

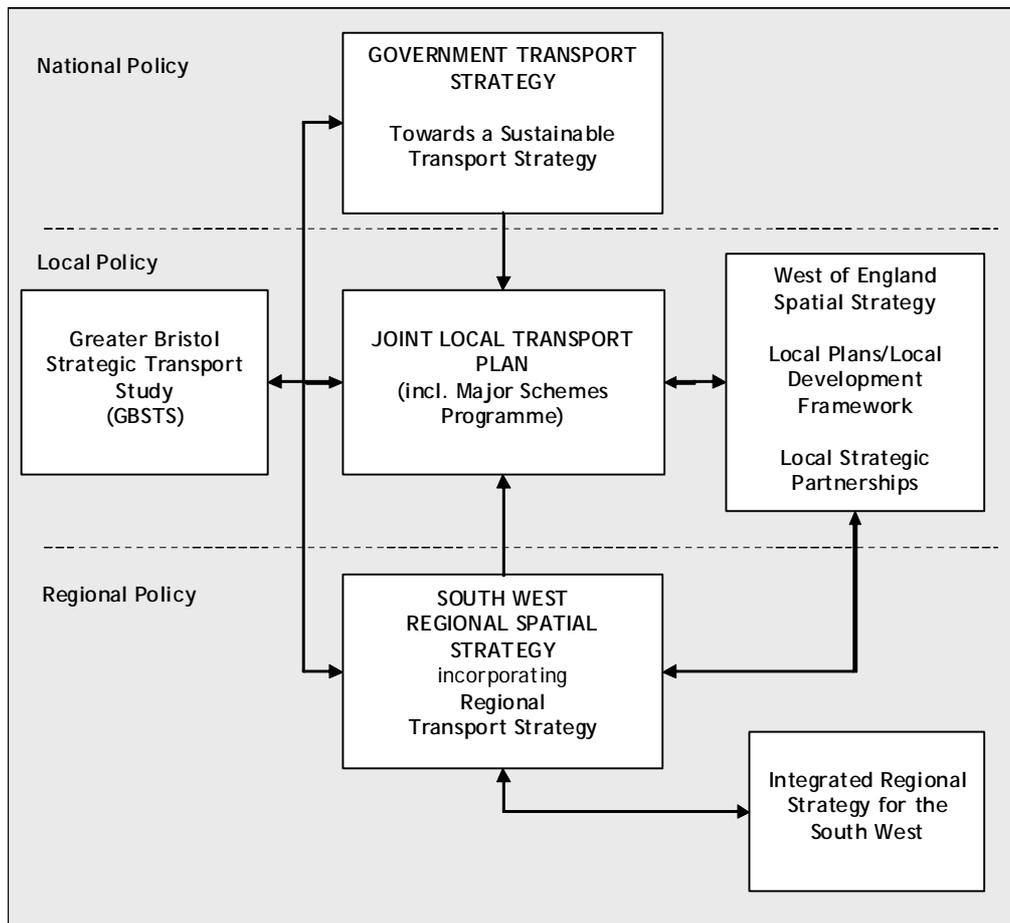
2C Policy and Planning

2C.1 Introduction

This appendix sets out in more detail the policy and planning considerations for the Ashton Vale to Temple Meads via Bristol City Centre rapid transit scheme (“the Rapid Transit Scheme”).

A simplification of the transport policy framework for the Rapid Transit Scheme is set out in Figure 2C.1

Figure 2C.1 Transport Policy Framework for the Rapid Transit Scheme



2C.2 National Policy

2C.2.1 The Eddington Transport Study, Sir Rod Eddington (2006)

The Eddington Transport Study highlighted the vital role that transport plays in supporting the continued economic success of the UK. It noted that economic growth drives transport demand and that the Government and private sector will need to show foresight to deliver a transport system capable of supporting the continued success of the UK economy, to both compete globally and meet environmental challenges.

The report sets out clear steps to ensure that investment in infrastructure in the UK rises to the challenges that the UK faces and gave five key recommendations to the Government. These five recommendations were:

- to make the most of the existing transport infrastructure by tackling congestion and capacity issues;
- to identify the strategic economic priorities - today, in the UK these are congested and growing cities, key inter-urban and international gateways;
- to introduce a sophisticated mix of pricing, better use and sustained transport infrastructure investment;
- to enshrine a systematic and transparent approach to policymaking and funding; and
- to ensure that the delivery system, including planning and governance arrangements, is ready to meet the future challenges with the right tools, capacity and funding at its disposal.

2C.2.2 The Stern Review on the Economics of Climate Change, Sir Nicholas Stern (2006)

The Stern Review was commissioned in response to the consensus in the scientific community that climate change is a serious global threat and demands an urgent global response. It assessed a wide range of evidence on the impacts of climate change and on the economic costs, and used a number of different techniques to assess costs and risks.

The headline conclusions of the Stern Review were that there is still time to avoid the worst impacts of climate change if strong action is taken now and that the benefits of this strong and early action far outweigh the economic costs of not acting. Estimates suggest that transport contributed 14% of greenhouse gas emissions in 2000. Stern proposed four ways to cut greenhouse gas emissions:

- Reducing demand for emissions-intensive goods and services.
- Increased efficiency, which can save both money and emissions.
- Action on non-energy emissions, such as avoiding deforestation.
- Switching to lower-carbon technologies for power, heat and transport.

In terms of transport this would mean to reduce demand, increase efficiency of transport and to switch to lower-carbon technologies.

2C.2.3 Towards a Sustainable Transport System, 2007

In response to the Eddington Study and the Stern Review, in 2007 the Department for Transport published “Towards a Sustainable Transport System” (TaSTS). TaSTS describes how the Government is “*responding to improve transport’s contribution to economic growth and productivity, how it is ensuring that transport will play its part in delivering the overall level of reductions in carbon emissions, sets out the Department for Transport’s policy and investment plans for the period to 2013-14...[and] proposes a new approach to longer term transport strategy*”.

TaSTS outlines five goals for transport, the key components of the national infrastructure, the difficulties of planning over the long term in the context of uncertain future demand and describes the investments needed in transport networks.

The five goals identified are:

1. Maximising the overall competitiveness and productivity of the national economy so as to achieve a sustained high level of GDP growth.

Eddington identified that a comprehensive and high-performing transport system is a key enabler of sustained economic prosperity. He recommended that the focus should be on travel for work in the urban areas, on the inter-urban corridors between these cities and on the principal international gateways through which freight and business travellers pass. Key principles within this goal are the reliability, connectivity and resilience.

At the sub-regional level this goal is particularly relevant in terms of the West of England area and its role as the economic hub of the South West Region. Central to regional and local planning policy is a well-functioning Bristol urban area and Bath (as Strategically Significant Cities), sub-regional transport hubs such as Bristol Temple Meads and Bristol Parkway and their role in connecting the South West to the rest of the UK, and international connections through our Ports and Airports.

2. Reducing transport’s emissions of CO2 and other greenhouse gases, with the desired outcome of avoiding dangerous climate change.

TaSTS stresses the need to reduce the level of carbon dioxide (CO2) emissions and other greenhouse gases through the way transport is planned and provided in the UK. The UK Climate Change Bill will set ambitious targets for greenhouse gas emission reductions across the economy looking at least a 26% reduction in CO2 emissions by 2020.

Planning at the sub-regional and local level is critical to achieving this target with the contribution that trips made within urban areas make. At a local level there is a need to change travel behaviour and/or reduce the need to travel in urban areas which could bring significant benefits both locally and to the overall national aims. Critical to this is the shift of trips from private cars to public transport through provision of a high quality system that competes with the private car.

3. Contributing to better health and longer life-expectancy through reducing the risk of death, injury or illness arising from transport, and promoting travel modes that are beneficial to health.

TaSTS aims not only to reduce the risks of accidents to transport systems to users, workers and third parties from transport but further looks to ensure that transport has a positive impact on life expectancy and physical well-being across the community.

At the sub-regional and local level we need to address the negative impacts of transport on public health and promote the health benefits of cycling and walking. These are central to regional and local policy and interwoven through the major schemes programme and the Rapid Transit Scheme.

4. Improving quality of life for transport users and non-transport users, including through a healthy natural environment, with the desired outcome of improved well-being for all.

TaSTS looks to ensure that transport contributes to improving the quality of our communities and environments. Transport can improve the quality of life through improved accessibility to the things people need, improved connectivity to the community, increased community empowerment and involvement in the transport network, particularly through use of public transport and reducing the harmful side effects of travelling and constructing transport schemes.

“A Rising Quality of Life for all” is the vision for the West of England sub-region. This translates into a series of objectives and, more importantly, delivery of an integrated transport system that will retain and improve the natural and social environment, ensure that alternatives to the car are a realistic first choice and offers an affordable, safe reliable and simple system to use.

5. Promoting greater equality of transport opportunity for all citizens, with the desired outcome of achieving a fairer society.

Tackling disadvantage in local areas is a Government priority. TaSTS identifies that this is delivered primarily by local authorities, who best understand the needs of neighbourhoods and of sections of their community. Transport can contribute to achieving wider aims, which will need to be considered as authorities prepare their Sustainable Community Strategies, Local Area Agreements and Local Development Frameworks.

The West of England sub-region is relatively prosperous but there are still areas where social inclusion and deprivation are significant issues. This goal relates to the South West and West of England objectives of achieving more balanced and sustainable communities.

2C.2.4 Update to TaSTS: Challenges Matrix: Cities & Regional Networks

In July 2008 the DfT issued an update note for TaSTS which outlines progress on the design of the TaSTS process going forward, and also for the carbon reduction strategy for transport which the Government has committed to produce. It provides further clarification of the specific challenges relating to each of the five goals.

The TaSTS update note sets out the purpose of the challenges as being “*to give those tasked with generating options a clear steer on the improvements that they need to deliver and those who have commissioned the options a means of identifying the most promising ones*”.

The challenges are:

Goal: Climate change

- Deliver quantifiable reductions in CO2 emissions on urban, regional and local networks consistent with supporting delivery of DfT strategic objectives and other wider Government goals

Goal: Competitiveness and Productivity

- Reduce lost productive time including by maintaining and/or improving the reliability and predictability of journey times on key local routes for business, commuting and freight.
- Support regional economic growth by increasing size of local workforce within [30] minutes of key business centres, and improving connectivity between business centres and with national / international networks.
- Support the delivery of housing, and in particular the PSA target of increasing supply to 240,000 net additional dwellings per annum by 2016 by facilitating the conditions for the housing to be delivered while limiting increased congestion
- Ensure local transport networks continue to operate effectively because assets / infrastructure are properly planned, designed and maintained including to be resilient to shocks and impacts such as adverse weather, accidents, terrorist attacks and impacts of climate change.

Goal: Equality of Opportunity

- Enhance social inclusion and the regeneration of deprived areas by enabling disadvantaged people to connect with employment opportunities, key local services, social networks and goods through improving accessibility, availability, affordability and acceptability.
- Contribute to the reduction in the gap between economic growth rates for different regions.

Goal: Health, Safety and Security

- Reduce the risk of death or injury to the public due to transport accidents.
- Reduce the risk of death or injury for transport industry employees and those driving for work.
- Reduce social and economic costs of transport to public health, including air quality impacts
- Reduce vulnerability of transport networks to terrorist attack.
- Improve health outcomes for individuals through encouraging and enabling more physically active travel
- Reduce crime, fear of crime and anti-social behaviour on urban, regional and local transport networks.

Quality of Life and the Natural Environment

- Bear down on noise.
- Minimise the impacts of transport on the natural environment and seek solutions which deliver long-term environmental benefits.
- Minimise the impacts of transport on heritage, landscape and communities
- Improve the quality of transport integration into streetscapes and the urban environment.
- Improve the journey experience of transport users of urban, regional and local networks including at the interfaces with national networks and international networks.
- Improve access to leisure activity and social contact which enhances people's personal wellbeing and sense of community

Table 2C.1 summarises the TaSTS goals and challenges and relates this to the Rapid Transit Scheme. The benefits and contribution to these goals of the wider Rapid Transit Network is considerably greater, not simply due to the additional routes, but also as a result of the synergies and additional connectivity created for the Rapid Transit Scheme.

2C.1 TaSTS and The Rapid Transit Scheme

Goal	Challenge	Measure being Developed (relevant to scheme)	The Rapid Transit Scheme...
Climate Change	Deliver quantifiable reductions in CO2 emissions on urban, regional and local networks consistent with supporting delivery of DfT strategic objectives and other wider Government goals	Changes in levels of CO2 emissions per capita Changes in levels of CO2 emissions from transport	... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles. ...provides direct links to Temple Meads and Bristol Bus Station improving attractiveness and ease of the public transport network. ... promotes/encourages cycling and walking trips.
Competitiveness and Productivity	Reduce lost productive time including by maintaining and/or improving the reliability and predictability of journey times on key local routes for business, commuting and freight.	Average journey time per mile on key local road routes, in all cases for vehicle time and for person journey time.	... improved journey times and reliability from the south west of the sub-region to Bristol City Centre. ...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks.
	Support regional economic growth by increasing size of local workforce within [30] minutes of key business centres, and improving connectivity between business centres and with national / international networks. Support the delivery of housing, and in particular the PSA target of increasing supply to 240,000 net additional dwellings per annum by 2016 by facilitating the conditions for the housing to be delivered while limiting increased congestion	The number of working age people living within a given time by public transport/walking or cycling of employment centres employing 500 people or more. Other agglomeration benefits, e.g. business to business accessibility	...is an integral part of West of England Strategy to deliver draft RSS proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000). ...improves accessibility of through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas. ... facilitates development and employment at Ashton Park and Bristol International Airport. ...facilitates business investment, viability and attractiveness of new development sites.

Goal	Challenge	Measure being Developed (relevant to scheme)	The Rapid Transit Scheme...
	Ensure local transport networks continue to operate effectively because assets / infrastructure are properly planned, designed and maintained including to be resilient to shocks and impacts such as adverse weather, accidents, terrorist attacks and impacts of climate change.	Indication of the condition of principal and classified roads A measure of progress in assessing and addressing the risks and opportunities of a changing climate, including risks to transport	...segregates the routes as far as possible thereby minimising impacts on the road network, retaining road network capacity as far as possible and improving resilience of the network. ...is designed to current standards and guidelines to ensure longevity and resilience of the scheme. ...provides new, additional choice of mode in the transport network.
Equality of Opportunity	Enhance social inclusion and the regeneration of deprived areas by enabling disadvantaged people to connect with employment opportunities, key local services, social networks and goods through improving accessibility, availability, affordability and acceptability.	Improve journey time accessibility to key services Improve access to employment Travel to work times and transport acting as a barrier to work Children travel to school	...provides direct links to Temple Meads and Bristol Bus Station. ...directly serves key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas. ... facilitates development and employment at Ashton Park and Bristol International Airport. ...provides potential link to future passenger services on Portishead Line.
	Contribute to the reduction in the gap between economic growth rates for different regions.	-	...improves access for Ashton Vale to the rail network and Bristol City Centre. ...promotes social inclusion by improving this access.
Health, Safety and Security	Reduce the risk of death or injury to the public due to transport accidents.	Reduction in accidents Reduced casualty risk within vulnerable groups	...removes trips from the road network and on to a safer mode. ... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme. ... provides safer off street cycling and walking route.

Goal	Challenge	Measure being Developed (relevant to scheme)	The Rapid Transit Scheme...
	Reduce the risk of death or injury for transport industry employees and those driving for work	Reduction in work related road accidents	... will be designed to current standards and guidelines to ensure a safe scheme to construct and operate.
	Reduce social and economic costs of transport to public health, including air quality impacts	Improved air quality Reduction in deaths due to air quality / pollution	... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles. ... promotes/encourages cycling and walking trips and associated health benefits.
	Reduce vulnerability of transport networks to terrorist attack.	Reduction in residual risk Acceptability and cost effectiveness of measures	... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme.
	Improve health outcomes for individuals through encouraging and enabling more physically active travel	Increased levels of walking and cycling Reduction in obesity levels (child & adult) Increase in % of adults meeting recommended minimum physical exercise	... promotes/encourages cycling and walking trips and associated health benefits. ... promotes sustainable transport as part of lifestyle.
	Reduce crime, fear of crime and anti-social behaviour on urban, regional and local transport networks.	Fewer crimes on the urban, regional and local transport networks. Improved public confidence in safety of using public transport Fewer instances of anti-social behaviour on the urban, regional and local transport networks.	... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme. ... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.

Goal	Challenge	Measure being Developed (relevant to scheme)	The Rapid Transit Scheme...
Quality of Life	Bear down on noise	EU noise measures	<p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels.</p> <p>... will be designed to current standards and guidelines to reduce any noise impacts of the scheme.</p>
	Minimise the impacts of transport on the natural environment and seek solutions which deliver long-term environmental benefits.	<p>Assessment of overall impacts from NATA Appraisal Summary Table combined with post-scheme appraisal information.</p> <p>Land take change in open countryside / designated areas</p> <p>Traffic levels in designated areas</p> <p>Impacts on indicator species and habitats</p>	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels.</p> <p>.... will be designed to current standards and guidelines to reduce the impact on the natural environment as far as possible.</p>
	Minimise the impacts of transport on heritage, landscape and communities	Assessment of overall impacts from NATA Appraisal Summary Table	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels.</p> <p>.... will be designed to current standards and guidelines to reduce the impact on the natural environment as far as possible.</p> <p>...retains existing Harbourside Heritage railway whilst making better use of this corridor overall.</p>

Goal	Challenge	Measure being Developed (relevant to scheme)	The Rapid Transit Scheme...
	<p>Improve the quality of transport integration into streetscapes and the urban environment.</p>	<p>No. of Home zones No. of Ecotowns and Growth Points represent exemplars in terms of sustainable transport No. of streetscape projects by local authority</p>	<p>...is Integral part of West of England Strategy to deliver Regional Spatial Strategy proposals sustainably ...directly related to proposed development sites in the sub-region ...facilitates and promotes integrated land use and transport planning ... will be designed to current standards and guidelines to reduce the impact on the built environment and enhance streetscape as far as possible</p>
	<p>Improve the journey experience of transport users of urban, regional and local networks including at the interfaces with national networks and international networks.</p>	<p>Levels of overcrowding Comfort levels</p>	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles. ...provides direct links to Temple Meads and Bristol Bus Station improving integration with national rail and coach networks. ... facilitates sustainable development at Bristol International Airport. ...provides potential link to future passenger services on Portishead Line.</p>

Goal	Challenge	Measure being Developed (relevant to scheme)	The Rapid Transit Scheme...
	<p>Improve access to leisure activity and social contact which enhances people's personal wellbeing and sense of community</p>	<p>–</p>	<p>... improves access to facilities</p> <p>... promotes/encourages cycling and walking trips and associated health benefits</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space</p> <p>... promotes sustainable transport as part of lifestyle</p>

2C.2.5 Delivering a Sustainable Transport System and Draft Guidance to Regions

Delivering a Sustainable Transport System (DaSTS), published in November 2008, sets out the Department's plans for putting TaSTS "*into action in a way that both tackles our immediate problems and also shapes our transport system to meet the longer term challenges*".

DaSTS repeats the goals of TaSTS and also discusses planning for uncertainty, the wider national framework and a delivery strategy.

At a national level, the Bristol, or West of England, area is specifically referenced in its role as the eighth largest urban area in the UK and tenth busiest Port with important international connections.

Whilst the Rapid Transit Scheme is within a wider integrated transport plan that looks at the importance and needs of the national and international connections, it is the focus on Regional Funding Allocations (RFAs) to support targeted investment in public transport schemes and investment in urban areas that is of most relevance to this major scheme bid.

Draft guidance to regions, also published in November 2008, reaffirms the role of the regions in option generation for regional and local investment.

2C.2.6 Local Transport Act 2008

The Local Transport Act is a key part of the Government's strategy to empower local authorities to take appropriate steps to meet local transport. The Local Transport Bill received Royal Assent at the end of 2008.

It is intended that the Act will:

- Give local authorities the right mix of powers to improve the quality of local bus services;
- Allow for the creation of an influential new bus passenger champion to represent the interests of bus passengers;
- Give local authorities the power to review and propose their own arrangements for local transport governance to support more coherent planning and delivery of local transport;
- Update existing legal powers so that, where local areas wish to develop proposals for local road pricing schemes, they have the freedom and flexibility to do so in a way that best meets local needs - whilst ensuring schemes are consistent and interoperable.

The West of England Authorities will be looking to exploit the new powers afforded by the Local Transport Act, particularly the measures that look to improve partnership working between local authorities and bus operators, including voluntary partnership agreements and quality partnership schemes.

2C.3 Regional Policy

2C.3.1 Regional Planning Guidance for the South West (RPG10)

The Regional Planning Guidance for the South West (RPG10) was formally adopted in November 2001 and sets out the regional context within which local authority development plans and local transport plans in the region should be prepared. This includes a broad development strategy for the period to 2016 and beyond; a spatial framework for other strategies and programmes; and the long term planning framework that will influence future iterations of the regional guidance.

The Regional Planning Guidance for the South West September 2001 emphasises the need to reduce the impact of transport on the environment by reducing the need to travel, encouraging travel by more sustainable means and locating development at accessible locations, particularly by public transport.

The vision of RPG10 is:

“developing the region, in a sustainable way, as a national and European region of quality and diversity, where the quality of life for residents, the business community and visitors will be maintained and enhanced.”

2C.3.2 Draft Regional Spatial Strategy for the South West (RSS)

The Regional Spatial Strategy for the South West (RSS) is currently in an advanced draft form; the draft document was approved by the Regional Assembly in March 2006 for submission to the Government in April of the same year. Subsequent to that, the draft RSS was subject to public consultation in the summer of 2006 and has since been through Examination in Public, with the Independent Panel’s report having been published in January 2008.

The Secretary of State for Communities and Local Government, published the Proposed Changes to South West’s long term plan in July 2008, which marked the start of a 12 week consultation, which Government Office for the South West ran until October 2008. The Secretary of State’s Proposed Changes to the draft RSS take account of the Examination in Public Panel’s recommendations along with representations made about the draft RSS and other relevant evidence. After considering any further views received as a result of the consultation on the Secretary of State’s Proposed Changes, the final Regional Spatial Strategy is expected to be published in the Summer 2009.

The draft RSS recognises the diverse needs and potential for change of different places and parts of the region. It notes that development will be planned to meet the needs of all the communities in the region and to realise their potential within environmental limits. It incorporates the Regional Transport Strategy, which sets out how proper planning of transport, and strategic and local investment in services and facilities will assist the achievement of the Spatial Strategy.

Land use and development changes will continue to have a significant impact on travel behaviour, use of the car and increasing congestion.

The draft RSS contains four main policies. The parts of these relevant to the Rapid Transit Scheme are:

SD1, The Ecological Footprint - The region's ecological footprint will be stabilised and then reduced by:

- ensuring that development respects environmental limits;
- minimising the need to travel by better alignment of jobs, homes and services, reducing the reliance on the private car by improved public transport and effective planning of future development, and a strong demand management regime applied in the region's main centres in particular;
- requiring a shift towards the more sustainable modes of transport.

SD2, Climate Change - The region's contribution to climate change will be reduced by:

- reducing greenhouse gas emissions at least in line with current national targets;
- following the principles outlined in SD1.

SD3, The Environment and Natural Resources - The region's environment and natural resources will be protected and enhanced by:

- reducing the environmental impact of the economy, transport and development;
- positively planning to enhance natural environments through development, taking a holistic approach based on landscape or ecosystem scale planning; planning and design of development to reduce pollution and contamination and to maintain tranquillity;
- positive planning and design to set development within, and to enhance, local character (including setting development within the landscape of the historic environment), and bringing historic buildings back into viable economic use and supporting regeneration.

SD4, Sustainable Communities - Growth and development will be planned for and managed positively to create and maintain Sustainable Communities throughout the region by:

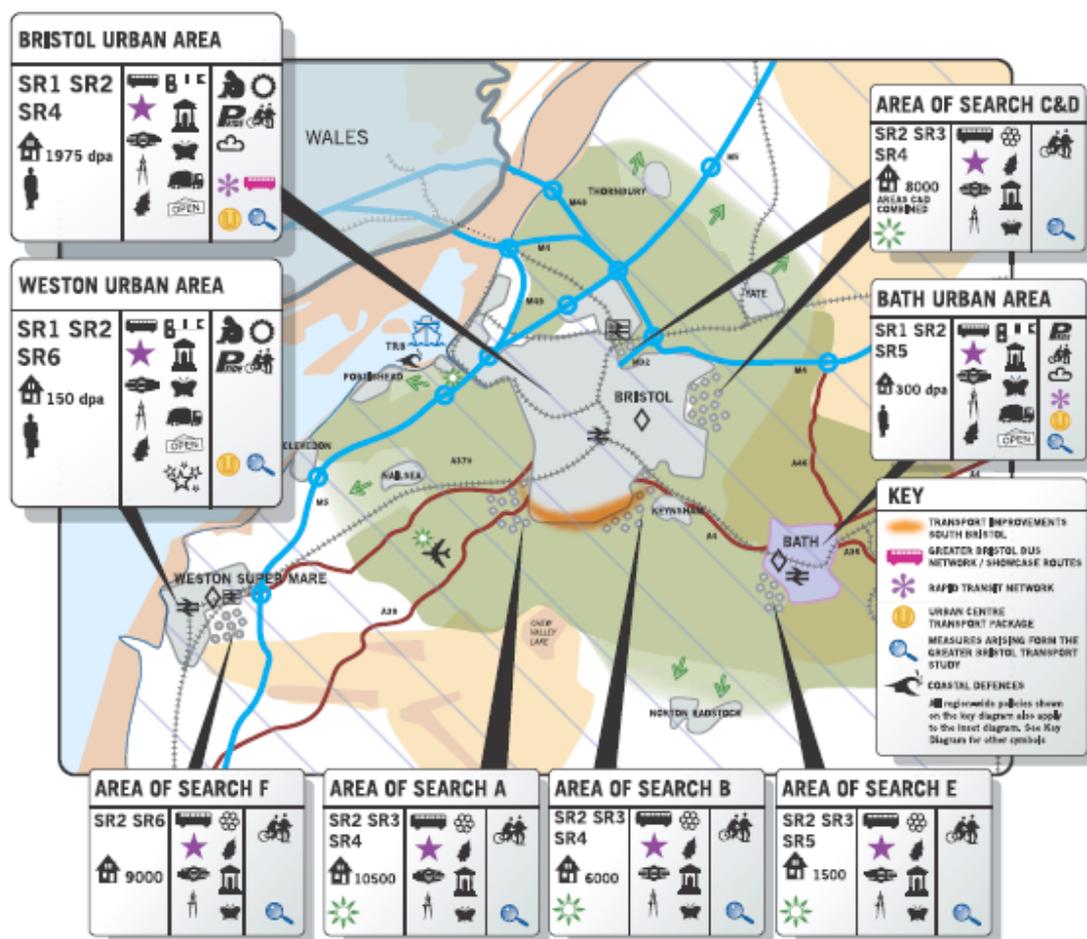
- linking the provision of homes, jobs and services based on role and function so that cities, towns and villages and groups of places have the potential to become more self contained and the need to travel is reduced;
- promoting a step change in public transport, taking steps to manage demand for travel, and promoting public transport 'hubs' and access to them;
- making the best use of existing infrastructure and ensuring that supporting infrastructure is delivered in step with development;
- providing networks of accessible green space for people to enjoy.

Housing

The broad proposals for the West of England Area are set out in policies SR1, SR2 and SR4, as shown in Figure 2C.2. These provide for over 138,500 new dwellings to sustain the level of economic growth. Some of this housing will be within the existing urban area but there are also some significant development sites such as:

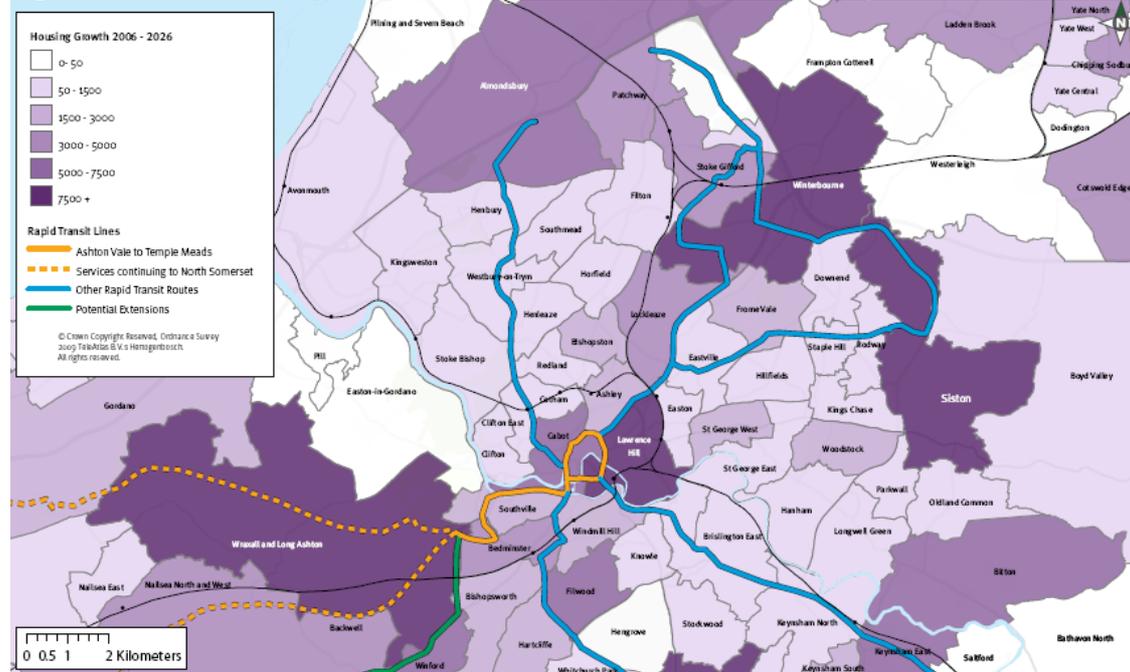
- Emerson's Green – 1,500 dwellings, mixed employment and local facilities, new Science Park.
- South Bristol – 30,000 dwellings, mixed employment and local facilities.
- Temple Quarter – 46 hectares mixed use regeneration.
- Wapping Wharf – mixed use regeneration, 900 dwellings.
- North Fringe - mixed employment and local facilities.
- South West Urban extension – at least 10,000 dwellings, mixed employment and local facilities.

Figure 2C.2 Draft Regional Spatial Strategy (Diagram 4.1)



Much of the development in the last ten to fifteen years has been low density and car based with insufficient investment in transport infrastructure. A continuation of this pattern would result in increased congestion, poorer accessibility for a significant proportion of the population, a degradation of air quality and a general decrease in the quality of life for all.

Figure 2C.3 Planned Dwelling Growth 2006 to 2026 and the Rapid Transit Network



Jobs and Investment

The sub-region is already undergoing an unprecedented level of development in terms of major regeneration schemes. In particular, the rejuvenation of Broadmead shopping centre in central Bristol (Cabot Circus), other city centre schemes at Harbourside, Temple Quay North, Courage Brewery, Western Riverside and Southgate in Bath are all progressing rapidly.

Overall £3bn of investment is forecast to occur up to 2026. This includes:

- Emerson's Green – mixed employment and local facilities, new Science Park.
- South Bristol – mixed employment and local facilities.
- Temple Quarter – 46 hectares mixed use regeneration.
- Harbourside – 66 hectares regeneration projects including refurbishment of the Bristol Industrial Museum and major leisure and office development.
- North Fringe - mixed employment and local facilities.
- South West Urban extension – mixed employment and local facilities.
- Broadmead – retail expansion has increased the scale of shopping by a third with 23,300sqm office floor space and some residential accommodation.

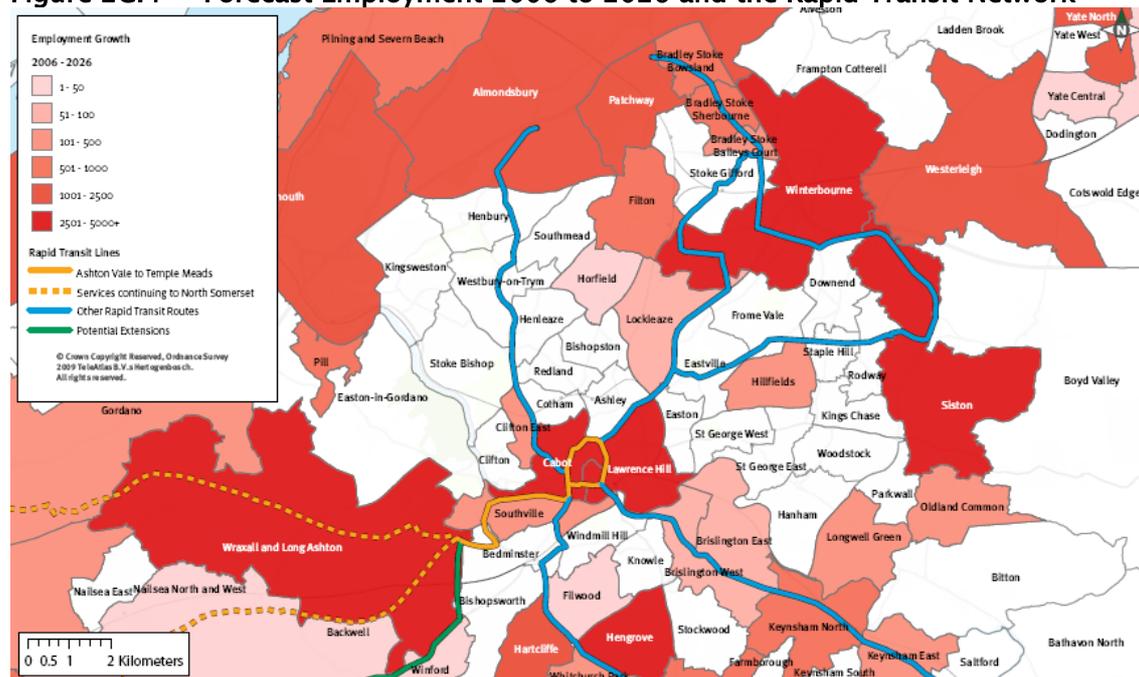
Bristol International Airport

The Airports White Paper forecasts growth at Bristol International Airport catering for eight million passengers in the short/medium term, and 12 million by 2030. Bristol International Airport Ltd, as the airport operator, has recently commenced consultation on its expansion plans prior to submitting a planning application which looks to:

- extend to the terminal building
- provide nine new aircraft stands
- provide new transport links to the airport will take place alongside the development, including improvements to the A38, a new fleet of buses on the Flyer service from Temple Meads, an extension to the Rapid Transit route from Ashton Vale, new bus services to Weston-super-Mare and Bath and a link route around south Bristol.

Forecasts have been prepared for job growth between 2006 and 2031. The main jobs growth areas pre-2016 are expected to be on the fringes of Bristol: the North/North East Fringe, Avonmouth, Keynsham, and also Bath. After 2016 there is also significant growth in jobs forecast in and around Bristol City Centre and in South Bristol.

Figure 2C.4 Forecast Employment 2006 to 2026 and the Rapid Transit Network



The draft RSS recognises that the future economic success of the region is to a large extent reliant upon the Strategically Significant Cities and Towns (SSCTs) functioning more efficiently and effectively as places where people and businesses benefit from well-planned urban environments and transport systems. It states that:

“The Spatial Strategy emphasis of realising the economic potential of the centre and north of the region and of managing growth carefully in the south east is absolutely dependent upon this outcome”.

The draft RSS notes that transport strategies are needed for the SSCTs which are prepared in

a co-ordinated way taking account of the wider hinterland, regardless of administrative boundaries. These strategies will need to identify the strategic investment and management measures required to provide for growth, address congestion, safety and pollution problems, to meet the Government's shared priority targets. They will also identify the transport measures necessary to facilitate regeneration. The West of England Authorities developed the Joint Local Transport plan (JLTP) in response to this. Further detail is provided in Section 2C.4.

Regional Transport Strategy

The draft RSS sets out a series of transport objectives for the South West. Objective 11, Intra-Regional Public Transport applies to the Rapid Transit Scheme. TR11 states:

“Improved rail, bus and coach services will be sought to facilitate sustainable travel between settlements within the region. This will be achieved through the removal of infrastructure constraints; better quality trains and buses/coaches; enhanced station and interchange facilities, station parking and passenger information”.

The Strategy identifies that a strategic rapid transit network will be a vital part of the infrastructure required to support the spatial strategy, particularly in Bristol and Bath. The draft RSS Implementation Plan sets out the major infrastructure investment required in the sub-region to implement the draft RSS which specifically includes:

“...strategic rapid transit network (Hengrove/North Fringe, Ashton Vale/Emerson's Green, Bath/Cribbs Causeway)”.

2C.3.2 Integrated Regional Strategy

The Draft RSS has been developed in the context of the Integrated Regional Strategy. The IRS provides a broad set of aims and objectives and seeks to encourage better integrated regional working. These are:

- To harness the benefits of population growth and manage the implications of population change.
- To enhance our distinctive environments and the quality and diversity of our cultural life
- To enhance our economic prosperity and quality of employment opportunity
- To address deprivation and disadvantage to reduce significant intra-regional inequalities
- To make sure that people are treated fairly and can participate fully in society

2C.3.4 Regional Economic Strategy

The Regional Economic Strategy (RES) provides “*a shared vision for the development of the region’s economy*”.

The RES aims to help ensure stronger and more sustainable communities in the region, as well as communities that connect and work better with each other. It also looks to facilitate growth in places that can make a significant contribution to achieving regional objectives and the need to reduce the region’s eco-footprint and enhance its special environment.

The RES recognises that the West of England, and in particular Bristol, “*has a lead role as a city-region of international, national and regional significance, and can use its status as a national Science City to strengthen the region’s economic base*”.

The vision for the RES is:

“South West England will have an economy where the aspirations and skills of our people combine with the quality of our physical and cultural environment to provide a high quality of life and sustainable prosperity for everyone”.

The RES objectives to support this vision are:

- Successful and competitive businesses.
- Strong and inclusive communities.
- An effective and confident region.

These are underpinned by regional priorities including Priority 3A, “to improve transport networks”. The RES states:

“Journey times from parts of the region to major markets represent a significant brake on productivity while congestion in urban centres remains a problem”.

Improvements needed are reduced journey times to major markets and increased reliability of public transport infrastructure. The RES supports public transport investment in the sub-region. Its states:

“To support the economic development and regeneration opportunities in these areas, and particularly in the West of England, we must address the problem of congestion through sustainable transport measures”.

2C.3.4 Regional Funding Allocation

The current approved regional funding programme for the South West sets out Central Government investment in the West of England’s major transport schemes to 2016.

The priorities for the Regional Funding Allocation investment are consistent with wider national policy objectives and build on current and emerging regional strategies including the Integrated Regional Strategy, the Regional Economic Strategy and draft RSS. The priorities are also guided by the principles of the Regional Sustainable Development Framework.

The priorities for investment of the Transport RFA funding are:

- Promoting more sustainable patterns of transport.
- Supporting development and economic activity in the strategically significant towns and cities through improved public transport, demand management, and selectively providing for new roads.
- Improving the reliability and resilience of inter and intra-regional connectivity through a second strategic road route into the region from London (along the A303/A358), on regionally significant transport corridors and on other transport corridors.
- Tackling access to jobs and delivery of services in rural areas.
- Delivering against DFT/ Regional "shared priorities".

The Greater Bristol Strategic Transport Study (GBSTS) (discussed below at 1E.4.1) identified a total funding requirement for the four identified rapid transit routes of £152.4 million (2005 prices) (the first three schemes totalling £121.9 million (2005 prices)) and this was submitted to the South West Regional Assembly for inclusion in the first round of Regional Funding (RFA1).

Regional Funding Allocation advice on transport (RFA1) submitted to the Government contained a set of regional priorities set out in two linked tables which included the first three rapid transit routes for the West of England. Ministers accepted these regional transport priorities in July 2006 and included to a total of £71 million (2006 prices) for rapid transit, Table 2C.2.

Table 2C.2 Extract of the January 2006 Regional Funding Allocation

Rapid Transit Scheme	£ millions (2006 prices)					TOTAL
	11/12	12/13	13/14	14/15	15/16	
Hengrove to North Fringe	12.0	2.3	2.3	2.3	2.3	21.2
Ashton Vale to Emerson's Green	-	7.0	7.0	7.0	7.0	28.0
Bath to Cribbs Causeway	-	5.5	5.5	5.5	5.5	22.0
TOTAL	12.0	14.8	14.8	14.8	14.8	71.2

In 2006 the West of England Authorities commissioned work towards submission of a Major Scheme Bid to the Department for Transport for rapid transit. This work has included the assessment of route priorities, in terms of which routes in the network should come forward first and the choice of rapid transit technology. Consultants recommended "rubber-wheeled rapid transit with the first route running from Ashton Vale to Emerson's Green". This represented an amendment to the priority order in the RFA1 programme (development of the scheme is covered further in Appendix 2B).

The initial feasibility work and subsequent more detailed work has identified that in order to meet the aim of providing a choice for cars users, and thus achieving a high mode shift from

car, it was necessary to ensure that the Rapid Transit Network had a high level of journey time reliability with fast and frequent services. To achieve this journey time reliability the consultants recommended that the system be segregated from general traffic as far as possible and for much improved bus lanes and prioritised signal junctions where full segregation was not possible. These recommendations were a higher level of segregation compared to those assessed in GBSTS. In addition, it was identified that further technical work on route options would need to be undertaken on the Temple Meads to Emerson’s Green section of the route to clarify the potential impacts of the route options on communities and the amenity of possible alignments.

The West of England Authorities reviewed the scheme and determined that the first major scheme bid should be for Phase 1 running from Ashton Vale to Temple Meads via Bristol City Centre (the Rapid Transit Scheme). The revised estimates for the regional funding allocation update (RFA2) were provided in October 2008.

The cost estimate for this level of segregation for the Rapid Transit Scheme is £47.8 million (outturn prices) with a funding request from the South West region for £43.2m. These estimates are more in line with the costs for other current segregated rapid transit schemes.

Table 2C.3 Extract of the RFA2 response from the South West Region

Rapid Transit Scheme	£ millions (outturn prices)			
	11/12	12/13	13/14	TOTAL
Capital Funding	6.966	20.185	16.021	43.172

The Regional Assembly and Regional Development Agency fully support the Rapid Transit Scheme and submission of this MSBC in accordance with the table above which has been incorporated in to the South West Region’s advice to Government (RFA2). Letters of support from the Regional Assembly and Regional Development Agency are included at Appendix 2D.

Table 2C.4 summarises the Rapid Transit Scheme’s contribution to Regional Policy. The benefits and contribution to these strategies of the wider Rapid Transit Network is considerably greater, not simply due to the additional routes, but also as a result of the synergies and additional connectivity created for the Rapid Transit Scheme.

Table 2C.4 Regional Policy Fit

Policy	Objectives	Rapid Transit Scheme...
Draft Regional Spatial Strategy	Reducing the Region's ecological footprint <ul style="list-style-type: none"> • ensuring development respects environmental limits; • improved public transport • shift towards the more sustainable modes of transport 	... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles. ...provides direct links to Temple Meads and Bristol Bus Station improving attractiveness and ease of the public transport network. ... promotes/encourages cycling and walking trips. will be designed to current standards and guidelines to reduce the impact on the natural and built environment as far as possible.
	Reducing the Region's contribution to climate change <ul style="list-style-type: none"> • reducing greenhouse gas emissions at least in line with current national targets 	... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles. will be designed to current standards and guidelines to reduce the impact on the natural environment as far as possible
	Protecting and enhancing Environment and Natural Resources <ul style="list-style-type: none"> • reducing the environmental impact of transport • planning and design of development to reduce pollution and contamination and to maintain tranquillity • set development within, and to enhance, local character 	... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles. ... facilitates sustainable development through integration with proposed development sites. ...is designed to current standards and guidelines to ensure longevity and resilience of the scheme.

Policy	Objectives	Rapid Transit Scheme...
	<p>Planning and managing growth and development to create and maintain Sustainable Communities</p> <ul style="list-style-type: none"> • linking the provision of homes, jobs and services so that places become more self contained and the need to travel is reduced • promoting a step change in public transport • promoting public transport 'hubs' and access to them • making the best use of existing infrastructure and ensuring that supporting infrastructure is delivered in step with development • providing networks of accessible green space 	<p>...is an integral part of West of England Strategy to deliver Regional Spatial Strategy proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000)</p> <p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>...improves accessibility of through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p> <p>...directly links the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>...segregates the routes as far as possible thereby minimising impacts on the road network, retaining road network capacity as far as possible and improving resilience of the network</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space</p>
Integrated Regional Strategy	Harness the benefits of population growth and manage the implications of population change.	...is an integral part of West of England Strategy to deliver Regional Spatial Strategy proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000)

Policy	Objectives	Rapid Transit Scheme...
	Enhance our distinctive environments and the quality and diversity of our cultural life	<p>... improves access to facilities.</p> <p>... promotes/encourages cycling and walking trips and associated health benefits.</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.</p> <p>... promotes sustainable transport as part of lifestyle.</p>
	Enhance our economic prosperity and quality of employment opportunity	<p>... is directly related to the most congested routes in the sub-region and seeks to remove trips from the road network thereby increasing business efficiency, through time savings and improved reliability for business travellers, freight and logistics operations.</p> <p>...improves accessibility of jobs increasing labour market flexibility, expand labour market catchments, improve job matching.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p> <p>...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p>
	Address deprivation and disadvantage to reduce significant intra-regional inequalities	<p>...directly links the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>... improves access to facilities.</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.</p>

Policy	Objectives	Rapid Transit Scheme...
	Make sure that people are treated fairly and can participate fully in society	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>...directly links the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.</p>
Regional Economic Strategy	Successful and competitive businesses.	<p>... is directly related to the most congested routes in the sub-region and seeks to remove trips from the road network thereby increasing business efficiency through time savings and improved reliability for business travellers, freight and logistics operations.</p> <p>...improves accessibility of jobs increasing labour market flexibility, expand labour market catchments, improve job matching.</p> <p>...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p>

Policy	Objectives	Rapid Transit Scheme...
	Strong and inclusive communities.	<p>...directly links the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>... improves access to facilities.</p> <p>... promotes/encourages cycling and walking trips and associated health benefits.</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.</p>
	An effective and confident region.	<p>...is an integral part of West of England Strategy to deliver draft RSS proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000)</p> <p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p>
Regional Funding Allocation – Investment Priorities	Promoting more sustainable patterns of transport.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>...directly links the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>... promotes/encourages cycling and walking trips.</p>
	Supporting strategically significant towns and cities through improved public transport	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>...facilitates business investment, viability and attractiveness of new development sites</p>

Policy	Objectives	Rapid Transit Scheme...
	Improving the reliability and resilience of inter and intra-regional connectivity through a second strategic road route into the region from London (along the A303/A358), on regionally significant transport corridors and on other transport corridors.	<p>...directly links the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>...contributes to a more reliable and efficient transport network.</p>
	Tackling access to jobs and delivery of services in rural areas.	<p>...provides improved accessibility to villages in north Somerset in to Bristol City Centre.</p> <p>... directly serves key existing and proposed hubs of employment at Temple Quay, Redcliffe, Ashton Park</p>
	Delivering against DFT/ Regional "shared priorities"	As set out above and Table 2C.1.

2C.4 Local Policy and Plans

The West of England Authorities are working together as the West of England Partnership to tackle transport and other major strategic issues. As part of this we have established overall vision for the area which guides the setting of objectives, policies and implementation. This vision is:

- A rising quality of life for all.
- Easier local national and international travel.
- Cultural attractions that make the West of England a place of choice.
- Approach to delivery that is energy efficient, protects air quality, minimises waste and protects and enhances the natural and built environment.
- Makes positive use of the mix of urban and rural areas.

2C.4.1 Greater Bristol Strategic Transport Study, Government Office for the South West (2006)

A comprehensive transport study to assess the current and future strategic transport needs of the West of England sub-region was completed in 2006. Known as the Greater Bristol Strategic Transport Study (GBSTS), this was commissioned by the Government Office for the South West (GOSW) in partnership with the Highways Agency (HA), South West of England Regional Development Agency (SWRDA) and the West of England Authorities.

GBSTS developed a series of transport strategies for the sub-region for the period up to 2031. By 2031, the study forecast a 34% rise in the number of vehicle trips on the road system in the morning peak. With the limited existing capacity this was expected to result in a 35% drop in average speeds from 44km/hour to 28 km/hour and an increase in delay of 230%. These figures indicate a large-scale growth in congestion.

At the outset, a wide range of potential measures was identified and each was considered in relation to its appropriateness to the problems in the study area, taking into account the objectives and time horizons, the characteristics of the area and the availability of resources. The range of potential measures was extensive and included. These were:

- Land use measures
- Infrastructure Measures
- Management Measures
- Information Provision
- Pricing Measures

Once a 'long list' of potential measures had been identified, analysed and assessed, a series of packages was developed:

- Encouraging the use of alternative modes.
- Management of travel demand.
- Public transport improvements.
- Highway measures.

In terms of public transport improvements and encouraging the use of alternative modes the study identified the need for what it called “second generation public transport improvements“ with their aim being to:

“provide high quality alternatives to the private car”.

To deliver this, GBSTS set out a series of objectives:

- 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 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 corridor by providing a high quality public transport alternative to the private car.

GBSTS also set out the plan for the development of a network of rapid transit lines. These would build on the priority measures within the Greater Bristol Bus Network to produce a system with further priorities including more segregation from general traffic. It was noted that the lines should be designed to serve many of the new residential and employment developments with the initial plans comprising four lines:

- Ashton Vale – Emerson’s Green;
- Hengrove – North Fringe/Cribbs Causeway;
- Bath – Cribbs Causeway; and
- Whitchurch – Avonmouth/Portishead.

GBSTS assessed the Rapid Transit Network and the individual corridors. It noted the aim of the study in relation to rapid transit as “to explore the requirements of the rapid transit system for the study area and the corridors with the greatest potential for its operation”. It continued to say:

As far as the GBSTS study is concerned, there are three major new factors that influence the content of a rapid transit system in the study area:

- *the identification and location of new development sites which will create significant growth in demand for travel;*
- *the major plans for the introduction of a network of Showcase bus corridors which will produce significant improvements in the operation of bus services; and*
- *plans for the expansion of local cross-Bristol rail which would provide improved links between Weston-super-Mare, Bath Spa, Yate, Bristol Parkway and central Bristol.*

The study has been exploring the potential for a rapid transit system that:

- *serves the major new development areas e.g. Ashton Park, Whitchurch and Emerson's Green/Pucklechurch providing a high-quality, high-speed, public transport link between these locations and central Bristol;*
- *offers new and improved links between south Bristol and central Bristol;*
- *provides new public transport links to Portishead;*
- *creates new cross-Bristol linkages; and*
- *builds on the network of Showcase bus corridors.*

With regards to corridor selection it noted:

“In the development of particular corridors for inclusion in the potential rapid transit network, the aim was to build on the series of improved bus corridors within the Showcase bus schemes in the Greater Bristol Bus Network major scheme bid. An assessment was made of the expected demand levels for each corridor using the Greater Bristol Model. Often, a key factor in the assessment was the ability to identify routes with the potential for significant improvements in journey times through segregated operation or high levels of priority measures”

With regards technology choice it noted:

There is a fairly wide range of systems that fall within the definition of rapid transit, including both bus and rail based systems. The specification of the eventual system is likely to be the subject for further examination. One of the factors in this will be the costs of implementation and operation, an initial review of which has been undertaken during the study. An example of the form that the rapid transit operation might follow is demonstrated by the public transport measures included in the Bath package.

With regards to the overall assessment of rapid transit the key findings of the study were:

- A high level of demand for rapid transit, with up to 20,000 trips per hour on the system in the morning peak period in 2031.

- 20% of rapid transit passengers would have previously made the journey by car.
- The rapid transit system delivers considerable time savings on routes currently served by bus.
- Journey time savings are modest for routes already served by rail.
- The rapid transit system would reduce the number of vehicle trips across the Greater Bristol area by 2% thereby reducing the car mode share from 80% to 76%.
- A 4% reduction in total highway delay, which compares favourably with most road schemes considered as part of the study.
- Rapid transit would relieve pressure on the rail network, reducing crowding levels by around a third.

2C.4.2 Joint Local Transport Plan

The Joint Local Transport Plan (JLTP) set out plans for improving transport in the whole area for the five years from 2006 and set out a vision for transport over twenty to thirty years.

The JLTP highlighted that transport is critical and that in the long term the transport system should:

- strengthen the local economy;
- support the rising quality of life and more effective social inclusion of disadvantaged groups;
- improve access and links;
- ensure that alternatives to the car are a realistic first choice for the majority of trips;
- offer a real choice – affordable, safe, secure, reliable, simple to use and available to all; and
- meet both rural and urban needs.

The draft JLTP described three incremental funding scenarios:

- Option A: maintenance of existing levels of funding.
- Option B: Option A plus increase funding to develop the Greater Bristol Bus Network and the 'Bath Package' of major schemes.
- Option C: Option B plus seek additional funding from the Transport Innovation Fund and a significant investment in a major scheme programme.

Extensive consultation was undertaken during the spring and winter of 2005 with views expressed on the options via written submissions, stakeholder forums, public exhibitions, the website and the consultation questionnaire. Of the 1553 questionnaires returned options B and C were "strongly supported" or "supported" by 54% and 62% respectively whilst option A received only 24%. In contrast 41% were against Option A whilst only 15% were against

Options B or C.

West of England Major Scheme Programme

One set of the potential measures of GBSTS is the major scheme programme which was consulted on as part of the draft JLTP and included in the final JLTP.

The full set of schemes includes:

- **The Greater Bristol Bus Network (GBBN):** The Greater Bristol Bus Network includes bus priority and other improvements on ten sub-regional corridors. These bus corridors will support a much wider bus network, with up to 70 different services benefiting from the proposed improvements. Implementation of the Greater Bristol Bus Network began in late Spring 2008.
- **The Bath Package:** A range of measures aimed at improving alternatives to the car by providing a modern, integrated and easy-to-use public transport system. The scheme received first-stage approval from the DfT in early October 2007.
- **Weston-super-Mare Package Phase 1:** A range of measures aimed at supporting sustainable development, including improved interchange facilities, car parking and improvements at Worle Station, improvements to town centre bus routes via new development areas and a park & ride.
- **South Bristol Link:** Proposals will support regeneration, deal with traffic growth and improve orbital access in South Bristol and to Bristol International Airport.
- **Rapid Transit Network:** The foundations for a Rapid Transit network consists of the following three corridors:
 - Ashton Vale to Emerson's Green (via Bristol City Centre).
 - Hengrove / Hartcliffe to the North Fringe (via Bristol City Centre).
 - Bath to Cribbs Causeway (via Bristol City Centre).

GBSTS identified that together, delivery of these schemes, will make a significant contribution to tackling the current and proposed transport issues and challenges in the sub-region. The rapid transit network is an important and integrated mechanism for achieving the JLTP strategy.

Joint Local Transport Plan Objectives

The objectives of our JLTP are:

Tackle congestion

- Promote use of alternatives to the private car;
- Encourage more sustainable patterns of travel behaviour;
- Manage the demand for travel by the private car.

Improve road safety for all road users

- Ensure significant reductions in the number of the most serious road casualties;
- Achieve improvements for road safety for the most vulnerable sections of the

community.

Improve air quality

- Improve air quality in the Air Quality Management Areas (AQMAs);
- Ensure air quality in all other areas remains better than the national standards.

Improve accessibility

- Improve accessibility for all residents to educational services;
- Improve accessibility for all residents to health services;
- Improve accessibility for all residents to employment.

Improve quality of life

- Ensure quality of life is improved through the other Shared Priority objectives, contributing towards the enhancement of public spaces and of community safety, neighbourhood renewal and regeneration, healthier communities, tackling noise and protecting landscape and diversity;
- Achieve balanced and sustainable communities

Joint Local Transport Plan Targets

The 2008 Joint Local Transport Plan Progress Review was published in 2008 and is provided at Appendix 1A (i). The Progress Review shows that the West of England Authorities are on track to meet 18 out of 21 JLTP targets. The JLTP targets for 2010/11 are:

Best Value Performance Indicators:

- To reduce by 25% the number of children killed or seriously injured on roads compared with the 2001-04 average
- To ensure there is no increase in the number of slight injury casualties
- To reduce by 20% the number of people killed or seriously injured on roads compared with the 2001-04 average
- To increase bus patronage by 3%
- To increase bus satisfaction from 38% to 44%
- To reduce by 30% the proportion of footways where structural maintenance is necessary
- To reduce by 8% the proportion of the principal road network where structural maintenance is necessary
- To ensure no further deterioration in the non-principal road network

- To reduce by 29% the proportion of unclassified roads where structural maintenance is necessary

National Local Transport Plan Indicators

- To increase by 7% the proportion of households within 30 minutes public transport travel time of health facilities
- To increase by 5% the proportion of households within 40 minutes public transport travel time of key employment sites
- To restrict traffic growth across the sub-region to 12%
- To increase by 30% the number of cycling trips**
- To ensure there is no increase in the number of children being driven to school by car.
- To increase the proportion of buses running on time to 90% (by 2014/15)
- To ensure there is no increase in peak period flow to Bristol city centre
- To limit journey time increase on the network to 14%
- To reduce by 4% the concentration of NO_x in the Bristol Air Quality Management Area (AQMA) and by 12% in Bath AQMA

Local JLTP Targets

- To increase by 15% the number of rail trips
- To increase by 16% park and ride journeys
- To increase by 50% the number of community transport and demand-responsive passenger journeys

2C 4.3 Local and Multi Area Agreements

The West of England Authorities have agreed a Multi Area Agreement (MAA) to achieve collective outcome based targets aiming to improve economic prosperity. The MAA is designed to be a cross-boundary Local Area Agreement (LAA) that brings together key players in flexible ways to tackle issues that are best addressed in partnership, at a sub-regional level. The MAA provides the means to drive economic prosperity at the sub-regional level by focussing on key policies related to economic growth such as managing homes and jobs growth, enhancing the transport offering, improving skills and competitiveness. Targets for transport agreed in the MAA include:

- Congestion – average journey time per mile during morning peak.
- Bus passenger journeys originating in the area.

Table 2C.5 summarises the targets the Authorities have chosen that have a direct or indirect on transport.

Table 2C.5 Summary of Local Area Agreement Targets

National Indicator Chosen as Designated Indicator in Local Area Agreement	Bath & North East Somerset	Bristol City	North Somerset	South Gloucestershire
Direct Impact				
167. Congestion average journey time per mile during morning peak **	X	X	X	X
175. Access to services and facilities by public transport, walking and cycling	X	X		
177. Bus passenger journeys originating in the area **	X	X	X	X
Indirect Impact				
55. Obesity in primary school age children in Reception		X		X
56. Obesity in primary school age children in Year 6			X	
185. CO ₂ reduction resulting from local authority operations	X			
186. Per capita reduction in CO ₂ emissions in local authority area		X	X	X
188. Planning to adapt to climate change			X	X

Note: ** Joint target in Multi Area Agreement

The West of England is incorporating targets for congestion and bus patronage under NI 167 and NI 177 in our Multi Area Agreement, illustrating the high importance placed on sub-regional action in these spheres. In their individual LAAs both Bath and North East Somerset and Bristol City Councils are including accessibility targets for NI 175 (Access to services and facilities by public transport, walking and cycling). All four councils have targeted CO₂ emissions and North Somerset and South Gloucestershire have climate change targets. Three out of the four have targets for reducing obesity in primary school age children.

2C.4.3 Community and Corporate Priorities

Since the JLTP was completed each Authority has been working with their Local Strategic Partnerships on preparing new Sustainable Community Strategies. These broadly follow the general themes that we identified in 2006: the main contribution of transport to these community and corporate priorities has been:

- Well-being and Communities: delivery of our action plans to achieve better access to healthcare and employment and promote greater use of community transport; enhanced concessionary travel scheme;
- Health: investment in infrastructure to encourage walking and cycling; promotion of school travel plans; delivery of our action plans to achieve better access to healthcare;
- Environmental Sustainability: delivery of our strategy to constrain traffic growth and congestion; increase bus and rail patronage and levels of cycling; and promote walking and smarter choices;
- Safer Communities: investment in local safety schemes and road safety education, training and publicity with reduction in the number of casualties; implementation of street lighting schemes;
- Children and Young People: investment in infrastructure to encourage walking and cycling; promotion of school travel plans; investment in local safety schemes and road safety education, training and publicity; and
- Economy and Regeneration: delivery of our action plans to achieve better access to employment; delivery of our strategy to constrain traffic growth and congestion and provide for freight transport.

2C 4.4 Local Planning Framework

Bristol City Council

The current development plan for Bristol City Council (BCC) is the 1997 Bristol Local Plan.

In accordance with changes introduced by the Planning and Compulsory Purchase Act 2004, BCC is currently in the early stages of formulating a Local Development Framework for the City, which is being termed the Bristol Development Framework (BDF). Upon adoption, this will replace the Local Plan as the principal document to guide development across the City.

At present, the BDF is in its formative stages, with progression extending to the publication of a Preferred Options Paper in January 2008, supported by a Sustainability Appraisal, which together provide some general strategic level objectives indicating the overall direction that policy formulation is likely to take in the medium to longer term.

The objectives relevant to the Rapid Transit Scheme are:

- Ensuring a sustainable future for Bristol.
- Mixed, balanced and sustainable communities.
- Ambitious and sustainable economic growth.
- Better health and wellbeing.
- High quality built environment.
- High quality natural environment.
- Improved accessibility and connectivity.
- Adapting to climate change and promotion of renewable energy.
- Community involvement and engagement.

The development and implementation of a comprehensive rapid transit network offers the potential to provide a modern and sustainable transport solution. This therefore offers the potential to be viewed as a means of underpinning the aspiration to deliver a sustainable and green capital. There is a need for the City to absorb and deliver the requisite employment and services to support an expansion in the City's population in the order of approximately 29,500 new households in the south of the City; 10,000 new households in the City Centre and St Philips; and 8,000 households elsewhere within the administrative boundary.

The level and severity of extant traffic congestion associated with Bristol is well documented at all levels from regional to local, together with the its environmental, social and economic effects.

In general terms, the principle of delivering a rapid public transport system to connect Ashton Vale to the City Centre has been established in policy for over 10 years. Policies M12 and M13 safeguard the proposed route from the city centre through to the point at which the Rapid Transit Scheme crosses the Portbury Freight Line. The Rapid Transit Scheme follows the safeguarded alignment as far as is practicable.

North Somerset Council

The North Somerset Replacement Local Plan (RLP) was adopted in 2007. The RLP is part of North Somerset's development framework until 2011. The RLP comprises a Written Statement and a Proposals Map, which together include policies for regulating development across North Somerset.

The RLP plays a key role in the Council's corporate commitment to making North Somerset a more prosperous place in which to live and work, and in meeting local needs, particularly in terms of housing, jobs, leisure, community provision, and transport requirements, while at the same time safeguarding environmental assets.

The RLP objectives in respect of transport are:

- to make the best use of existing resources and infrastructure, particularly through bringing empty properties back into use, more intensive use of under-used and vacant land, re-development of previously developed land and buildings and reclamation of derelict land, including decontamination where appropriate;
- to locate and design development, especially mixed uses, to reduce the need to travel, especially by car, and to enable cycling and walking to work, school and other facilities;
- to improve public transport infrastructure and services, including the provision of effective interchanges;
- to recognise the role of Bristol International Airport and Royal Portbury Dock as major gateways for North Somerset and the South West, and promote access to them by more sustainable modes of transport;
- to ensure that proposals are well related to public transport and non car modes of transport, community facilities and services and the availability of infrastructure;
- to develop an integrated approach to improving the main corridors of movement within North Somerset;
- to ensure that development contributes fairly to the provision of infrastructure and other needs arising from it;
- to ensure that development is of a high standard of design, both visually and functionally, having regard to its location and the efficient use of land;
- whilst recognising that the car is likely to be the preferred means of travel for the majority of residents and visitors for most journey purposes, to promote and provide opportunities for safe travel, the use of public transport and more sustainable and healthy forms of travel such as walking, cycling and horse-riding;
- to contribute to achieving national targets on reduction of greenhouse gases, reduce noise and improve air quality;
- to ensure that development proposals contribute to the provision and conservation of a clean, pleasant and safe environment, while using energy, water and other resources efficiently;
- to support the provision of high quality infrastructure as the key to attracting and retaining new investment;
- to continue to work towards an integrated transport package – rail, road/motorway, airport and dock in a sustainable approach to meeting businesses’ transport needs;
- to enable people with disabilities to reach their full potential and live in their communities as independently as possible;

- to promote and increase the health, welfare, cultural and leisure opportunities of all sectors of the local population;
- to ensure the provision of a wide range of quality recreational and cultural opportunities, including rights of way and other forms of public access, parks, public open spaces and outdoor recreation facilities, which meet the needs and aspirations of residents of North Somerset;
- to support the land use requirements of broad-based regeneration programmes such as Weston Visioning and the Single Regeneration Budget to contribute to the regeneration of disadvantaged areas and to ensure equality of opportunity.

The RLP aims to both reduce the need to travel and to expand travel choice. The transport policies relevant to the Rapid Transit Scheme are:

- Make best use of existing rail lines and support use of Portbury freight line for passenger services.
- Make best use of existing rail stations and support new stations on the Portbury freight line for passenger services.
- Protection of rights of way and other forms of public access.
- Support and develop strategic cycle routes.
- Development of Bristol International Airport requires appropriate provision of sustainable surface access.

Table 2C.6 summarises the Rapid Transit Scheme's contribution to Local Policy and Plans. The benefits and contribution to these policies of the wider Rapid Transit Network is considerably greater, not simply due to the additional routes, but also as a result of the synergies and additional connectivity created for the Rapid Transit Scheme.

Table 2C.6 Local Policy Fit

Policy	Objectives	Rapid Transit Scheme...
Greater Bristol Strategic Transport Study	<p>Study objectives:</p> <ul style="list-style-type: none"> • to investigate the potential for transferring to local transport means, trips that start or end within the study area and use national strategic routes • having identified the potential for change, to look into the more detailed needs of the national and local strategic networks to deal with the residual problems on these routes • to support, validate and inform development of the Regional Transport Strategy and future development scenarios reflecting the Principal Urban Area (PUA) status as defined by Regional Planning Guidance (RPG10). 	<p>...was identified by the Study as a key part of the integrated solution to current and forecast transport issues.</p> <p>... is an integral part of West of England Strategy to deliver Regional Spatial Strategy proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000)</p>
Joint Local Transport Plan	<p>Tackle congestion</p> <ul style="list-style-type: none"> • Promote use of alternatives to the private car; • Encourage more sustainable patterns of travel behaviour; • Manage the demand for travel by the private car. 	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... improved journey times and reliability from the south west of the sub-region to Bristol City Centre.</p> <p>...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks.</p>
	<p>Improve road safety for all road users</p> <ul style="list-style-type: none"> • Ensure significant reductions in the number of the most serious road casualties; • Achieve improvements for road safety for the most vulnerable sections of the community. 	<p>...removes trips from the road network and on to a safer mode.</p> <p>... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme.</p> <p>... provides safer off street cycling and walking route.</p>

Policy	Objectives	Rapid Transit Scheme...
	<p>Improve air quality</p> <ul style="list-style-type: none"> • Improve air quality in the Air Quality Management Areas (AQMAs); • Ensure air quality in all other areas remains better than the national standards. 	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p>
	<p>Improve accessibility</p> <ul style="list-style-type: none"> • Improve accessibility for all residents to educational services; • Improve accessibility for all residents to health services; • Improve accessibility for all residents to employment. 	<p>...direct links to the key interchanges of Temple Meads and Bristol Bus Station.</p> <p>...improves accessibility of jobs increasing labour market flexibility, expand labour market catchments, improve job matching</p> <p>... improves access to facilities</p> <p>...provides improved accessibility to villages in north Somerset in to Bristol City Centre.</p>
	<p>Improve quality of life</p> <ul style="list-style-type: none"> • Ensure quality of life is improved through the other Shared Priority objectives, contributing towards the enhancement of public spaces and of community safety, neighbourhood renewal and regeneration, healthier communities, tackling noise and protecting landscape and diversity; • Achieve balanced and sustainable communities 	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... improves access to facilities.</p> <p>... promotes/encourages cycling and walking trips and associated health benefits.</p> <p>... promotes/encourages cycling and walking trips with increased use of the corridor and public space.</p> <p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels</p> <p>.... will be designed to current standards and guidelines to reduce the impact on the built and natural environment as far as possible</p>

Policy	Objectives	Rapid Transit Scheme...
Sustainable Community Strategies	Well-being and Communities	<p>... improved journey times and reliability from the south west of the sub-region to Bristol City Centre.</p> <p>...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks.</p>
	Health	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... promotes/encourages cycling and walking trips and associated health benefits.</p>
	Environmental Sustainability	<p>...is an integral part of West of England Strategy to deliver draft RSS proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000).</p> <p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels.</p> <p>... will be designed to current standards and guidelines to reduce the impact on the built and natural environment as far as possible.</p> <p>...direct links to the key interchanges of Temple Meads and Bristol Bus Station improving attractiveness and ease of the public transport system.</p>
	Safer Communities	<p>...removes trips from the road network and on to a safer mode.</p> <p>... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme.</p>

Policy	Objectives	Rapid Transit Scheme...
	Children and Young People	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... promotes/encourages cycling and walking trips and associated health benefits.</p> <p>... safe, secure system offer opportunity for more independent travel.</p>
	Economy and Regeneration	<p>... improved journey times and reliability from the south west of the sub-region to Bristol City Centre.</p> <p>...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks.</p> <p>...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p>

Policy	Objectives	Rapid Transit Scheme...
Emerging Bristol Development Framework	Ensuring a sustainable future for Bristol.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... improved journey times and reliability from the south west of the sub-region to Bristol City Centre.</p> <p>...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks.</p> <p>...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p>
	Mixed, balanced and sustainable communities.	<p>...improves accessibility of through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p> <p>... promotes/encourages cycling and walking trips.</p>

Policy	Objectives	Rapid Transit Scheme...
	Ambitious and sustainable economic growth.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p>
	Better health and wellbeing.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... promotes/encourages cycling and walking trips and associated health benefits</p> <p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels</p> <p>.... will be designed to current standards and guidelines to reduce the impact on the built and natural environment as far as possible</p>
	High quality built environment.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles</p> <p>.... will be designed to current standards and guidelines to reduce the impact on the built environment as far as possible</p>

Policy	Objectives	Rapid Transit Scheme...
	High quality natural environment.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p> <p>... provides high volume mass transit with fewer vehicles to reduce comparative noise levels</p> <p>... will be designed to current standards and guidelines to reduce the impact on the natural environment as far as possible</p>
	Improved accessibility and connectivity.	<p>...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas.</p> <p>... facilitates development and employment at Ashton Park and Bristol International Airport.</p> <p>...facilitates business investment, viability and attractiveness of new development sites.</p>
	Adapting to climate change and promotion of renewable energy.	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p>
	Community involvement and engagement.	<p>...is being developed with the engagement of stakeholders and the community.</p>
North Somerset Council Local Plan	to make the best use of existing resources and infrastructure	<p>...segregates the routes as far as possible thereby minimising impacts on the road network, retaining road network capacity as far as possible and improving resilience of the network.</p> <p>...is designed to current standards and guidelines to ensure longevity and resilience of the scheme.</p>

Policy	Objectives	Rapid Transit Scheme...
	to locate and design development to reduce the need to travel	... is an integral part of West of England Strategy to deliver draft RSS proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000)
	to improve provision of effective interchanges;	...provides direct links to Temple Meads and Bristol Bus Station. ...directly serves key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas. ... facilitates development and employment at Ashton Park and Bristol International Airport. ...provides potential link to future passenger services on Portishead Line.
	to recognise the role of Bristol International Airport as major gateways for North Somerset and the South West, and promote access to them by more sustainable modes of transport;	...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas. ... facilitates development of Bristol International Airport and sustainable access. ...facilitates business investment, viability and attractiveness of new development sites.
	to ensure that proposals are well related to public transport	... is an integral part of West of England Strategy to deliver draft RSS proposals (138,500 dwellings, 138,000 jobs, increase in population of 200,000)
	to develop an integrated approach to improving the main corridors of movement within North Somerset;	... improved journey times and reliability from the south west of the sub-region to Bristol City Centre. ...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks

Policy	Objectives	Rapid Transit Scheme...
	<p>promote and provide opportunities for safe travel, the use of public transport and more sustainable and healthy forms of travel</p>	<p>...removes trips from the road network and on to a safer mode. will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme.</p>
	<p>to contribute to achieving national targets on reduction of greenhouse gases, reduce noise and improve air quality;</p>	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles.</p>
	<p>to ensure that development proposals contribute to the provision and conservation of a clean, pleasant and safe environment, while using energy, water and other resources efficiently;</p>	<p>... provides an alternative to the private car by providing a fast, reliable network, encouraging mode shift and providing travel on low emission vehicles will be designed to current standards and guidelines to reduce the impact on the built and natural environment as far as possible</p>
	<p>to support the provision of high quality infrastructure as the key to attracting and retaining new investment;</p>	<p>... improved journey times and reliability from the south west of the sub-region to Bristol City Centre. ...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks. ...improves accessibility through directly serving key existing hubs of employment in the City Centre and at Temple Quay, Redcliffe and links with residential areas. ... facilitates development and employment at Ashton Park and Bristol International Airport. ...facilitates business investment, viability and attractiveness of new development sites.</p>
	<p>to continue to work towards an integrated transport package to meeting businesses' transport needs;</p>	<p>... improved journey times and reliability from the south west of the sub-region to Bristol City Centre. ...contributes to a more reliable and effective transport network to improve business efficiency and connections to national networks.</p>

Policy	Objectives	Rapid Transit Scheme...
	to enable people with disabilities to reach their full potential and live in their communities as independently as possible;	...will provide fully DDA compliant system to improve accessibility for mobility impaired persons.
	to promote and increase the health, welfare, cultural and leisure opportunities of all sectors of the local population;	<p>... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme.</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.</p>
	to ensure the provision of quality recreational and cultural opportunities, including rights of way and other forms of public access, and outdoor recreation facilities	<p>... will be designed to current standards and guidelines to ensure a safe, secure and accessible scheme.</p> <p>... promotes/encourages cycling and walking trips and associated benefits with increased use of the corridor and public space.</p> <p>...improves access to facilities.</p>

2C.5 Summary

In summary:

- The need for Rapid Transit has been strategically identified and has a strong fit with supported in regional and local policy being integral to achievement of both.
- The Rapid Transit Scheme makes a significant contribution to DfT's Towards a Sustainable Transport System; though delivery of regional policy and the issues of the Strategically Significant City of Bristol but also ensuring the local public transport network is well integrated with intra-regional and international hubs such as including Bristol Temple Meads, Bristol Parkway and Bristol International Airport.
- The network is closely aligned, and will progressively be implemented, as part of the delivery of the draft South West Regional Spatial Strategy (RSS) proposals.
- The Rapid Transit Network is directly related to the proposed location of new housing, providing new public transport links to these areas and linking them with the major employment and activity centres as well as integration with existing transport hubs.
- Rapid Transit Scheme is central to delivering sustainable development identified in the draft RSS in the key areas of South Bristol and the south west urban extension.
- The Rapid Transit Scheme is programmed to be delivered in accordance with the regional funding programme which in turn is closely aligned to sustainable development requirements and the West of England Authorities and working closely with the South West Regional Development Agency.
- The Rapid Transit Scheme underpins Bristol City Council's aspiration to deliver a sustainable and green capital and is consistent with the sustainability objectives for the City. The Rapid Transit Scheme makes use of the designated safeguarded rapid transit route in the Bristol Local Plan.
- Rapid Transit supports the North Somerset Replacement Local Plan by contributing to improving the accessibility of more rural areas in the sub-region, establishing sustainable mixed communities as extensions to the Bristol urban area and facilitating more sustainable links to Bristol International Airport.

Related Documents:

2A (i) – Joint Local Transport Plan 2008 Progress Review