



# West of England Rapid Transit Ashton Vale to Temple Meads and Bristol City Centre

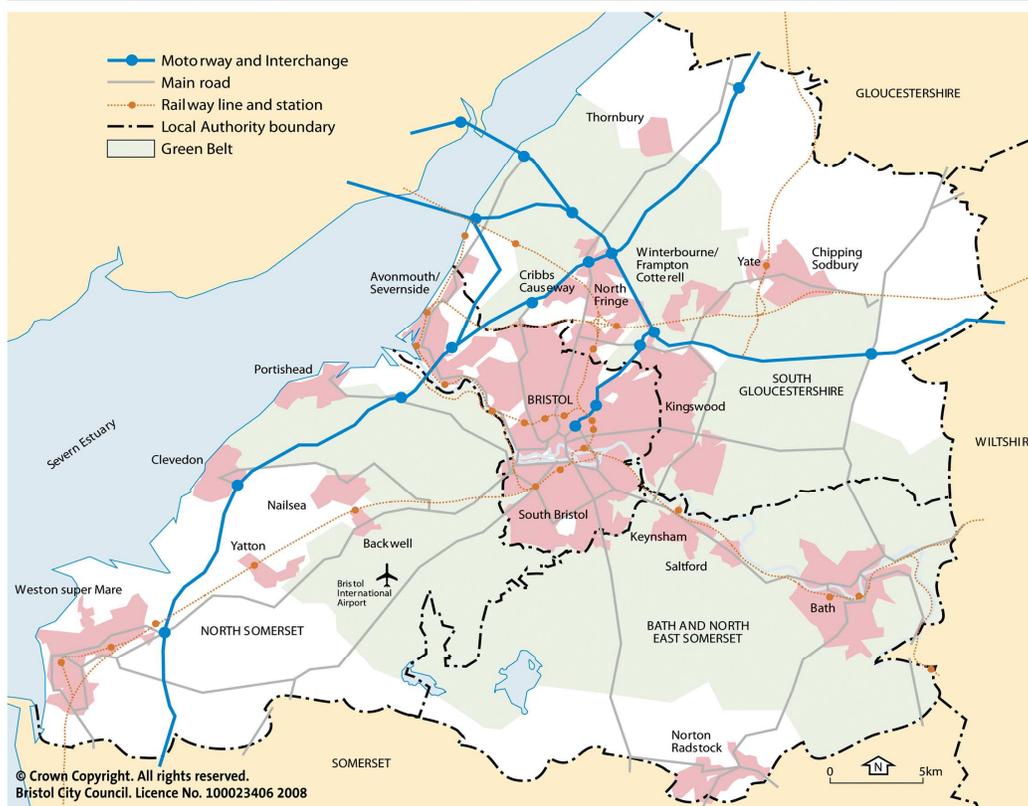
## Major Scheme Business Case - Executive Summary

- 1 The West of England is a prosperous area with an excellent quality of life and a growing national and international profile. The travel demands that accompany this prosperity and growth are increasing pressure on infrastructure, particularly provision of transport.
- 2 The West of England Authorities are working together to deliver high quality public transport measures to provide alternatives to the car that are a realistic choice for the majority of trips. This will meet the area's growing needs, whilst safeguarding its environmental and economic future.
- 3 Rapid Transit, as one of these measures, will play a significant role in reducing traffic congestion. It will provide hassle-free journeys that link shopping, work, leisure and district centres.

The West of England sub-region is made up of Bath and North East Somerset, the City of Bristol, North Somerset and South Gloucestershire, Figure 1.

The four councils are working together as the West of England Partnership to tackle transport and other major strategic issues.

Figure 1: The West of England



## Background

- 4 About a million people live in the West of England and it provides around 500,000 jobs. Most of these people live in the major urban areas of Bristol, Bath and Weston-super-Mare and the in the area's seven towns. One in six live in villages and the wider countryside.
- 5 The South West contributes nearly 8% towards the National Gross Value Added of the UK with the West of England contributing one quarter of this. Forecasts show that by 2026 our successful economy will support an additional 138,000 jobs, an increase of 28%. The area's population could grow by over 200,000 people. The draft Regional Spatial Strategy (RSS) consequently proposes large-scale housing development in the sub-region, with construction of 138,500 new dwellings. Overall £3 billion of potential development sites are identified.
- 6 The West of England has a unique heritage and character, including Bristol's industrial and maritime past, Bath's status as a world heritage site and the rich traditions of North Somerset and South Gloucestershire. The area has a wealth of natural environmental assets spread across the urban and rural areas including parkland, landscapes and natural resources but also contains areas of significant deprivation and disadvantage which suffer from poor transport links.
- 7 Congestion is already a serious problem and the Bristol area experiences the UK's lowest average car speeds of just 15 miles per hour (2006). Over the last ten years traffic on the area's roads has grown by 21% compared to 16% nationally. This has resulted in poor air quality, delays, unreliable journey times and unsustainable pressure on existing infrastructure and services. The continued growth of congestion, with its undesirable effects, threatens the quality of the environment and the quality of life for people who live within it.
- 8 To continue our success and achieve our aspirations for economic, environmental and social development, we require an ambitious but realistic vision for our future transport.

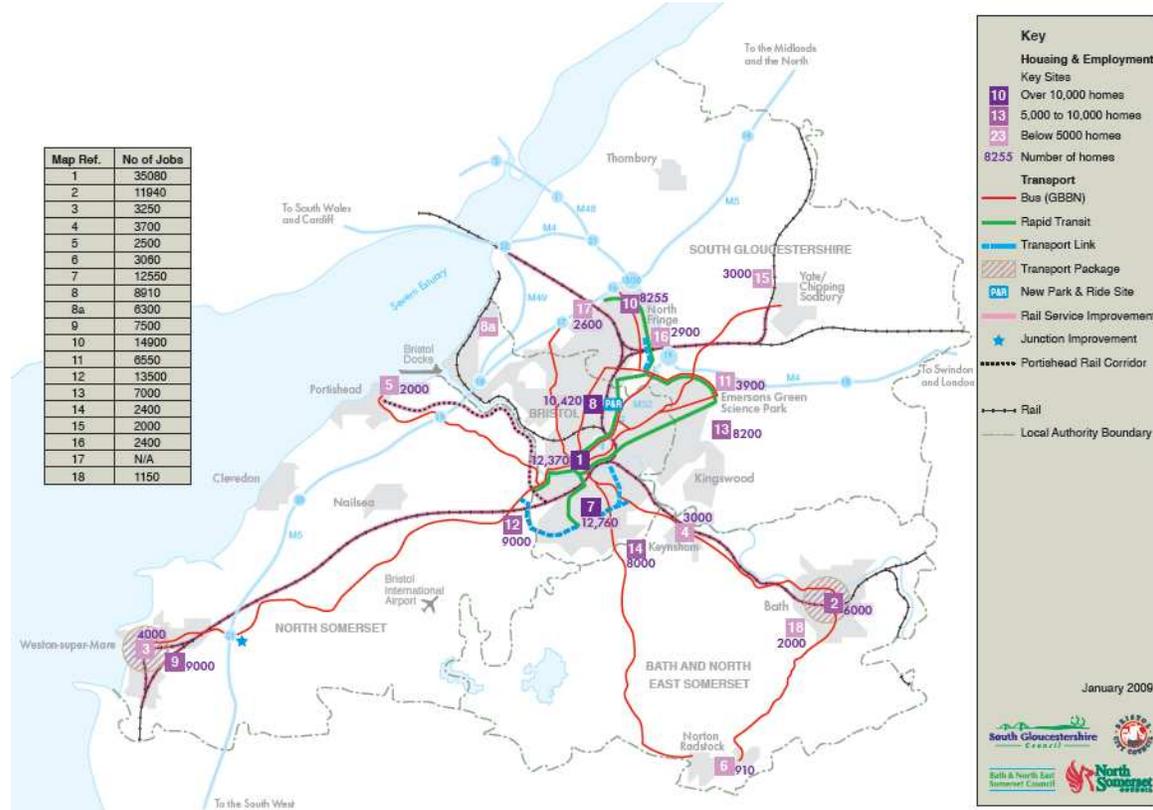
Our Future Transport Vision aims to:

- Improve our quality of life
- Tackle congestion
- Improve road safety
- Improve air quality
- Improve access to job opportunities
- Help us get to work and school efficiently
- Strengthen the local economy

## Development of a West of England Rapid Transit Network

- 9 A comprehensive transport study to assess the current and future strategic transport needs of the West of England region up to 2031 was completed in 2006. Known as the Greater Bristol Strategic Transport Study (GBSTS), it was commissioned by the Government Office for the South West in partnership with the Highways Agency, South West of England Regional Development Agency and the West of England authorities.
- 10 GBSTS recommended a package of measures to support the sustainable growth of the sub-region. One of these is the development of a Rapid Transit Network with the aim being “to provide high quality alternatives to the private car”.
- 11 GBSTS identified that this network should:
- Extend choice of transport modes for all, in particular for private car drivers, to encourage a shift to public transport.
  - Promote sustainable development by providing high quality public transport links.
  - Improve access to public transport for areas that currently have poor provision.
  - Improve integration of the public transport network.
  - Promote social inclusion by improving access to employment, retail, community, leisure and educational facilities.
  - Improve safety along the corridors by reducing use of private cars.
- 12 GBSTS set out the plan for the development of a Rapid Transit Network. It identified corridors in the network that would serve many of the new residential and employment developments. There are four cross sub-regional corridors running via Bristol City Centre from:
- Ashton Vale to Emerson’s Green.
  - Hengrove to North Fringe.
  - Bath to Cribbs Causeway.
  - Whitchurch to Avonmouth/Portishead.
- 13 These corridors are embedded in the Joint Local Transport Plan (JLTP) within the major schemes programme and the first two corridors have funding allocated in Regional Funding Allocation (2006) for the South West.
- 14 The first two corridors and their relationship with the residential and employment developments proposed by the RSS are shown in Figure 2.
- 15 The Ashton Vale to Temple Meads and Bristol City Centre (the Rapid Transit Scheme) is now being put forward for funding with Department for Transport (DfT) through submission of this Major Scheme Business Case (MSBC) for Programme Entry.

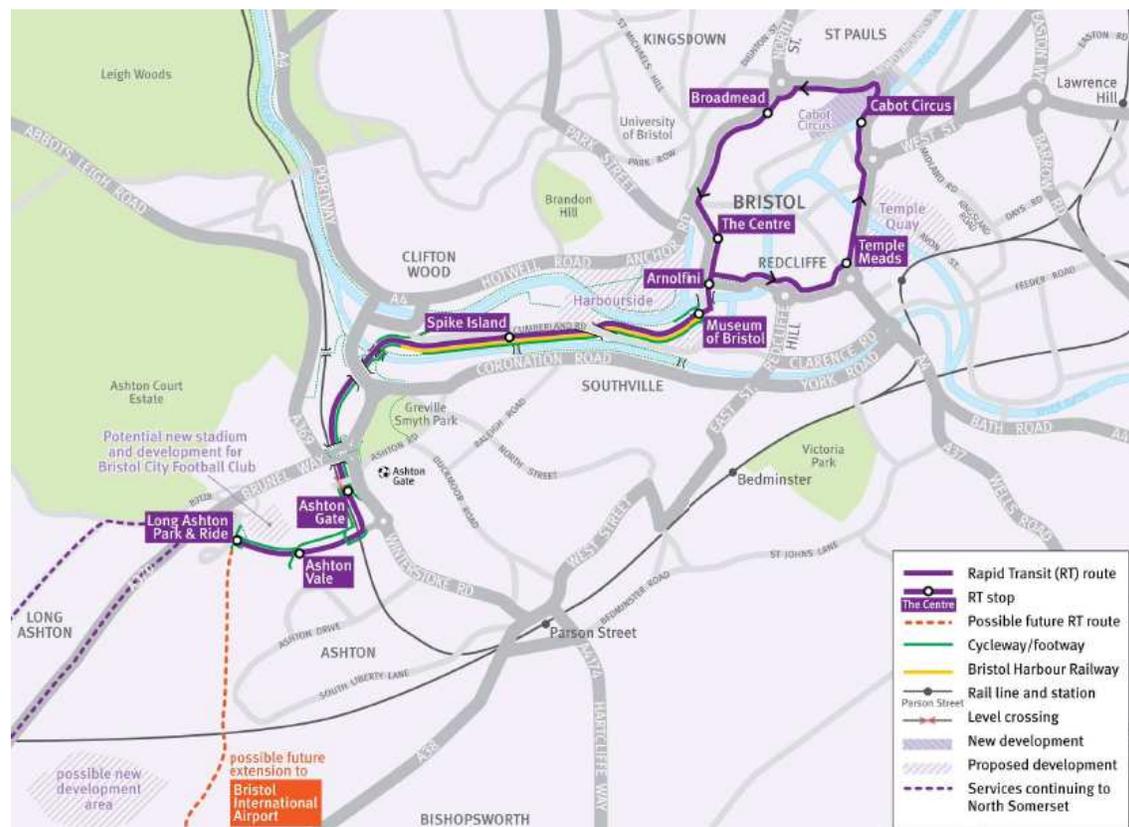
Figure 2: Transport Infrastructure to 2018/2019 and Development Sites proposed by draft Regional Spatial Strategy



## Scheme Description

- 16 The Rapid Transit Scheme will provide a fast, frequent and reliable public transport service. Services will run on a largely segregated route, separate from car traffic, and will be given priority over other road users at traffic signals.
- 17 There will be a set of core services running frequently from Long Ashton Park and Ride to Bristol Temple Meads and on to Cabot Circus, Broadmead and the Centre (running in an anti-clockwise loop around the city). Additional services will make use of the Rapid Transit Scheme to provide faster journey times and improved reliability for services to North Somerset (Weston-super-Mare, Clevedon and Nailsea).
- 18 The Rapid Transit Scheme will provide a high quality passenger experience - ticket machines at stops, user-friendly electronic information displays, high quality stop design, safe and secure access to stops. The route between the Museum of Bristol and Long Ashton Park and Ride will include a parallel cycling and pedestrian route linking in to existing networks thereby providing a further sustainable transport option.
- 19 The Rapid Transit Scheme is shown in Figure 3.

Figure 3: Ashton Vale to Temple Meads and Development Sites proposed by draft Regional Spatial Strategy



- 20 Services will be run using modern, accessible, comfortable, low-emission vehicles that provide the quality and feel of a high quality metro-style system. The Authorities are committed to exploring the range of alternative fuel sources with potential operators. These would offer considerable environmental improvements with lower noise levels, fewer greenhouse gas emissions and less harmful local pollutants. Access to the Rapid Transit Scheme will be open to operators meeting quality thresholds which will govern vehicle and service standards.
- 21 Works in Bristol City Centre include a new interchange at Temple Meads. These works are part of wider regeneration and development proposals for the area including Network Rail’s station enhancement programme. The Authorities will work with the South West Regional Development Agency, Network Rail, First Great Western, bus operators and developers to realise the significant benefits of this site.
- 22 The Rapid Transit Scheme will serve:
- Bristol Temple Meads Railway Station.
  - New and planned liberty development at Redcliffe and Temple Quay.
  - Retail and employment areas of the new Cabot Circus development and Broadmead.
  - Retail and employment areas around The Centre and interchange with bus services.
  - The refurbished Museum of Bristol and planned Wapping Wharf development.

- Spike Island and the SS Great Britain.
  - The potential new stadium and development of Bristol City Football Club.
  - Long Ashton Park and Ride.
  - Weston-super-Mare, towns and villages in North Somerset.
- 23 There is potential for an early extension of the Rapid Transit Scheme to serve Bristol International Airport and the draft RSS aspiration of a development at Ashton Park of at least 10,000 dwellings and associated mixed-use development.

### Scheme Appraisal

- 24 The benefits of Rapid Transit Scheme are:
- Improved journey times and reliability from the south west of the sub-region to Bristol City Centre.
  - Provision of a high-quality, more sustainable choice of travel - rapid transit and cycling or walking.
  - Shift of trips to more environmentally sustainable transport modes, reducing carbon emissions and local pollutants. Improving physical activity and quality of life through encouraging walking and cycling.
  - Improved connectivity between existing centres of activity with new and proposed development. Contributing to a more reliable and efficient transport network to improve business efficiency, movement of labour and connections to national and international networks.
  - Improved accessibility to and from the south west of the sub-region to the existing public transport network, without the need for interchange, particularly Bristol Temple Meads Railway Station.
  - Shift of trips to a safer transport mode.
  - Better use of an under-used existing transport corridor and retaining road network capacity.
  - Opportunity to facilitate sustainable development and improved connectivity to Bristol International Airport.
- 25 The Rapid Transit Scheme has a strong and supportive strategic background and assists in the delivery of local, regional and national policies. The scheme objectives and benefits align closely with Government's goals of addressing climate change, maximising competitiveness and efficiency of our economy, contributing to health and longer life expectancy, improving the quality of life and producing greater equality of transport opportunity.

- 26 The economic appraisal of the scheme results in a benefit to cost ratio of 4.12:1 representing high value for money.
- 27 The key milestones in the project programme are:
- Submission of draft Transport and Works Act Order (to obtain required consents to construct and operate the scheme) - end 2009.
  - Conditional Approval application to DfT - 2011.
  - Procurement/tendering process - 2010/2011.
  - Commencement of construction - end 2011.
  - Operational services - 2013.
- 28 The Rapid Transit Scheme will replace the existing Long Ashton Park and Ride service. The Authorities are reviewing a range of options for procuring an operator, or operators, to run services. The Authorities will use the powers afforded by the new Transport Act (2008) to ensure that arrangements are put in place that deliver the Rapid Transit Scheme's objectives and present value for money to the Authorities, central Government and the paying public.
- 29 Local bus operators, First and Wessex Connect, support the submission of the MSBC to the DfT.
- 30 The Authorities are also reviewing a range of options for procuring the rapid transit infrastructure. Parts of the scheme such as information systems, CCTV, traffic signals and bus lanes are already delivered regularly by the Authorities and it is likely that existing or extensions to existing, arrangements will be taken advantage of. The larger construction elements of the scheme are likely to be procured through a design and build contract. These options will be further reviewed at the next stage of scheme development to ensure value for money; that risk to the Authorities is managed and reduced; and a robust and deliverable programme.
- 31 The capital cost estimate for the Rapid Transit Scheme is £47.8 million. £43.2 million is allocated in the draft South West Regional Funding Allocation to be submitted to the DfT at the end of February 2009. The South West Region fully supports the submission of a major scheme business case to DfT for this funding. Around 10% of the required funding will be provided from local sources. The Authorities will seek this funding from developments related to the Rapid Transit Scheme and potentially from operators.
- 32 A forward programme of scheme development and associated costs has been identified and included within the MSBC submission. 50% of the eligible scheme development costs after Programme Entry will be funded by DfT and 50% by the Authorities.

## Summary

- 33 The proposed Rapid Transit Network has a strong strategic background with its roots in the Greater Bristol Strategic Transport Study which identified rapid transit as one of a series of necessary measures to ensure sustainable growth and development in the West of England.
- 34 The West of England Authorities have undertaken considerable feasibility and assessment work to identify a deliverable and value for money network and to determine the first route of the network to come forward for funding: Ashton Vale to Temple Meads via Bristol City Centre.
- 35 The Rapid Transit Scheme is a regional priority for the South West and is fully supported by the Regional Assembly and Regional Development Agency. It is also has broad support from local stakeholders, the general public and local bus operators.
- 36 Start of construction is estimated for 2011, after obtaining the required powers and planning permissions. The submission of a draft Transport and Works Act Order is planned for later in 2009 subject to a successful Programme Entry application.