWest Phase 1:

- Rebuild the disused Portishead to Pill line (5km);
- Closure of historic crossings;
- New station at Portishead including car park and pedestrian and cycle link to the town centre;
- A new fully accessible pedestrian bridge linking to Trinity Primary School in Portishead;
- Reopening of former station at Pill and new fully accessible pedestrian bridge and new car park;
- Double track works at Pill and Ashton Gate area;
- Improvements to highway access at Pill tunnel and other locations;
- Enhancement of Parson Street junction;
- Partial reinstatement of the Down Relief line at Bedminster
- New signals for the entire line between Temple Meads and Portishead;
- Additional signal at Avonmouth; and
- Bathampton turn-back (track crossover and signalling).

The MetroWest Phase 1 principal business objectives are:

- To support economic growth, through enhancing the transport links to the Temple Quay Enterprise Zone (TQEZ) and into and across Bristol city centre, from the Portishead, Bath and Avonmouth and Severn Beach arterial corridors;
- To deliver a more resilient transport offer, providing more attractive and guaranteed (future-proofed) journey times for commuters, business and residents into and across Bristol, through better utilisation of strategic heavy rail corridors from Portishead, Bath and Avonmouth, and Severn Beach;
- To improve accessibility to the rail network with new and reopened rail stations and reduce the cost (generalised cost) of travel for commuters, business and residents; and
- To make a positive contribution to social well-being, life opportunities and improving quality of life, across the three arterial corridors.

The MetroWest Phase 1 supporting objectives are:

- To contribute to reducing traffic congestion on the Portishead, Bath and Avonmouth, and Severn Beach arterial corridors;
- To contribute to enhancing the capacity of the local rail network, in terms of seats per hour in the AM and PM peak; and
- To contribute to reducing the overall environmental impact of the transport network.

The project feasibility stage (including GRIP Stage 2) was completed in 2014 and reported in the Preliminary Business Case and endorsed by the WoE Joint Transport Board. The Preliminary

Business Case demonstrated the project has a strong case for intervention, provides good value for money, has a sound commercial footing, is financially affordable and deliverable by 2019.

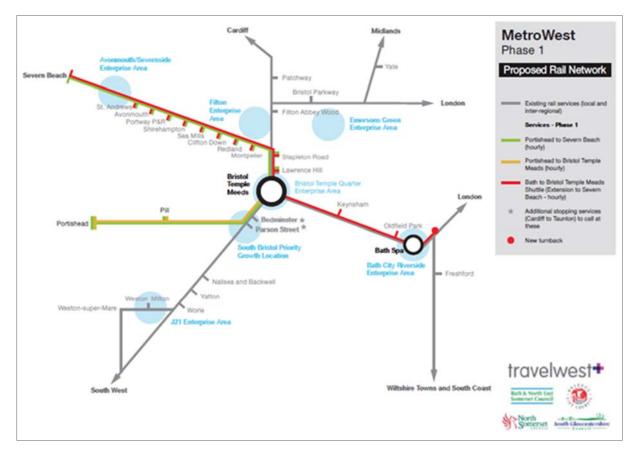


Figure 2-1: MetroWest Phase 1

#### 2.4 Consenting Regime

The Planning Act 2008 introduced DCOs as the means of seeking planning permission for developments categorised as NSIPs. NSIPs can include railway schemes where the railway will be constructed wholly within England, be part of a network operated by an approved operator, and the construction is not permitted development. For MetroWest Phase 1 this means planning permission for the re-construction of the disused railway line between Portishead and Pill, the construction of a new station at Portishead, refurbishment of the disused station in Pill and the enhancement works to the Portbury freight line, will be sought under the DCO process.

North Somerset Council as the lead council, is working closely with Network Rail (NR) to ensure that all the work streams required to deliver the design, planning approvals and construction are progressed in tandem.

Figure 2.2 shows the indicative red line boundary for the scheme as at July 2015.

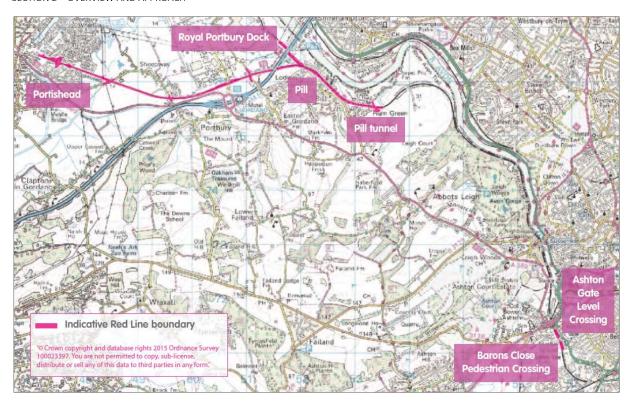


Figure 2-2: MetroWest Phase 1 indicative red line boundary

#### 2.5 Portishead and Pill Local Context

Portishead town has undergone considerable redevelopment and expansion over the last decade with several thousand new homes built at Portishead Vale, the Village Quarter and Port Marine (which is currently in its final phase of build). The whole area was formerly dominated by heavy industry, but was all closed by the late 1980s. The development has been typically high density with a modern urban design layout and appearance. The population of Portishead now over 27,000 and is forecast to exceed 30,000 before the project opens in 2019. Portishead is a successful and vibrant town with an active high street.

Commuting from Portishead to Bristol City Centre under typical morning peak hour traffic conditions takes approximately 50 minutes, as congestion contributes to increased journey times and reduced journey time reliability. The average vehicle speed is very low with peak hour trips taking considerably longer than the same journey in the off-peak. The lack of a rail link between Bristol and Portishead also means people without access to a car face additional difficulties. Bus journeys can take over an hour in peak periods and are susceptible to delay due to congestion on this corridor. This journey time may, in some cases, mean that residents of Portishead are unable to (or discouraged from) seeking employment, education or social opportunities in the Bristol area.

Pill is an historic village, with Easton-in-Gordano to the south west and Ham Green to the east. The three villages have little green space between them and therefore effectively form one urban settlement. The disused Pill station, which is to be re-opened, is located in the heart of the historic centre of the village. The major access route to Bristol from Pill is the A369 which has congestion and journey time issues.

The provision of new / re-opened stations at Portishead and Pill will increase the accessibility of the rail network to residents in North Somerset. In particular, this will benefit the 14,000 people who live within 1 km of Portishead station and around 4,500 people who live within 1 km of Pill station.

<sup>&</sup>lt;sup>1</sup> Pill is much reduced by adjustment because the simple circle catchment includes Shirehampton on the other side of the Avon where a simple circle 1km population is almost 7,500.

#### 2.6 Portishead Station

#### 2.6.1 Station location options appraisal

As part of the preparation of the Preliminary Business Case, a Portishead Station location options appraisal report was undertaken in the summer of 2014. The options appraisal examined a number of alternative locations as follows and shown in figure 2.3:

- Option 1A located closer to the town centre (off Harbour Road)
- Option 1B located to the rear of the new Sainsbury's store (off Harbour Road)
- Option 2A located to the east of Quays Avenue
- Option 2B located across Quays Avenue
- Option 2C located to the west of Quays Avenue
- Option 3 located on land north of Moor Farm

Option 1A was the closest site the original location of Portishead station before it was closed in 1964, however this location was dependent upon installing a level crossing at Quays Avenue, as a road over rail bridge at Quays Avenue was found to be not feasible, nor was the option of stopping up Quays Avenue to through traffic.

#### 2.6.2 Outcome of the options appraisal

Assessed against the criteria of policy fit, environmental/social impact and deliverability assessment, the appraisal concluded the following ranking:

Ranked 1st: Option 2B

Ranked joint 2nd: Options 2A and 2C

Ranked 4th: Option 3
 Ranked 5th: Option 1A
 Ranked 6th: Option 1B

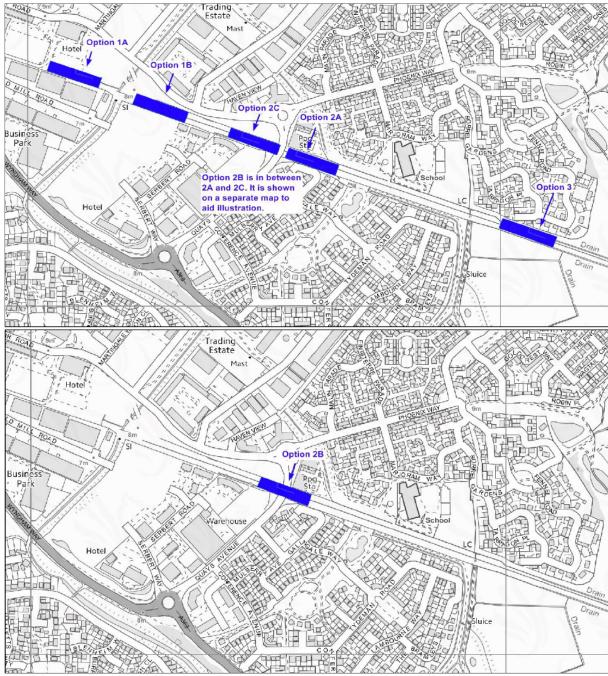
The optional appraisal consulted that options 2A, 2B and 2C warranted further consideration, while options 1A, 1B and 3 were not sufficiently robust to take forward.

#### 2.6.3 Public Consultation on Portishead Station Location

A public consultation was undertaken during June and July 2014, on the location of Portishead station. The consultation presented options 2A, 2B and 2C and sought views and feedback on each of them. The consultation explained why options 1A, 1B and 3 had been discounted. Over 400 consultation responses were received, with option 2B being the most popular followed by option 2A and 2C. Further information about the consultation is set out the Portishead Station Location Consultation Report Sept 2014 which is available from www.travelwise.info/project/metrowest.

#### 2.6.4 Response to the ORR for the case for a new level crossing

Following views expressed by some stakeholders for option 1A as it was closest to the town centre but required a level crossing, the Office of Rail and Road (ORR) set out ten criteria that it would need to consider in order to determine whether there are exceptional circumstances for a level crossing at Quays Avenue, Portishead. On this basis, NSC have prepared and a submitted a response to the ORR in January 2015. The ORR issued a formal response to NSC on 2 March 2015 stating '....would NOT contemplate a level crossing at Quays Avenue, Portishead....'

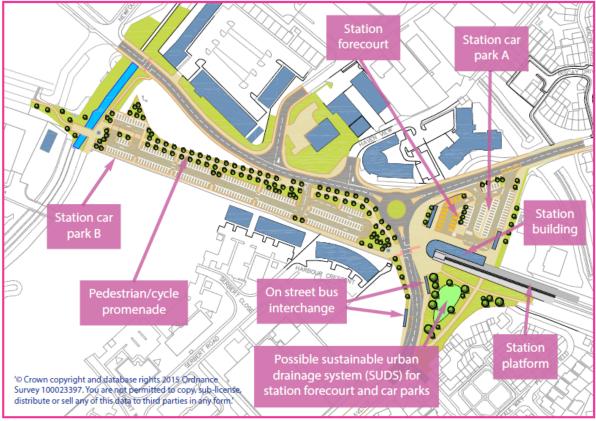


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Figure 2-3: Location of the proposed Portishead Station Options

#### 2.6.5 Decision on Portishead Station Location

On the basis of the ORR response on the level crossing and responses to the public consultation, option 2B was recommended to the NSC Executive as the preferred option to take through to delivery. The NSC executive endorsed Portishead station location option 2B on 17 March 2015.



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Figure 2-4: Location of the proposed Portishead Station Options

#### 2.6.6 Portishead Station Proposals

The new Portishead station will include:

- A single platform, with an overhead canopy, lighting and passenger information
- A station building with a ticket office, waiting area, toilets and possible space for other facilities such as a café or historic railway exhibition
- A station forecourt with seating, cycle parking (number of spaces to be confirmed) taxis rank and disabled parking
- A 50 space car park (Phoenix Way) with lighting and a 200 space car park (Harbour Road) with lighting and a pedestrian crossing on Quays Avenue. In addition a further 100 space car park (Harbour Road west) will form part of the total station car park capacity
- A bus interchange facility with lighting
- A 300 metre pedestrian and cycle promenade linking to the town centre and various footpath improvements

These works will be included in the TA as part of the DCO documentation. As shown in the plan below, alterations will need to be made to the alignment of Quays Avenue. The plan is a concept plan only and is to be developed further as part of the Outline Business Case.

#### 2.7 Pill Station

The scheme proposes the re-opening of the dis-used station at Pill. This will involve:

- The full refurbishment of the abandoned southern side platform,
- A new waiting shelter, information displays and lighting,
- A new fully accessible pedestrian bridge,
- A new pedestrian entrance on Monmouth Road with lighting, disabled parking, cycle parking (number of spaces to be confirmed), pedestrian crossing and improvements to footpaths,
- A new 50 to 60 space car park and lighting.

These works will be included in the TA as part of the DCO documentation.

The platform is located in a cutting, with road bridges such a Station Road bridge over ahead. The road layout is best described as 'historic' characterised by an abundance of narrow side lanes joining the primary route being Station Road. This undoubtedly adds to the local character of Pill village, but also gives rise to some constraints in respect of the extent of traffic engineering / mitigation that could be feasible and acceptable to the local community.

The new car park on the north side of Pill Station will be created on land previously used as the station goods yard which is currently in private ownership. To facilitate this, some removal of \*vegetation will be needed to improve sight lines entering and exiting the car park and a new pedestrian crossing may be needed from the car park to the Monmouth Road footpath.

#### 2.8 Existing Level Crossings

There is an existing highway level crossing at Ashton Vale Road on the Portbury Freight Line. The context of the Ashton Vale Road level crossing is that currently only a relatively small number of trains (freight trains only) operate per day, although the actual number per day varies in response to the freight markets served by Bristol Port. The re-opening of the Portishead line and re-introduction of passenger train services will increase the total number of trains operating through the level crossing. Each train movement necessitates the operation of the level crossing lights and lowering of the barriers across the highway. The approach to establishing the baseline conditions are set out in section 4 and the approach to assessing the traffic impact of the increased number of level crossing cycles is set out in section 5.

There is also a pedestrian only crossing known as Ashton Containers crossing, which is approximately 200 metres south of the Ashton Vale Road level crossing. The Ashton Vale MetroBus project is to build in 2016 a parallel pedestrian and cycle link on the western side of the railway from the location of the Ashton Containers crossing to the location of Ashton Vale Road Level Crossing. MetroWest Phase 1 is currently examining the viability of permanently closing Ashton Containers pedestrian crossing. If the crossing is closed alternative routes will be investigated and sought.

#### 2.9 Passenger Rail Service – Service Pattern

The project feasibility set out in the Preliminary Business Case considered a number of options for the rail service including service frequency options, service calling pattern options and service routing options. The best performing options included:

- half hourly all day service frequency on the Portishead line, and
- all Portishead line services calling at Bedminster

The Preliminary Business Case tested two principal options, following an earlier sifting of options at the earlier Early Appraisal Sifting Tool (EAST) stage. These were:

#### Option 5b

- Portishead to Avonmouth: 1 train per hour all day;
- Portishead to Bristol Temple Meads: 1 train per hour all day; and
- Severn Beach to Bath Spa: 1 train per hour all day.

#### Option 6b

- Portishead to Avonmouth: 1 train per hour all day;
- Portishead to Bath Spa: 1 train per hour all day; and
- Severn Beach to Bristol Temple Meads: 1 train per hour all day.

Stopping at: Pill, Parson Street, Bedminster, Bristol Temple Meads, Keynsham, Oldfield Park, St. Andrews Road, Avonmouth, Portway, Shirehampton, Sea Mills, Clifton Down, Redland, Montpelier, Stapleton Road, Lawrence Hill and route terminus stations.

The proposed service between Bath and Bristol is an additional top up service in addition to the existing services in order to deliver an overall half hourly frequency. Route option 5B performs marginally better in respect of the economic appraisal than route option 6B, however both options are being taken forward with more detailed technical development. It should be noted that for the purposes of the TA the differences between route option 5B and 6B are very subtle, due to differences only in the routes, while the level of service at each station remains the same. Furthermore both route options require the same infrastructure to operate and there is no pressing need for the project to choose one of the two route options until a much later stage in project development.

Therefore it is anticipated that both route options will be taken forward as part of the next stage of the business case. This next stage will entail:

- Refinement of the options including the timetabling impacts/robustness from Railsys modelling (supply side modelling);
- More detailed work on forecast passenger demand via the Rail Demand Model (demand side modelling);
- Further consideration of variables such as the impact of car parking charges and further sensitivity tests following independent assurance review such as the impact of overcrowding on demand.

#### 2.10 Additional Works Required to the Railway Alignment

A number of additional works are required along the railway alignment that will need to be included within the TA as part of the DCO documentation. These elements have been provisionally identified but further detail will be confirmed as part of the Outline Business Case. They are:

- Various historic rail crossings to be closed, some of which have fallen out of use due to changes to adjacent land uses, such as Moor Lane in Portishead;
- Closure of two private accommodation crossings at Sheepway Gate Farm and alterative access arrangements provided;
- The existing cycle path under Royal Portbury Dock Road Bridge, Marsh Lane Bridge and M5 bridge are to be retained and rebuilt with additional safety features; and
- Improved road access for emergency vehicles, including hard standing, for Pill Tunnel and other locations.

#### 2.11 Transport Assessment Guidance

In October 2014, the Guidance for Transport Assessment (GTA) was archived. This document has been replaced by two principal elements - the Transport Evidence Bases in Plan Making and guidance and stronger reference to the existing National Planning Policy Framework (NPPF).

The Transport Evidence Bases in Plan Making is less prescriptive than the previous guidance but cites a number of headings that need to be followed particularly in relation to the analysis of the transport impacts of local plans.

In the NPPF, paragraph 32 sets out all developments that generate significant amounts of transport movement should be supported by a TA or a Transport Statement (TS). Local planning authorities must make a judgement as to whether a development proposal would generate significant amounts of movement on a case by case basis.

In identifying a need for a TA, the scale and level detail should be established early in the development management process. This may include:

- The planning context of the development proposal;
- The area, scope and duration of the study;
- Assessment of public transport capacity, walking and cycling provision and highway network capacity;
- Road trip generation and trip distribution methodologies and assumptions about the development proposal;
- Measures to promote sustainable travel;
- Safety implications of the development; and
- Mitigation measures where applicable including scope and implementation strategy.

The scope and level of detail in a TA will vary from site to site but the following should be considered in settling the scope of the proposed assessment:

- Information about the proposed development, site layout including the proposed transport access and layout across all modes of transport;
- Information about neighbouring uses, amenity and character, existing functional classification of the nearby highway network;
- Data about the existing public transport provision including the provision and frequency of services and the proposed public transport changes;
- A qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;
- An assessment of trips from all directly relevant committed development in the area (essentially development that there is a reasonable degree of certainty will process within the next three years);
- Data about current traffic flows on links and at junctions within the study and the identification of critical links and junctions;
- An analysis of injury accident records in the most recent three or five year period;
- An assessment of the likely associated environmental impacts of transport related to the development (such as air quality management areas);
- Measures to improve the accessibility of the location (such as footway and cycleway links);
- Description of parking facilities in the area and the parking strategy of the development;

• Ways of improving sustainability by reducing the need to travel; and measures to mitigate the residual impacts of the development.

Generally, assessments should be based on normal traffic flow and usage conditions (for example, non-school holiday periods, typical weather conditions). Projections should use local traffic forecasts such as TEMPRO drawing where necessary on National Road Traffic Forecasts (NRTF).

The timeframe that the assessment covers should be agreed with the local planning authority in consultation with the relevant transport network operators and service providers. However, in circumstances where there will be an impact on a national transport network, this period will be set out in the relevant government policy.

At the time of writing (April 2015), it is known that NSC is drafting a Supplementary Planning Document (SPD) on Transport Assessments. It is not known at this stage the content or the adoption timetable of the document.

#### 2.12 Preparation of the TA

The TA will be undertaken in parallel with:

- Scheme informal consultation (Stage 1 consultation);
- Urban / highway design for Portishead and Pill station;
- Scheme GRIP stage 3 with Network Rail; and
- Further transport modelling for the Outline Business Case.

It is anticipated the TA will be completed by the end of 2015.

#### 2.13 Proposed TA Structure

On the basis of the above, the following structure is proposed for the TA:

- Section 1 Introduction This will formally introduce the TA and its contents. It will make
  reference to the agreed scoping, methodologies and approach following discussion. The
  introduction will also outline the extent of the TA and other elements of the scheme that may
  fall outside the DCO application area.
- Section 2 Policy Context This section will provide detail of the relevant national and local policies. The aim of this section is to demonstrate, in so far, how the proposed scheme is aligned with national and local policy objectives and will meet intended outcomes.
- Section 3 Existing Conditions This will outline the existing conditions of the scheme area. This will include an analysis of the site locations and current land uses and committed developments. Existing patterns of travel will be assessed together an analysis of the local highway network. This will include an assessment of existing traffic flows, parking levels and traffic accident data. The section will be completed by an assessment of existing public transport provision and walking and cycling networks including count data where available.
- Section 4 Scheme Proposals The aim of this section is to outline the scheme proposals from a transport perspective. This will include detail of the scheme elements including access arrangements, changes to crossing points along the railway alignment, changes to right of ways and parking. The scheme proposals will also consider the proposed service frequency and the impacts these may have.
- Section 5 Impact Methodology This section will outline the methodology and approach to
  assess the scheme impact. This will detail the assumptions that have been used to underpin
  the assessment, the calculation of trips (from both the GBATS4 and the Rail Demand Model),
  the distribution of traffic, calculation of traffic growth and the assignment of traffic across the
  network.

- Section 6 Impact Assessment This section will analyse the impact of the scheme against the existing baseline and future horizon year assessment periods. This will include the impacts on identified junctions and parking using appropriate software. Impacts in terms of public transport, walking and cycling will be considered.
- Section 7 Mitigation and Assessment The aim of this section is to consider whether
  mitigation is required to offset concerns identified in the previous section. If so the mitigation
  will be tested with appropriate software to assess if it address the concerns identified.
- Section 8 Transport Implementation Strategy This final section summarises the various interventions required to support the scheme proposal and to mitigate any identified adverse impacts. This will include a construction management plan, servicing and waste strategy and travel plans.
- **Section 9 Conclusions and Recommendations** The TA will conclude by reviewing the evidence and assessment contained within it together with appropriate recommendations.

#### 2.14 Summary

This section has detailed:

- The development of the options for the MetroWest phase 1 scheme and the further technical development to be undertaken as part of the Outline Business Case;
- The TA will need to take into account the supporting infrastructure such as the proposed access works to the rail alignment;
- That recent guidance on the preparation of TAs has changed but the NPPF still outlines the headings that should form the content and analysis of a TA; and

The proposed structure of the TA that will be submitted in support of the ES.

# Policy Background

#### 3.1 Introduction

This section outlines the policies that will be reviewed in the TA and evidence the extent that the development is aligned with the overarching planning and transport policy.

#### 3.2 National Planning and Transport Policy

The TA will provide a summary of the following policy and will evidence how the proposal will support the capacity, capability and reliability of transport networks and facilitate both sustainable development and travel:

- National Planning Policy Framework (March 2012) (the NPPF)
- The National Policy Statement on National Networks (December 2014)
- Network Rail Long Term Planning Process (LTPP)
- Great Western Route Utilisation Strategy (RUS) (March 2010)

#### 3.3 Local Policies and Strategies

The proposal will be assessed in terms of the following sub-regional and local planning and transport policies and strategies:

- Joint Local Transport Plan 3 2011 to 2026
- West of England LEP Strategic Economic Plan (March 2014)
- The North Somerset Core Strategy (March 2014)
- North Somerset Parking Standards (November 2013)
- North Somerset Design Guide (October 2015)
- Bristol Local Plan Core Strategy (June 2011)
- Bristol Local Plan Site Allocations and Development Management Policies (July 2014)
- Bristol Local Plan Bristol Central Area Plan (March 2015)

Emerging policies and strategies

- West of England Joint Spatial Plan
- North Somerset Guidance on Transport Assessments

#### 3.4 Summary

The policies and strategies identified above will inform the key policy and priority framework that this proposal sits within. The section will demonstrate the extent to which the scheme is aligned with national and local policy and will meet the outcomes.

# Proposed Study Area & Existing Conditions

#### 4.1 Introduction

This section outlines the proposed study area and existing conditions that will be considered within the TA. It is important to note that work is being undertaken to develop the scheme further, so elements of the study area and existing conditions will need to reflect this emerging work.

#### 4.2 Existing Land Uses

In order to understand the base line conditions, a short review of existing land uses will be undertaken. This is to give context to the potential trip generation that will form later sections of the TA. Figure 4.1 illustrates indicative land uses in the vicinity of the Portishead station options. This shows a distinct residential zone to the north and east of the town whereas commercial, retail and mixed uses dominant towards the centre and west of the competing station location options.

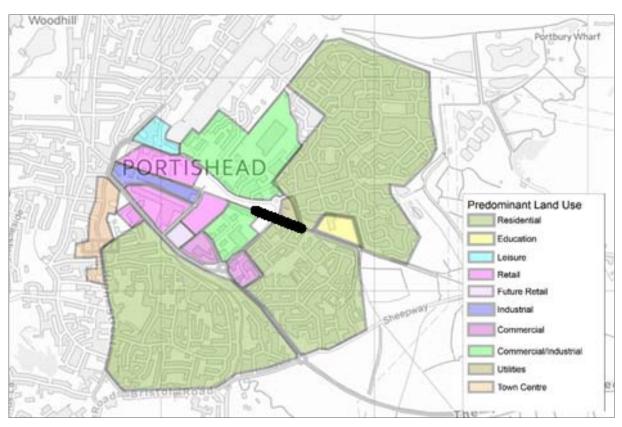


Figure 4-1: Indicative land uses in the vicinity of Portishead station options

A similar mapping exercise will be undertaken in terms of the location for the proposed Pill station. Consideration will also be given to the land uses along the route alignment where closure of informal crossing points will have a localised impact.

#### 4.3 Committed Development

NPPF indicates an assessment of trips from all directly relevant committed development in the area (essentially development that there is a reasonable degree of certainty will proceed within the next three years) should be undertaken. The assessment will include developments included in the Greater Bristol Area Transport Study model (GBATS4), further details will be available in the GBATS4 forecasting report.

#### 4.4 Existing Highway Network

#### 4.4.1 Description of the function and characteristics of the network

The TA will provide an overview of the highway hierarchy that serves Portishead and Pill. The focus is to understand the importance of the function that each link plays and understand the highway layout and characteristics.

#### 4.4.2 M5 J19

Junction 19 Gordano connects with the A369 between Portishead and the centre of Bristol along the south side of the River Avon. A large volume of commuter traffic from Portishead accesses the M5 via Junction 19. There is a particular issue in the PM peak where traffic queues exit block the Junction 19 southbound off slip and queue back on the M5 main line. It is likely that the MetroWest Phase 1 scheme will result in some modal switch from car to rail and as a result is expected to ease the M5 queuing problem.

The TA will assess the impact of the scheme on the junction with specific focus on the likely change in flows. Consideration will also be given to the potential impacts of platoons of traffic along Wyndham Way which results in a knock on effect of arriving traffic at the junction.

#### 4.4.3 Other external Portishead links

With other external links, the A369 Portishead to Bristol corridor suffers congestion and journey time reliability problems. These are summarised as:

- The A369 is the only transport corridor directly linking Portishead with Bristol which is just 10 miles to the east;
- The capacity constraints on the A369 are exacerbated by the fact that it crosses junction 19 of the M5. This is one of the busiest parts of the M5 with the Avonmouth Bridge immediately to the north; and
- The A369 continually suffers from the knock-on effects of incidents on the M5 with high volumes of traffic using a constrained local road corridor with few alternative route options.

The B3128 and B3130 provide more circuitous routes into the Bristol via the A370 from Long Ashton and the Park and Ride to the south west of Bristol. South of Portishead, the B3124 links Portishead with Clevedon and other settlements along the North Somerset coast whilst the unclassified Clapton Lane provides a further link to Nailsea.

#### 4.4.4 Portishead principal links

The main arterials within Portishead are:

- A369 Wyndham Way which connects the eastern part of Portishead, the marina and the town centre with the principal link to the M5;
- B3214 Bristol Road which connects to the town centre, the western part of Portishead and the various settlements south of Portishead;
- Cabstand and Nore Road which links the town centre and western parts of Portishead particularly along the coastline;
- West Hill and Down Road which is the main access route between the western parts of Portishead and the town centre; and
- Harbour Road/Quays Avenue which link Wyndham Way with the marina area and the new areas in eastern Portishead.

#### 4.4.5 Portishead local links

Within this section, the focus will be on the immediate links surrounding the station options. This is to understand both the highway layout and conditions. The roads that are proposed for analysis include:

- Port Marine
  - Phoenix Way;
  - Malin Parade;
  - Marjoram Way;
  - Camomile Walk; and
  - Finisterre Parade.
- Harbour Road
  - Harbour Road; and
  - Haven Way.
- Gordano Gate Business Park
  - Serbert Close;
  - Serbert Road; and
  - Serbert Way.
- Gallingale Estate
  - Conference Avenue;
  - Gallingale Way;
  - Mulberry Avenue;
  - Mulberry Close;
  - Peartree Field;
  - Quays Avenue; and
  - Tyndman Road.

#### 4.4.6 Pill links

To the west of the River Avon and the City of Bristol lies the settlement of Pill. Pill is linked to the wider strategic highway network through the A369. The A369 itself providing the main highway corridor between Portishead and Bristol. In assessing the existing highways within Pill, the TA will focus on Pill Road, Heywood Road and Lodway as the principal access route. In terms of local links, the analysis will be on the immediate streets surrounding the proposed Pill station:

- Avon Road;
- Back Lane;
- Chapel Row;
- Church Walk;
- Crusty Lane;
- Hardwick Road;
- Heywood Terrace;
- Lodway Close;

- Mariners Way;
- Monmouth Court;
- Monmouth Road;
- Samborne Lane;
- Severn Road;
- Station Road; and
- Upper Myrtle Hill

#### 4.5 Existing Highway Flows

#### 4.5.1 Portishead

Figure 4.2 shows the automatic turning count data will be collected for the following junctions within Portishead.

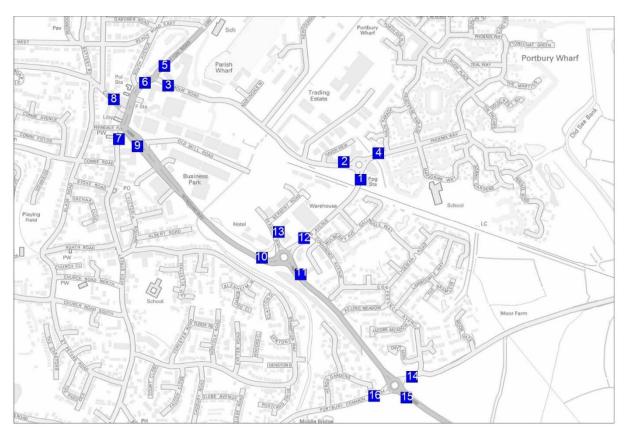


Figure 4-2: Proposed junction capacity assessment in Portishead

#### The junctions and links being:

- Harbour Road/Phoenix Way/Quays Avenue;
- Harbour Road/Station Road;
- Station Road/High Street/Cabstand;
- High Street/Wyndham Way;
- Sails junction Quays Avenue, Serbert Way, and Wyndham Way; and
- Portbury Common, Wyndham Way, Sheepway and Portbury Hundred.

#### 4.5.2 Pill junctions

Figure 4.3 shows the automatic turning count data will be collected for the following junctions in Pill. Following discussion with NSC, the junction of A369/St Georges Hill was added (located outside the figure)

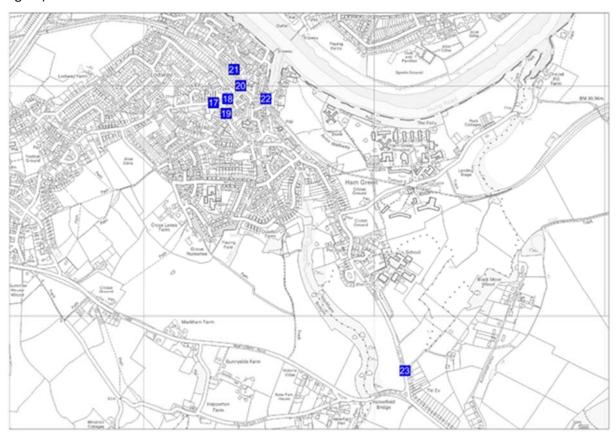


Figure 4-3: Proposed junction capacity assessment in Pill

The junctions and links to be assessed being:

- Heywood Road/Lodway/Station Road;
- Back Lane/Monmouth Road/Station Road;
- Underbanks;
- Pill Road; and
- A369/St Georges Hill (not shown on the map in figure 4.3).

#### 4.5.3 Count Methodology

The proposed count methodology will adhere to the following criteria:

- Undertaken in accordance with DMRB Volume 112: Traffic Appraisal of Roads Schemes Chapter 6 Section 6.2;
- Continuous for 14 consecutive calendar days excluding school holidays for a two week period;
- Hour flows recorded;
- Undertaken in both directions;
- AM and PM peak hours to be identified;
- Vehicles to be classified by length; and
- Summary for each week to give 12, 16, 18 and 24 hour totals as well as 5 and 7 day averages.

#### 4.6 Existing Parking Conditions

#### 4.6.1 Parking levels and provision in Portishead

Given the proposal is to include 200 car parking spaces, an understanding of existing parking conditions around the proposed station locations is required. This is particularly important given the likelihood of a car park tariff which would have potential to for a detrimental impact on neighbouring streets.

As a result, it is important to understand both the provision of parking, including any Traffic Regulation Orders (TROs) and the level of parking across the day. As outlined earlier, there are distinct land uses surrounding the station options which result in distinct fluctuations in parking levels.

#### 4.6.2 Proposed parking survey in Portishead

It is proposed to undertake a comprehensive parking survey throughout a weekday from 0700 to 1900. Figure 4.4 illustrates the proposed parking survey zones and table 4.1 provides a street listing.

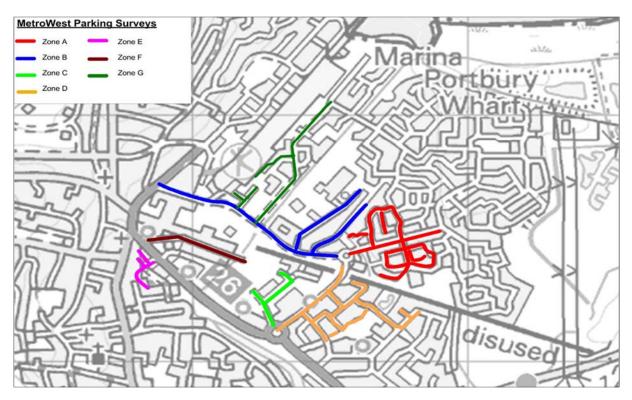


Figure 4-4: Proposed parking survey zones

#### Table 4.1: Extent of the proposed parking survey in Portishead

Zone A Port Marine

Located to the immediate north east of the site, Port Marine is an urban extension built from the early 2000s onwards. The residential area has been designed to reduce car use through the limited availability of both on-street and off-street parking spaces. Within this area also is Trinity Primary School which currently has around 400 pupils on roll including a nursery.

- Biscay Drive
- Camomile Walk
- Finisterre Parade (from Phoenix Way to the junction with Malin Parade)
- Marjoram Way (from Phoenix Way to Trinity Primary School)
- Malin Parade
- Phoenix Way (from Quays Avenue to Fennel Road junction)
- Tansy Lane
- Wright Row

## Table 4.1: Extent of the proposed parking survey in Portishead

Zone B Harbour Road Industrial Estate	Located to the north and North West of the sites, this area largely comprises both commercial and industrial businesses. It is also location to the Marina Healthcare centre which can lead to spikes in parking demand particularly close to the junction of Phoenix Way, Quays Avenue and Harbour Road.
	<ul> <li>Harbour Road (from Quays Avenue to Portbury Ditch) also including Harbour Road industrial estate</li> <li>Haven View</li> </ul>
Zone C Gordano Gate Business Park	This is located to south west of the sites and comprises a mix of commercial and industrial uses. A new Sainsbury's food store opened during October 2014 together with an extension to the Premier Inn with further land expected to be developed in future years.
	Serbert Close
	Serbert Road
	Serbert Way
	Sainsbury's Car Park
Zone D Galingate Estate	This residential area to the south east was largely developed in the early 2000s. The estate has a greater level of both on-street and off-street parking available. The estate is bordered to the south west by a business park although parking demand appears to be catered for by onsite provision.
	<ul> <li>Conference Avenue (from Quays Avenue to park area only)</li> <li>Gallingale Way</li> <li>Mulberry Avenue</li> <li>Mulberry Close</li> <li>Peartree Field</li> <li>Quays Avenue (from Phoenix Way junction to Sails junction)</li> <li>Tyndman Road</li> </ul>
Zone E Waitrose/Lidl	This retail area is located north west along Harbour Road approximately 400m from the station location options.  Portishead town centre car park
Zone F Old Mill Road	Old Mill Road is a small industrial zone within the town centre area comprising a mix of commercial enterprises. Given the proximity of Old Mill Road to the station locations, there may be a direct impact where existing on-street parking and movements are relatively high.
	<ul><li>Old Mill Road</li><li>Old Mill Retail Park</li></ul>
Zone G Portishead Marina	The Portishead Marina is around 400m (crow-fly) away from the new Portishead station location. The area is characterised by its mixture of residential and commercia entities. This zone was only surveyed in September 2015.
	The surveys captured data in the following locations:
	<ul><li>Newfoundland Way</li><li>The Anchorage</li><li>Martingale Way</li></ul>

The parking survey will seek to obtain the following information as shown in table 4.2.

Table 4.2: Parking survey information

Heading	Measurement
Survey times	Weekday morning peak 07-00 to 10-00
	Weekday interpeak 11-00 to 13-00
	Weekday evening peak 16-00 to 19-00
Frequency	Time segments of every 15 mins

Table 4.2: Parking survey information

Heading	Measurement			
Count information	Number of parked vehicles for each street within each 15 minute time segment. Vehicles only on the public highway should be counted. This should also include vehicles waiting			
Other observations	Other observations that are having an impact on the operation and efficiency of the local highway will be recorded. This could include:			
	<ul> <li>Partial parking on the footway and cycleway;</li> <li>Parking on the carriageway that prevents the free flow of opposing traffic;</li> <li>Any parking restrictions that are not being adhered to;</li> <li>Parking at junctions that hinder visibility or create risks for vulnerable users;</li> <li>Any problems arising from deliveries or service vehicles (e.g. difficult HGV manoeuvres as a result of parked vehicles); and</li> <li>Any particular parking problem that create particular access difficulties (e.g. school drop off or pick up).</li> </ul>			

## 4.6.3 Proposed parking survey in Pill

To understand further the existing parking conditions and levels surrounding the proposed station site in Pill, a qualitative assessment will be undertaken. It is recognised that the station is located in an area consisting of densely built older housing and buildings and there is limited off street parking available. As a result, there is a consistent demand for on street parking spaces in the area.

## 4.7 Existing Accident Data

Historical accident data will be collated for a five year period for the locations surrounding the preferred station options. An analysis of the data by severity and cause will be undertaken to determine whether the data shows evidence of any accident cluster and the possible contributory effects such as highway layout. The analysis will also examine any accidents involving vulnerable users such as pedestrians and cyclists.

## 4.8 Existing Public Transport Access

The baseline review of public transport services will look at both existing commercially operated and council funded public transport services. The focus of the review within the TA would look at the extent to which the proposed station sites can be easily accessed by services using existing stops. This will also consider the extent of cross ticketing arrangements such as Plus Bus which could facilitate integrated public transport journeys.

This review will also consider frequencies both during weekdays and weekends including early mornings and evenings and also typical journey times from the nearest bus stops to identified locations across Portishead and elsewhere within North Somerset.

## 4.9 Existing Walking and Cycling Access

#### 4.9.1 Pedestrian links

In assessing the baseline conditions, the proposed methodology will be to assess the extent and quality of pedestrian links to and from the station locations in a 800m threshold and other key destinations such as Portishead town centre and the western suburbs of the town.

## 4.9.2 Cycling study area

In assessing the baseline conditions, the proposed methodology will be to assess the extent and quality of cycling links to and from the competing station locations within the standard 5km threshold. The 5km threshold means all of Portishead and Pill will be included in the analysis.

## 4.9.3 Methodology

In assessing the extent of existing walking and cycling networks, a walking and cycling plan will be produced which includes an NMU audit. The NMU will be based on the principles and approach laid out in DMRB HD42/05 and will include:

- Should link key origins and destinations;
- Should directly facilitate the desired journey without undue deviation or difficulty;
- Be continuous and not subject to severance or fragmentation;
- Any walking and cycling route should not give rise to road safety or personal safety concerns;
   and
- Be accessible to disabled users and people with children and pushchairs.#

## 4.9.4 Severance and Public Right of Way (PRoWs)

The TA will also assess the extent of PRoWs in the area and the potential for community severance. Community severance is defined as separation of people from existing services due to a significant change in transport infrastructure or traffic flows.

The disused railway line from Pill to Portishead has been well protected since it closed in 1964. As such no registered public footpaths, bridleways or byways cross the railway on the level according to NSC's definitive map.

There is one permissive pedestrian crossing of the dis-used railway line to Trinity Primary School, authorised by the land owner North Somerset Council. There are also a number of informal crossings which are more akin to dog walking tracks, some of which require traversing ditches to use them. All these crossings will have to be closed by the scheme to meet railway safety requirements. In respect of the permissive crossing to Trinity Primary School, a fully accessible pedestrian bridge is proposed.

Moor Lane at Portishead is regarded as a byway on railway records and previously served the council's tip. Rights to the crossing are held by Bristol City Council. The informal route at Moor Lane – formerly an access road – is unsurfaced, not fully accessible, bounded by vegetation and with poor natural surveillance. Therefore, the intention is to utilise the crossing near the Trinity Primary School to cater for these movements.

There are other rights of ways that will need to be considered. This includes the Drove at Portbury is claimed as a byway by a rights of way group. The claim is contested by NSC. Other crossing points relate to private access rights to farms and alternative access arrangements are being proposed.

# 4.10 Existing Level Crossings within the DCO application area (Ashton Vale Road)

The existing highway level crossing at Ashton Vale Road does not have a constant number of down barrier cycles per day due to the dynamic nature of the freight train operations. Bristol Port have rights to operate 20 freight trains per day in each direction, approximately equivalent to one train per hour in each direction. The actual volume of freight trains operated is driven by the freight markets the Port serve which currently are mainly car imports / exports, containers and coal. Each train movement necessitates the operation of the level crossing lights and lowering of the barriers across the highway. The current average number of freight trains operated per day in each direction together with the current average level crossing cycle time, will provide the total closure during the am peak, inter peak and pm peak.

To assess the impact of the increased number of trains, traffic count data is being collated at the following locations:

- 24: Ashton Vale Road (to the immediate east of the level crossing); and
- 25: A3029 Ashton Gate Underpass (northbound City Centre bound traffic only, not the 'Weston' lane)

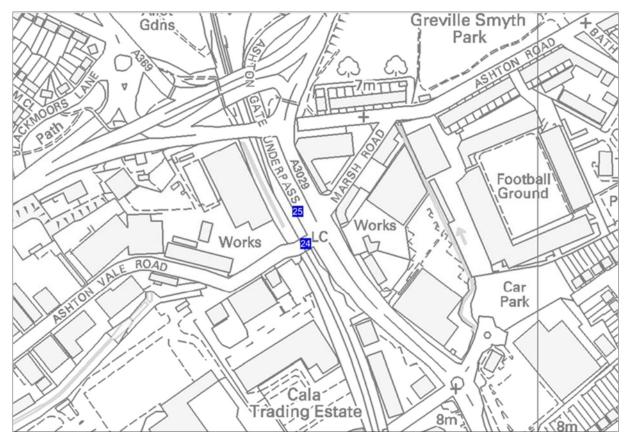


Figure 4-5: Ashton Vale Road Level Crossing, Bristol

The existing queue lengths either side of the level crossing during barrier down time, will be modelled and this will provide a baseline position in respect of traffic impact. Count data will be used to forecast future traffic volume and queue lengths either side of the level crossing during barrier down time, will be calculated for the am peak, inter peak and pm peak. The net traffic impact will be established through a comparison between the baseline and forecast queue lengths.

The Ashton Vale Containers pedestrian only crossing (Barons Close), is approximately 200 metres south of the Ashton Vale Road level crossing. The Ashton Vale MetroBus project is to build in 2016 a parallel pedestrian and cycle link on the western side of the railway from the location of the Ashton Containers crossing to the location of Ashton Vale Road Level Crossing. MetroWest Phase 1 is currently examining the viability of permanently closing Ashton Containers pedestrian crossing, in light of potential safety issues arising from the higher line speeds and the addition of the half hourly passenger train service to be delivered by the scheme. If the crossing is closed pedestrians would be diverted to cross the railway at another identified location. It is noted, as part of the works, the crossing point has been temporarily closed since summer 2015. As such, it is not possible to ascertain pedestrian usage at this point.

## 4.11 Summary

This section seeks to outline the study area and existing conditions that will be considered within the TA as follows:

- Existing land uses surrounding the station locations and the route alignment including committed developments will be considered;
- An analysis of the existing highway network and traffic flows for Portishead and Pill;
- The proposed extent of the parking survey in Portishead and Pill;
- Consideration of existing accident for a five year period by severity and cause including any accidents involving vulnerable users;
- A review of existing public transport provision and infrastructure;
- Consideration of existing pedestrian links within a 800m zone but also to demand generators such as Portishead town centre and the marina;
- Review of cycling links within a standard 5km radius of each station location; and

## Assessment of Impacts

## 5.1 Introduction

This section describes the proposed approach to the assessment of impacts. This will outline the proposed methodology where necessary and the impacts that will be examined. The section will recommend some of the mitigation measures that could be recommended by the TA.

# 5.2 Potential impacts, mitigation and residual impacts of the DCO scheme

The scoping document for the EIA highlighted some of the potential impacts and mitigation of the scheme on transport, access and NMUs as shown in Table 5.1.

Table 5.1: Potential impacts, mitigation and residual impacts of the DCO scheme on transport, access and NMUs

Aspect	Impact	Receptors	<b>Potential Mitigation</b>	Residual Impact
Construction activities				
Construction of stations	Potential changes in traffic management arrangements	Local highway users, and residents/business in the area	Unknown at this stage	Unknown at this stage
Line construction	Potential changes in traffic management and access arrangements	Users of existing PRoWs near the station	Unknown at this stage	Unknown at this stage
Operation activities				
Vehicular demand to access Portishead station car park	Changes in travel demand in Portishead	Local highway users, and residents/business in the area	Traffic management solutions to be considered	Unknown at this stage
Vehicular demand to access Pill to use the station	Changes in travel demand in Pill	Local highway users, and residents/business in the area	Traffic management solutions to be considered	Unknown at this stage
Increased use of Ashton Vale Road	Increased traffic congestion	Local highway users, and business in the	Consider schemes such as re-routing	Unknown at this stage
Level Crossing	Safety issues	area	traffic/new crossings. The safety issues would be considered as part of the GRIP 3 work	

## 5.3 Trip Generation and Assignment

### 5.3.1 GBATS4 and the Rail Demand Model

To inform the trip generation, assignment and distribution, outputs from both the GBATS4 and the Rail Demand Model (RDM) will be used.

GBATS is the multi-modal model for the greater Bristol area which has been developed to be TAG compliant and has been used to assess a number of schemes in the area that have been given funding approval by the DfT. GBATS produces matrices of trips and journey data (time, cost and distance) for three time periods (AM peak, inter-peak and PM peak hours) and several modes (car, bus, rail and BRT) also subdivided by user class (commuting, other home based trips and business journeys) and income level of travellers.

The RDM is a combination of bespoke spreadsheet models and MOIRA to assess rail enhancements offered by MetroWest phase 1. There are three main elements as follows:

- Trips at new stations (on existing and re-opened lines);
- Diversion of existing trips to new stations; and
- Changes in demand at existing stations from new or amended services (including suppression of demand by extra station calls).

The accompanying Appraisal Specification Report (ASR) for the Outline Business Case specifies the methodology and sensitivity testing within the RDM that has been used. The methodology makes use of rail industry data and derived techniques to forecast demand at new station broadly based on relationships at existing stations elsewhere. No data has been specifically collected, forecasts have therefore employed existing data sources. These include:

- The National Rail Travel Survey (NRTS);
- ORR Statistics;
- West of England annual station survey;
- MOIRA; and
- The Passenger Demand Forecasting Handbook (PDFH).

## 5.3.2 Trip generation

The models will be used to provide details of the trip generation at the stations. The models are being developed to have 2019 and 2029 time horizons. The methodology will be based on the wider transport model for the scheme and will be agreed with the client team and subsequently clearly identified and explained within the TA.

In terms of trip generation, a simple regression and gravity model technique will be used. This takes into account the relationship between journeys and catchments and the impact of other factors on demand such as ticket types such as season tickets and 'full price' tickets.

The stations used in the regression are drawn from the local West of England area as much as possible. These include Nailsea and Backwell, Bridgwater and Keynsham which have been considered as the most reasonable demographic fit as having similar characteristics to the catchments for Portishead and Pill. It also takes into account the full catchment of destination stations for rail users in the MetroWest area.

## 5.3.3 Future rail demand growth

Demand for rail travel has grown significantly in recent years, with for example, an almost 70% increase in passenger numbers through stations in the West of England between 2004/05 to

2011/12 (ORR figures). This includes larger increases on specific routes, such as the doubling of patronage on the Severn Beach line.

Looking to the future, the Great Western RUS (published in March 2010) forecast that demand in the Bristol area would rise by 41% at peak times between 2008 and 2019 (a rate of 3.2% per annum) and 37% off peak (2.9%), with an average growth rate of 3.0% per annum. Other forecasts by Network Rail such as the Long Term Planning Process (LTPP) suggest annual growth rates of 0.6% to 3.9%. However, it is acknowledged that despite recorded growth in recent years, these rates would not continue unabated.

On this basis, the RDM has used a combination of decrementing historic growth rates based on RUS and LTPP figures. The intention is to use the outputs and growth figures from the RDM to inform the TA.

### 5.3.4 Demand and mode of access

The model has been further analysed to understand the locations that potential users could come from, as well as the modes they may use to reach the stations. NRTS data has been used to determine potential patterns of trip distance and mode of access, as this provides an indication of the true origin of trips through a station, as well as the mode of transport used to get there. This has been based on a combination of information from Nailsea and Backwell, Bridgwater and Keynsham stations, with adjustments related to the possible availability of access facilities such as car parking and bus services.

As an example, taken from the RDM model the forecast dated July 2014 indicates the following modal split by distance. The intention in the TA will be to provide the latest figures from the RDM for both Portishead and Pill stations.

Table 5.2: Rail users accessing Portishead by origin and catchment for 2020 (based on scenarios 5B and 6B with two trains per hour) (rounding) from the forecasting report dated July 2014

Catchment	Walk	Bus	Car Parked	Car Drop Off	Bicycle	Taxi	All
Less than 1km	150	2	29	9	10	1	200
1 to 2km	209	4	87	47	12	10	369
2 to 3km	10	-	25	16	3	9	62
3 to 4km	-	6	29	14	3	-	52
4 to 5km	-	2	10	12	2	-	25
5 to 10km	-	-	36	7	1	-	44
More than 10km	-	-	10	1	-	-	11
TOTAL	368	14	225	106	31	19	763
Percentages	48.2%	1.8%	29.5%	13.9%	4.1%	2.5%	-

## 5.3.5 Change in the number of highway trips

The TA will use the outputs from GBATS4 and the RDM to identify the reduction in the number of car trips. For the competing options and the horizon assessment years, the forecasting report dated July 2014 indicated the following reduction in the number of vehicle trips. Reduction across kety corridors outside Portishead will also be shown such as the A369 and the M5.

Table 5.3: Reduction in car trips from the forecasting report dated July 2014

Option	2016 AM	2016 IP	2016 PM	2031 AM	2031 IP	2031 PM
5B Baseline	147	67	148	217	99	219
5B Advanced	151	69	152	224	102	226
6B Baseline	147	67	148	217	99	219
6B Advanced	151	69	152	224	102	226

## 5.3.6 Distribution and assignment of local traffic

The generated vehicular trips will be assigned to the highway network and compared against existing traffic flows in order to understand the relative traffic impact arising from the proposed scheme. A possible distribution methodology for calculating the distribution of trips could include the following:

- Geographical split for visitor origins;
- Population data extracted for wards and districts stated above; and
- Weighted population distribution used to define visitor distribution (local and independent visitors).

The directional distribution at some of the access / egress points for the proposed stations will be governed by on-street restrictions (e.g. left-in, left out arrangements). Where no restrictions are in place or proposed, the directional distribution of traffic generated by the proposed development will be based on existing movements within the area. The assumptions made with regards to the arrival and departure routeings will be set out in the TA.

Figure 5.1 shows, as an example, the proposed assignment area for Portishead based on the study area where traffic count data that has been collated. The assumptions underpinning the assignment and distribution will be made and these will be explicitly outlined in the TA.

## 5.4 Highway Impacts

## 5.4.1 Junctions

Junction capacity will be tested through a number of scenarios which will include:

- The existing situation;
- The opening year baseline situation without development;
- The opening year baseline situation with development;
- The horizon year situation without development; and
- The horizon year situation with development.

The TA will include an assessment of the cumulative impact of the proposals in conjunction the committed development in the vicinity of the site, to take account of any new major traffic flows they may generate on the local highway network.

Industry standard software such as JUNCTIONS8 and TRANSYT will be used to model capacity of junctions in the local area.

JUNCTIONS8 will be used to assess roundabout and priority junction capacity in terms of queues and delays. The software will be applied to any new junctions at the proposed station access/egress points.

TRANSYT will be used to analyse key signalised junctions within the study area. Any pedestrian crossings close to any of these junctions will also be considered. Any existing or proposed bus infrastructure will also be included as part of the modelling, where such infrastructure is located in close proximity to a junction. Any isolated signalised junctions will be modelled using LINSIG.

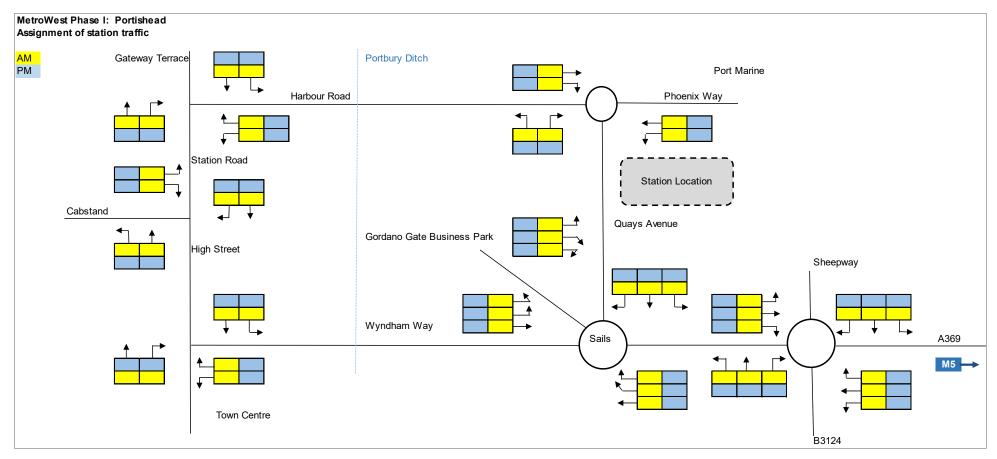


Figure 5-1: Indicative diagram showing how traffic will be assigned across the study area in Portishead

## 5.4.2 Parking

The TA will assess the demand on the parking provided through a parking accumulation analysis. This will be based on the demand profile above and the expected level of TPHs. Figure 5.2 is an indication of how the parking demand will be assessed throughout the typical weekday.

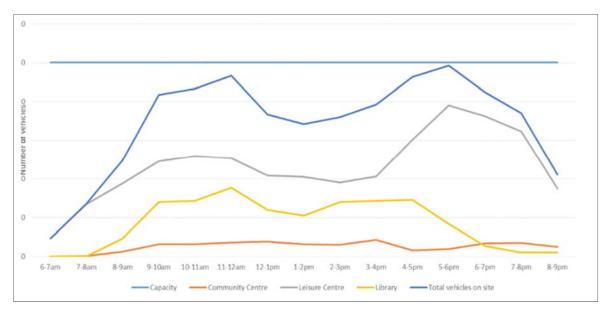


Figure 5-2: An example of the proposed parking accumulation analysis

## 5.5 Public Transport Impacts

Within this section, the TA will consider two public transport impacts. The first will outline the interchange and the connection opportunities between existing public transport services.

The second, will consider any modal shift from bus to rail as a result of the new service. This is likely to be based on taking an output from GBATS4 and adjusting the data to reflect the RDM. However, it has to be noted that most of the local bus services are operated on a commercial basis and bus companies can change services following notification to the Traffic Commissioner.

## 5.6 Walking and Cycling Impacts

This section will examine the impact of the scheme on walking and cycling routes particularly along desire lines. The focus will be ease of accessing the new station and whether further enhancement to encourage modal shift may be required. The methodology outlined earlier on will be utilised to assess any impacts including the use of existing collected pedestrian and cyclist data:

- Should link key origins and destinations;
- Should directly facilitate the desired journey without undue deviation or difficulty;
- Be continuous and not subject to severance or fragmentation;
- Any walking and cycling route should not give rise to road safety or personal safety concerns;
- Be accessible to disabled users and people with children and pushchairs#

## 5.7 Mitigation

#### 5.7.1 Overview

The TA will identify any necessary measures to mitigate the impacts of the additional traffic and person trips generated by the development proposals. The mitigation measures may include hard measures such as off-site highway works to improve junction capacity, improvements to pedestrian and cycle infrastructure, increased frequency to public transport services, improvements to public transport infrastructure surrounding the proposed scheme railway stations. Soft mitigation measures would be detailed within the Travel Plan.

In terms of the mitigation, if there are any off-site highway works to improve junction capacity, the proposed layout will be tested using the same methodology and software as outlined earlier.

## 5.7.2 Transport Implementation Strategy

The proposed TA will include a separate section on a Transport Implementation Strategy. Effectively this brings together all the various interventions that will be required to support the scheme proposal and to mitigate against any identified adverse impacts. The strategy will include elements such as a construction management plan, a servicing and waste strategy and importantly, a travel plan.

#### 5.7.3 Outline Travel Plans

An outline travel plan for both stations will be submitted as part of the mitigation proposals. The travel plan will comprise a number of elements as follows:

- Mode share targets;
- Travel information and marketing;
- The need for a Travel Plan Co-ordinator;
- Monitoring and review mechanisms;
- Draft action plans; and
- Details on securing the travel plan and how it will be funded.

## 5.7.4 Construction Traffic Management Plan

Accompanying the TA will be a Construction Traffic Management Plan (CTMP) and will reflect the detail of the construction arrangements as they evolve. There are two principal traffic related impacts associated with the works – these being personnel engaged on the building works and the delivery of materials and equipment.

The CTMP will identify the various access points and compounds along the scheme alignment. Access routes to and from these sites will be identified in the CTP and will take account of the likely vehicle types and flows. The impacts of the construction traffic will be assessed on other road users including pedestrians, cyclists and public transport operators. This will help identify the travel demand management (TDM) measures that might be required.

## 5.8 Summary

This section outlines the proposed approaches to assessing the impacts arising from the scheme. The main components being:

- The use of the GBATS4 and the RDM to calculate likely trip generation rates to and from the stations, the wider highway network impacts, future growth and the principal access modes;
- Building on this and the use of a gravity model in determining the distribution and assignment of local traffic;
- Assessment of highway impacts and the use of appropriate software;
- Impacts on parking including a parking accumulation exercise;
- Wider impacts on existing public transport noting that there may be some displacement from existing bus services;
- Assessment on walking and cycling taking into account the need to link origin and destinations, be continuous and not subject to severance or fragmentation;
- The need for mitigation where necessary and the testing of any changes to highway layouts using appropriate software; and
- The inclusion of a Transport Implementation Strategy in the final TA that effectively brings together all the interventions that will be required to mitigate the adverse impacts of the scheme.

## **Cumulative Impacts**

## 6.1 Introduction

The scoping document for the EIA at the Preliminary Outline Business Case identified a number of impacts outside the DCO application area. These are summarised in table 6.1 below:

Table 6.1: Potential cumulative impacts, mitigation and residual impacts on transport, access and NMUs

Aspect Impact		Receptors	<b>Potential Mitigation</b>	Residual Impact
Construction activities				
Construction of scheme components outside the DCO scheme extent	Potential changes in traffic management and access arrangements	Transport users in other areas of the scheme effected by construction (to be determined when the construction management plan is progressed).	Unknown at this stage	Unknown at this stage
Operation activities				
Increased use of level crossings	Increased traffic congestion Safety issues	Local highway users, and residents/business in the area	Consider schemes such as re-routing traffic/new crossings. The safety issues would be considered as part of the GRIP 3 work	Unknown at this stage
Possible local vehicular demand associated scheme	Traffic congestion	Local highway users, and residents/business in the area	Traffic management solutions to be considered	Unknown at this stage

## 6.2 Level crossings

There are three existing highway level crossings outside the DCO assessment area, on the Severn Beach line as follows:

- West Town Gate Level Crossing, near Portway (Bristol Port Secondary Entrance), Bristol;
- Avonmouth Station Level Crossing, Avonmouth; and
- King Road Avenue Level Crossing (Bristol Port Main Entrance), Avonmouth

The Severn Beach Line currently has an every 40 minutes passenger train service between Avonmouth station and Bristol Temple Meads and a 2 hourly service from St. Andrews Road and Severn Beach stations to Bristol Temple Meads. Furthermore, there are no freight trains operating on the Severn Beach line, although freight trains cross the Severn Beach line at Hallen junction near St. Andrews Road. The current number of trains per day together with the current average level crossing cycle time, and traffic count will provide a baseline position in respect of traffic impact.

The net additional trains arising from proposed half hourly train service between Avonmouth station and Temple Meads and hourly train service from St. Andrews Road and Severn Beach stations to Bristol Temple Meads, will be calculated to identify the net additional closure time for the am peak, inter peak and pm peak. The traffic count data will be used to forecast future traffic volume and this

together with the net additional closure times, will enable the calculation of net additional queue lengths arising as a result of the project.

Traffic count data is being collated at the following locations:

- Avonmouth King Road Avenue and Gloucester Road
  - 26: King Road Avenue (to the immediate east of the level crossing but on the public highway)
  - 27: Gloucester Road (to the east of the level crossing but east of Portview Road)
  - 28: Gloucester Road (to the west of the level crossing)

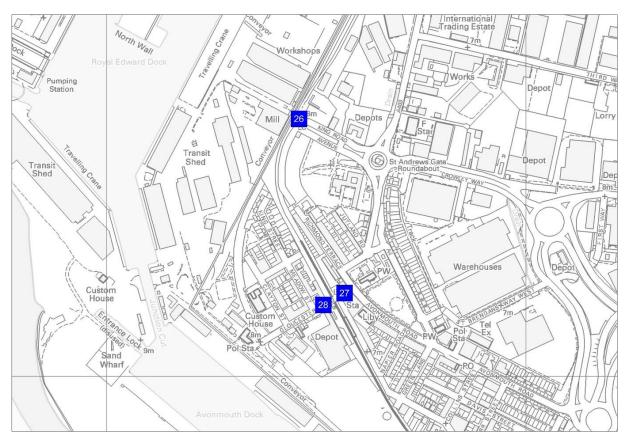


Figure 6-1: Avonmouth King Road Avenue and Gloucester Road

- Avonmouth (Portway) West Town Gate (see location plan figure 8)
  - 29: Right turning flows from Portway into West Town Gate
  - 30: Both directions along Portway, north of the junction with WestTown Gate
  - 31: Flows into the Portway Park and Ride site
  - 32: Both sides of West Town Gate (to the east of the Portway Park and Ride site entrance)

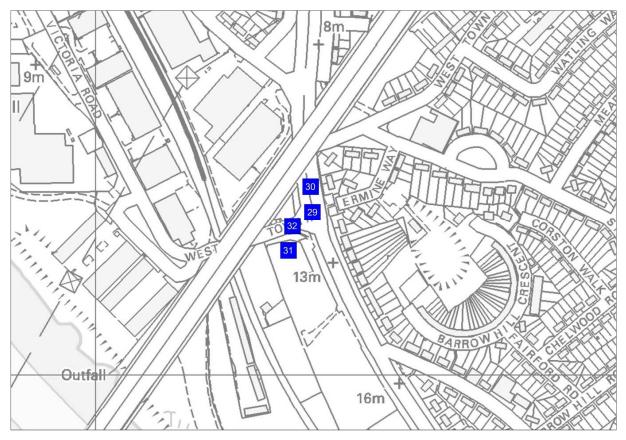


Figure 6-2: Avonmouth Portway

There are a further three pedestrian only crossings as follows:

- Sea Mills Station private user crossing, Sea Mills station, Bristol;
- Sea Mills Station public right of way crossing, Sea Mills station, Bristol; and
- Redwick 18 public footpath crossing, between St.Andrews Road station and Severn Beach station, Bristol

Counts will be undertaken to establish the existing use of these crossings. Network Rail will review the ALCRM rating of each level crossing in light of the proposed increased number of trains, and changes in vehicle and pedestrian flows. Network Rail will also indentify any other safety issues identified through LXRMTK or through work arising from GRIP stage 3. This will be reported in the TA along with any recommended actions or mitigations.

## 6.3 Assessment and mitigation of impacts

The assessment of impacts will be informed by Network Rail's GRIP work. This will determine both the minimum average barrier down time together with the number of cycles associated with the MetroWest Phase 1 proposals compared to existing level crossing downtimes for existing passenger and freight movements.

A number of scenarios will test the highway impacts as follows:

- The existing situation;
- The opening year baseline situation without the scheme;
- The opening year baseline situation with the scheme;
- The horizon year situation without the scheme; and
- The horizon year situation with the scheme.

Consideration will also be given to the impacts for non-motorised users and community severance.

The TA will include an assessment of the cumulative impact of the proposals in conjunction the committed development in the vicinity of the site, to take account of any new major traffic flows they may generate on the local highway network.

Industry standard software such as JUNCTIONS8 and TRANSYT will be used to model capacity of junctions in the local area.

JUNCTIONS8 will be used to assess roundabout and priority junction capacity in terms of queues and delays. The software will be applied to any new junctions at the proposed station access/egress points.

TRANSYT will be used to analyse key signalised junctions within the study area. Any pedestrian crossings close to any of these junctions will also be considered. Any existing or proposed bus infrastructure will also be included as part of the modelling, where such infrastructure is located in close proximity to a junction. Any isolated signalised junctions will be modelled using LINSIG.

If any adverse impacts are identified, mitigation measures may be proposed. These will be tested using the same methodology and software as outlined above.

## 6.4 Summary

Consideration will need to be given to the highway and severance impacts arising from an increase in level crossing downtimes outside the DCO application area. This will include:

- An assessment of the level crossings at Avonmouth King Road, Avonmouth Gloucester Road and Avonmouth Portbury; and
- Will test the impacts through a number of scenarios with and without the scheme and for current and future assessment periods.

## SECTION 2

# Meeting Notes



# MetroWest Phase 1 Transport Assessment Scoping Discussion with Highways England

ATTENDEES: Sean Walsh (Highways England), Rachel Sandy (Highways England), Jacqui

Ashman (Highways England ), Simon Snell (Network Rail), Jeremy Masters

(Network Rail), James Willcock (NSC), Steven Penaluna (NSC), Helen

Spackman (CH2M), Jeff Evans (CH2M)

COPY TO:

PREPARED BY: JE

DATE: 11 September 2015

#### 1 Overview of the MetroWest Phase 1 scheme

JW presented an overview of the scheme and the various components and elements that comprise Phase 1. Reference was made to the current status of the DCO application area (the red line), the project team are considering extending the DCO redline through the Gorge to the Parson Street junction.

Initial feedback from Highways England focussed on:

- The potential for traffic generation from Clevedon towards Portishead, although it was noted that such traffic would likely to use local authority maintained roads;
- Potential implications on HE structures within the vicinity of the M5 underbridge and J19, as referenced in the HE's response to PINS for the Environmental Scoping Opinion;
- A need to examine existing parking demand at Nailsea and Backwell station as some demand will be diverted to Portishead; and
- Construction impacts.

## 2 Overview of the proposed methodology

JE outlined that the TA scoping report was a draft and comments and feedback were invited. The intention was to update the document taking on board the comments that have been made. It was proposed to follow the format of the archived DfT document on Guidance for Transport Assessment and it was agreed this approach would be acceptable.

## 3 Scope of the TA

#### 3.1 Construction Impacts

Network Rail outlined the construction options that are being examined as part of GRIP3 assessment process. This included materials and deliveries being brought in by road, rail, sea or a mix of all three. The current GRIP 3 work was examining the possibility of blockading the existing Portbury line for two weeks – although more discussions with the Port about the operational impacts were required.

Highways England feedback centred on the following:

- Although it was recognised that detailed construction arrangements may not be known at this stage, Highways England sought a consistent level of information and detail about construction plans with each DCO application;
- Any unusual vehicle loads such as a large fabricated sections for the footbridge should be
  identified up at the earliest opportunity and communicated to Highways England. The choice of

delivery routes was particularly important such as Avonmouth Bridge and the need to take account of junction layout and dimensions. It was noted that the removal of Highways England signage was an expensive process;

- A construction management plan and a delivery (route) management plan would be required as part of the submission; and
- To also flag up anything that crosses culverts and the potential impact on the SRN. It was recommended that a meeting (around Mid-November) should be arranged when some of the outputs of GRIP3 and the construction impacts are known.
  - Consideration of other major construction works in the area such as Hinkley Power Station and the National Grid projects. It was however acknowledged that until the timescales of these projects are confirmed there will remain some uncertainty.

#### Action: JW/SP to arrange GRIP3 meeting with Highways England

#### 3.2 M5 Junction 19 Impacts

Highways England requested that an assessment of the traffic impacts on M5 J19. To facilitate this, Highways England will provide traffic data from TRADS for this junction.

#### Action: Highways England to provide M5 J19 TRADS data

#### 3.3 Public Transport

Highways England requested the consideration of the existing capacity of public transport should be assessed within the TA. It was noted that the project will result in modal switch from both car to rail and bus to rail. Consequently, some changes to the local bus service may be needed, however the total capacity of public transport ie total train and bus capacity along the A369 will increase.

#### 3.4 Committed Developments

CH2M to forward a spreadsheet of committed developments and Highways England will comment whether any developments require special attention and consideration within the TA.

#### Action: JE to forward a spreadsheet of the committed developments

## 4 TA Analysis and Assessment

### 4.1 Horizon Year Assessments

It was agreed that the horizon year assessment should be opening year and 10 years. Use of GBATS and methodology will be required of the scaling back to correspond with 2019 and 2029. Assumptions (for this and other parts) to be forwarded to Highways England – may need further sensitivity tests if other concerns are raised.

#### Action: JE to forward assumptions re the scaling back of GBATS to correspond with 2019 and 2029

#### 4.2 Wyndham Way and J19 improvements

Highways England requested additional focus on Wyndham Way and the platoon impacts of traffic using the Wyndham Way/Quays Avenue junction, the Portbury Hundred junction and the eventual impact on M5 J19. The impacts of increased pedestrian movements across Wyndham Way at controlled crossing points to be also considered. The TA should also examine the likely impacts of the scheme on improvements being proposed for M5 J19.

#### 4.3 Local Plan

It was noted that the GBATS period of 2036 was beyond the time period of the NSC local plan. There is also a need to reference the NSC local plan section on housing is currently in abeyance and the progress being made on the WoE joint spatial strategy. CH2M will check and reference how GBATS is dealing with these emerging planning documents.

### 4.4 Other

Highways England requested that consideration of any other impacts on the SRN should be outlined – such as future proofing electrification, other cables, historic rail structures and sidings for diesel.

## 5 TA Timeline

The draft TA is expected to be published around Mid-December 2015 to Mid-January 2016. It was intended that the TA will have a draft status until submission with the EIA.

] 3

# Highway Authority Feedback

### Evans, Jeff/CWL

From:

Steve Thorne <Steve.Thorne@n-somerset.gov.uk>

Sent:

06 October 2015 17:16

To: Cc: Evans, Jeff/CWL

Subject:

Paul Paton
FW: MetroWest Phase 1: Environmental Impact Assessment. Transport Assessment

Scoping Report, July 2015

#### Dear Jeff

Following consultation with Howard Davies and NSC colleagues I am pleased to provide a formal highways response to the draft **MetroWest Phase 1: Environmental Impact Assessment. Transport Assessment Scoping Report**, dated July 2015, on behalf of North Somerset Council as Highway Authority.

The minutes of the **Joint TA Scoping Meeting** held at Castlewood on 27 August 2015 properly record the details of the discussions on the draft report and are an appropriate reference to the majority of issues that were raised by this Council at that stage. I see no reason to repeat those points here but assume that you will take full account of them in the final version of the Scoping Report which I understand you will issue shortly.

Further points are as follows and, where paragraph numbers are given, they relate to those in your draft document:

- 2.11 Following formal consultation the Councils' proposed new Highways Development Design Guidance document is being presented to the council's Executive Committee on 20 October for their formal approval and adoption. Importantly in this context it effectively incorporates the former DfT/DCLG Guidance on Transport Assessment and it is recommended that you obtain an advance copy of the document from my colleague Paul Paton who will also be able to advise you of the precise date when the document is formally adopted.
- 4.4.2 I believe you may have already seen the following comments in respect of this section:
  - M5 J18a serves as a strategic link to the M4 South Wales route (via M49)
  - M5 J18 serves Avonmouth and Severnside, an area of high employment which has been designated as an Enterprise Area with scope for significant development
  - M5 J19 serves Portbury Dock and surrounding businesses within the scope laid out in the section you asked me to review.
  - Mention is made of Clapton Lane linking to Nailsea, however this is a major commuter route to south Bristol and is the most direct route to the Park and Ride for much of the traffic originating in Portishead. Traffic volumes on this road are currently causing concern and there is a local safety scheme currently planned to introduce traffic calming and a 20mph speed limit on Clapton Lane within the village. This could lead to displacement of traffic onto other already congested routes.

In addition there are concerns about the likely impact the proposed Portishead station may have on traffic flows: There are currently two pedestrian crossings on A369 Wyndham Way between Quays Ave roundabout and Portbury Common roundabout. Traffic flows and congestion blocks both roundabouts and is particularly sensitive to these crossings. It may be prudent to assess the likely impact of increased usage of these lights on network traffic flows and congestion. It may also be worth considering the potential desire lines for station access, including the use of an existing informal crossing north west of Quays Avenue, which may be a strong desire for rail

passengers. This is a busy section of road and increased desire may have road safety implications. Indeed, issue like these highlight the need for detailed NMU audits.

I trust that these comments are of assistance to you as you finalise the TA Scoping Report.

Regards

Steve

Steve Thorne

Strategic Transport Policy and Development Manager
Development & Environment
North Somerset Council

Tel:

01934 426920

E-Mail:

Steve.Thorne@n-somerset.gov.uk

Post:

Town Hall, Walliscote Grove Road, Weston-super-Mare, BS23 1UJ

Web:

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Care Connect: for all adult social services enquiries visit http://secure-

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#### Evans, Jeff/CWL

From:

Laurence Fallon <a href="mailto:ristol.gov.uk">Laurence Fallon <a href="mailto:ristol.gov.uk">ristol.gov.uk</a>

Sent:

11 September 2015 13:25

To:

Evans, Jeff/CWL

Cc:

James.Willcock@n-somerset.gov.uk; Steven.Penaluna@n-somerset.gov.uk; Spackman,

Helen/UKS

Subject:

RE: MetroWest Phase 1 - List of Committed Developments

Hi Jeff.

Thanks for this.

Unfortunately I haven't time to go through the likelihood of each development. However, the developments of note in BCC in this vicinity which will be happening in the next few years would be as follows:

South Bristol Link Road (already in GBATS)

Ashton Gate Stadium – more of a weekend / Tuesday evening use but conference facilities during the day will attract trips

**UWE Bower Ashton Campus** – extension to teaching facilities, approved August '15.

I would suggest that everything else (particularly strategic growth sites contained within the Site Allocations Document) are already accounted for in terms of wider growth factors. The most likely on the horizon would be the **Malago House** site in Bedminster which is pending approval. We also have an application in for 76 houses on **Wills Way** at Imperial Park.

Kind regards

## Laurence Fallon BA(Hons) BTP MRTPI

Transport Development Manager

Bristol City Council - Place

t: 0117 903 6846

e: laurence.fallon@bristol.gov.uk

http://uk.linkedin.com/pub/laurence-fallon/94/30a/679

From: Jeff.Evans@ch2m.com [mailto:Jeff.Evans@ch2m.com]

Sent: 09 September 2015 11:19

To: Laurence Fallon

Cc: James.Willcock@n-somerset.gov.uk; Steven.Penaluna@n-somerset.gov.uk; Helen.Spackman@ch2m.com

Subject: MetroWest Phase 1 - List of Committed Developments

Laurence,

Many thanks for the matters you raised at the Metro West Phase 1 scoping meeting on the 27 August.

As discussed, attached is a spreadsheet comprising the committed developments that form part of the GBATS4 modelling. I have separated both the residential and employment developments in the vicinity of the scheme proposal and these are shown separately under the BCC tab. The residential and employment developments fall under two categories here – NC – near certain and RF – reasonably foreseeable.

I would be grateful if you would be able to review the spreadsheet and highlight any developments in particular that will require additional focus for the TA.

Additionally, further to the discussion regarding the signalling on Winterstoke Road and the Ashton Vale Road level crossing - could you provide the name and contact details of a colleague where we would be able to obtain the signal data from?

With thanks.

Kind regards. Jeff

Jeff Evans

Transport Planning D+44 (0)29 2072 0905

CH2M One Kingsway Cardiff CF10 3AN

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X Marie Super Ser and Administration recommendations	

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# Summary of Stage 1 Consultation

### MetroWest Phase 1 – Summary of comments and questions from public consultation

Public consultation for the reopening of the Portishead branch line was open from the 22 June to 3 August 2015, generating 856 responses.

The key issues raised were: scope of work included in the project, changes in traffic and congestion, parking conflicts, impact of the footbridge including design, and local social and environmental impacts.

The consultation responses are summarised below:

Topic	General Concerns
Scope of work	Suggestion to include other stations/stops, including at Ashton Gate, Portway Park and
	Ride, Patchway, Bedminster, Bathampton, Parsons Street, Filton Abbey Wood, Portbury
	and within the Ashton Gate Stadium car park.
	Suggestion to include a link with the Seven Beach line.
	Suggestion to include the re-connection of the branch from Ashton Gate to Wapping
	Wharf
	Potential to support tourist and excursion trains.
	Suggestion to reinstate the passing loop at Ham Green.
Design	General concerns over the design and layout of the scheme works.
	Suggestion for local amenities and shops at stations and for station to be staffed.
	Suggestions regarding landscaping and greenery
	Desire to remove level crossings and replace with a bridge/underpass.
Cycle network	General concerns over the impact to existing cycle paths/loss of route.
impacts	Suggestions for cycle routes improvements, materials used, alternative routes,
	provision of cycle facilities at stations and on trains.
	Concerns over safety, signage, lighting on cycle routes.
Bridleway	Concern over impact to bridleway.
Project	General concerns over the time and costs required to implement the scheme and
completion	significant work load required to complete the project.
Traffic,	Concerns over the impact on parking, congestion and traffic surround the stations. The
congestion	possibility of parking restrictions or residents parking schemes. Concern over lack of
and parking	land for parking extension.
	Questions/suggestions about the cost of parking and provision of disabled parking.
Infrastructure	Concerns and suggestions over new road layouts
changes	
Construction	Concern over traffic management during construction.
Management	Suggestion for works / disruption near Ashton Gate to occur outside of football season
Environmental	General concerns over environmental pollution including noise, light and visual impact
concerns	and effect on wildlife impact.
	Suggestion of motion activated street lighting.
Local impacts	General concerns over impact to local property including privacy.
Rail	Suggestion to electrify the line
operations	Suggestion for more frequent services and adjustments to the number and size of
	carriages.
	Concerns over operating hours
	Concerns over rail line capacity and the accuracy of passenger forecast demand.
Integration	General concerns over access by all modes and for users with mobility and sensory
	impairment.

	Suggestions for integrating rail services with other transport services, including buses, park and ride, car drop off.
	Concerns over impact of bus stops.
	Suggestion for bus card readers to be provided at the stations
Safety	General concerns over safety and whether the scheme will attract crime / vandalism. General concerns for emergency and health / safety (on the track and for local
	residents), including the potential for people to throw objects onto the track. Concerns over the access for emergency vehicles.
User costs	General concerns over ticketing system and cost of travel.
Planning	Concerns regarding progress in planning procedures and obtaining consent for listed
consent	infrastructure works.
Sustainability	Concern over the sustainability of the scheme and opportunities for future expansion.

Topic	Concerns at Portishead
Design	Alternative location proposed for Portishead Station.
Trinity	General concerns over the design of the bridge linking Trinity Primary School.
Footbridge	Suggestions for the design of the bridge and for involvement of local people. Concerns
	over the implications of snow and ice on the bridge.
	General concerns over public costs, demand levels for the bridge, the proximity to the school.
Station design	Different aspirations for station design. For example to be in keeping with old station or
and features	for a modern design. Inclusion of a gateway feature and iconic architecture or art.
	General concerns over design and length of the canopy, adequacy of shelter, platform
	length at Portishead station.
	Consideration should be given to a gradual grading of the line from around Moor Farm
	so that the platform at Portishead station is at ground level with the line roughly 1
	metre lower.
Pedestrian	General concerns over pedestrian access and safety (especially for children).
safety and	Suggestions for pedestrian priority crossings.
access	Concerns over disruption to pedestrian access / walking route.
Local impacts	Concern that access to private roads should remain so.
Historic	Why has the rail line been left in place since closure in 1946 is this because it's still
infrastructure	railway property?
Funding	Should the developers in Portishead be asked to foot at least some of the costs?

Topic	Concerns at Pill
Traffic,	General concerns over the impacts of drop offs/pick ups at Pill Station
congestion	Suggestion for speed restrictions and for car park layout.
and parking	Concern over parking on nearby streets.
Social impact	Suggestion to restore historic surrounding buildings at Pill Station
	How are the people of Pill to be recompensed for what is being taken from them?
Project	General concerns over demand forecast for Pill station usage, belief demand is greater
justification	elsewhere.
Scope of work	Suggestion for the freight line to be on down side / loop on Monmouth road.
Infrastructure and utilities	Question about the problem with the width of Pill Tunnel been resolved.
	Concerns over the protection of public utilities.