



MetroWest

MetroWest Phase 2 OUTLINE BUSINESS CASE

Executive Summary

travelwest 

Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire
councils working together to improve your local transport

March 2019

Executive Summary

The West of England (WoE) councils are progressing plans to invest in the local rail network over the next ten years through the MetroWest programme. The MetroWest programme comprises:

- The MetroWest Phase 1 project;
- The MetroWest Phase 2 project;
- A range of station re-opening/new station projects; and
- Smaller scale enhancement projects.

MetroWest is being jointly promoted and developed by the West of England Combined Authority (WECA), Bath & North-East Somerset Council (B&NES), Bristol City Council (BCC), South Gloucestershire Council (SGC), and North Somerset Council (NSC). 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;
- Increasing service frequency; cross-Bristol service patterns (e.g. Bath to Severn Beach) and to Yate.
- Up to five new stations bringing more people within a 1 km catchment of a rail station.

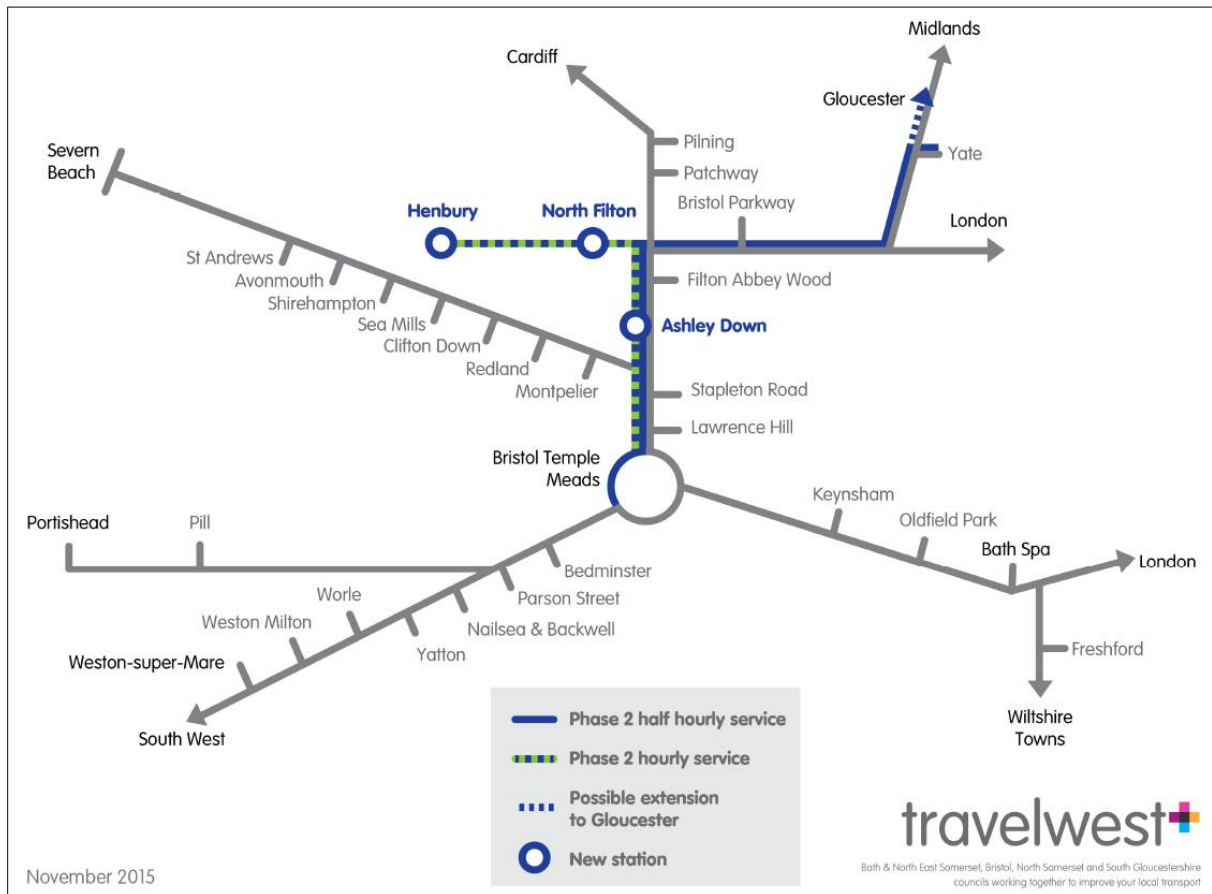
The MetroWest programme builds on and will complement the investment being made by Network Rail (NR) which has been significant and impactful in the last few years including:

- The four tracking of Filton Bank;
- Bristol area re-signalling
- Longer platforms to provide more capacity for passengers;
- New platforms at Filton Abbey Wood and Bristol Parkway stations;
- Electrification of the route from Paddington to Bristol Parkway

This has been complimented by the introduction of trains which are longer and have more seats than previously and which are faster and quieter than previous rolling stock, particularly in electric mode. Towards the beginning of 2020 new timetables will provide faster and more frequent journeys between Bristol and London and lead to reliability improvements in the WoE area.

The MetroWest programme is to be delivered in stages over the next five to ten years. The MetroWest Phase 2 scheme focuses on increasing the frequency of rail services from Bristol to Yate. This would provide a half-hourly service along the Bristol Parkway to Gloucester line with a possible extension to Gloucester in the future. The construction of new rail stations at Ashley Down, North Filton and Henbury, and the re-opening of the Henbury rail line to passenger services which will run on an hourly basis. The new train services will also serve 6 existing stations.

The MetroWest Phase 2 Network



Key benefits of the scheme are:

- Supporting economic growth. MetroWest Phase 2 is part of a wider transport offering to accommodate planned and committed business and residential growth throughout the region. The MetroWest Phase 2 scheme is assumed to be in place before Joint Spatial Plan (JSP) growth. The scheme will support and facilitate this planned growth.
- Improved accessibility and enhanced carrying capacity of the local rail network by providing new stations and services.
- Delivery of a more resilient transport offer. MetroWest Phase 2 results in increased demand to use the local railway network (580,000 passengers per annum at the new stations by 2036). This demand demonstrates the need for additional transport choices in the area.
- A positive contribution to social well-being. The scheme combats high car dependency which can result in inactive lifestyles which pose a major threat to public health.
- Reduction of highway congestion as demonstrated by the high level of highway user benefits.
- The reduction of some adverse environmental impacts on the local transport network as a whole by reducing car use and providing a more sustainable travel option.

Financial case

The MetroWest Phase 2 scheme is affordable as the scheme can be funded through allocated Local Growth Funding, South Gloucestershire Council and Bristol City Council funding, Devolved Major Scheme Funding, WECA Investment Fund and S106 funding.

The MetroWest Phase 2 scheme capital costs are £48,225,000 and the revenue costs from 2021 to 2024 are £5,938,000.

Economic case

The scheme offers a significant level of rail transport user benefits equating to £31.4 million of commuting benefits and £22.0 million of other user benefits.

The scheme also provides a high level of highway transport user benefits equating to £3.9 million of commuting benefits and £10.1 million of other user benefits. These benefits are due to reduced congestion on the roads as individuals transferred their journeys to rail.

The scheme generates Wider Economic Impacts of £27.2 million and regeneration benefits associated with new jobs.

There are likely to be slight to moderate adverse impacts on noise, with existing receptors experiencing an increase in noise despite being already exposed to some level of noise associated with road and rail transport.

In addition, the scheme will have a moderately beneficial impact on greenhouse gases due to rail being more energy efficient than road transport and gives rise to less pollution per passenger kilometre than road transport.

Landscape is expected to be slight to moderately impacted by the scheme due to the clearance of vegetation and the Yate turn-back.

The impact of the scheme on water environment is likely to be moderate to large adverse. This is due to the proposed site for the new station at Henbury being located entirely within Flood Zone 3, and therefore requiring a specific Flood Risk Assessment and mitigation measures in order to ensure the station does not increase flood risk.

The MetroWest Phase 2 scheme offers a Net Present Value of £14.12 million / £65.87 million and currently provides a Benefit to Cost Ratio of 1.88 when adjusted to include wider impacts (with an initial Benefit to Cost Ratio of 1.19). The scheme is considered to offer Moderate Value for Money.

However, there are a number of factors that could improve the Benefit to Cost Ratio. These include considering the demand from other developments within the area, for example the proposed Bristol Arena, as well as better aligning the MetroWest Phase 2 scheme programme with the Cribbs Patchway New Neighbourhood (CPNN) programme. In addition, consideration of the growth that will be produced by the Joint Spatial Plan (JSP) schemes will further enhance the BCR. Further assessment of the BCR will be undertaken as part of the Full Business Case (FBC).

Commercial case

The MetroWest Phase 2 commercial case includes 4 main elements of procurement:

- Professional services pre-construction. Scheme preparation works will be undertaken using in-house resources, framework consultants and Network Rail. Additional legal, land and property support will be procured through a standard procurement process led by SGC Legal and Property teams.

- Railway construction works. Scheme track-side construction will be led by Network Rail and delivered through a Design and Build contract.
- Non-trackside construction works. Non track-side work will be undertaken by Network Rail, local developers, council in-house resources or framework contractors depending on the station.
- Train operator service. DfT Rail, the Train Operating Company (TOC) and the next base Great Western franchise specification will be used to procure train services.

Management Case

The MetroWest Phase 2 scheme benefits from a strong governance structure comprising of local government, Network Rail and train operating company staff. The project programme is considered achievable and includes the following milestones:

- GRIP5 Detail Design (final signalling design) - Dec 2019
- Full Business Case Approval - Jan 2020
- GRIP 6 Construction Start - Dec 2020
- Operation - Dec 2021

The main risks within the project are:

- The upgrade of Bristol East Junction is delayed or funding is not available resulting in the inability to provide Henbury Line Services adding significant cost and delay to programme.
- Delays in obtaining appropriate consents to progress the project.
- Issues which could impact on programme / cost particularly in relation to:
 - a. Access / drainage issues in relation to Henbury
 - b. Decision on location of Bristol Arena in relation to North Filton and potential access issues if build out rate for the development is slower than predicted
- Managing the interface between NR / SGC and third parties
- Increasing freight demand or train paths not being available which may restrict capacity of passenger services