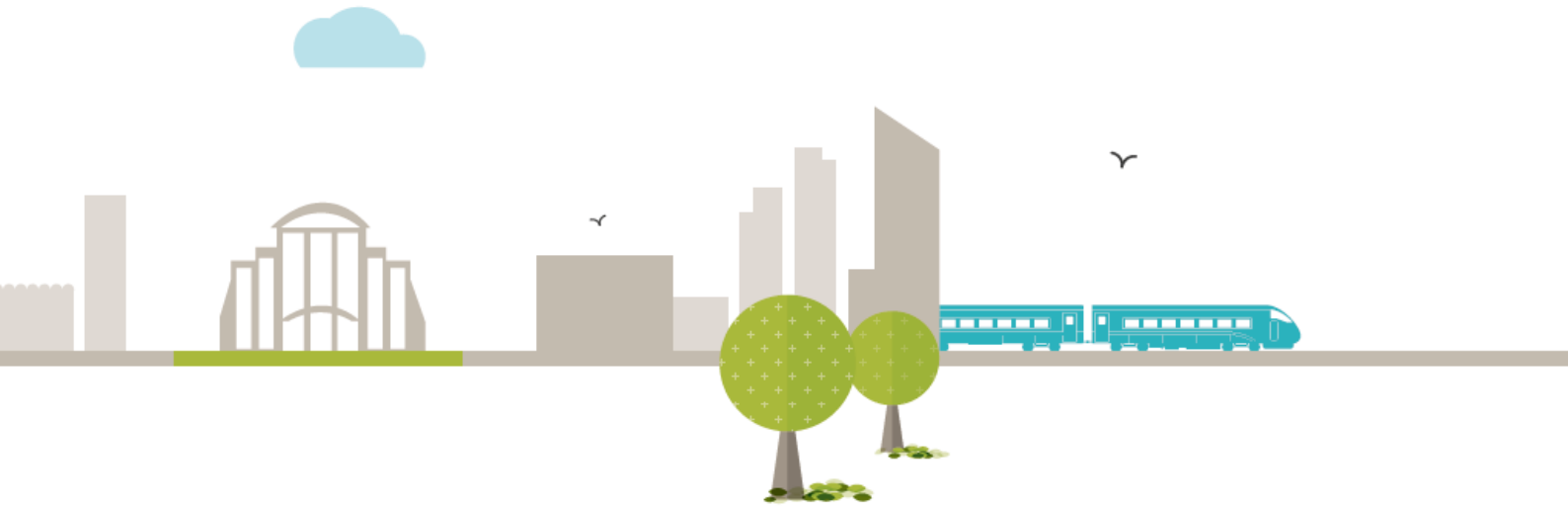


WEST OF ENGLAND

"BUILDING OUR FUTURE"

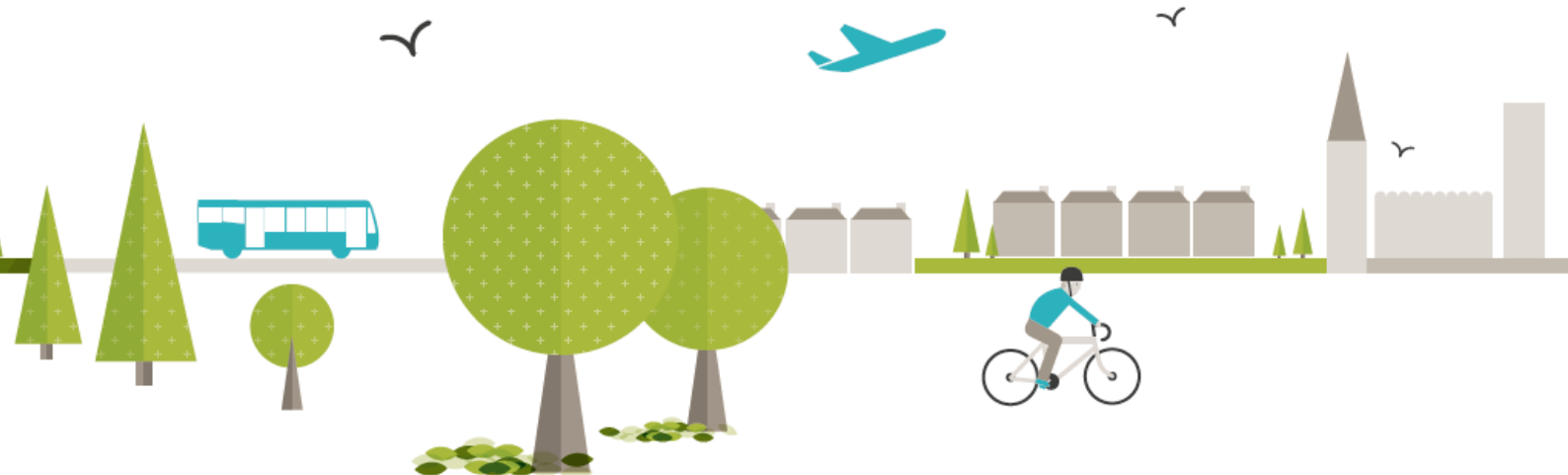


West of England

Joint Transport Study

Transport Vision Summary Document

NOVEMBER 2016



Bath & North East
Somerset Council



North
Somerset
Council

South Gloucestershire
Council



WEST OF ENGLAND TRANSPORT VISION

INTRODUCTION

In 2015 the four West of England councils started a major study to shape the future of our transport network over the next twenty years.

We have been working together to develop proposals for a package of integrated public transport, walking, cycling and highway investment, to tackle congestion, improve air quality

and promote more sustainable travel choices, and deliver housing and employment growth up to 2036.

This summary outlines our progress and recommended package of investment, and asks for your views. We will then take your views into account in a final recommendation on the schemes to be taken forward in an investment programme and investigate

funding options for them.

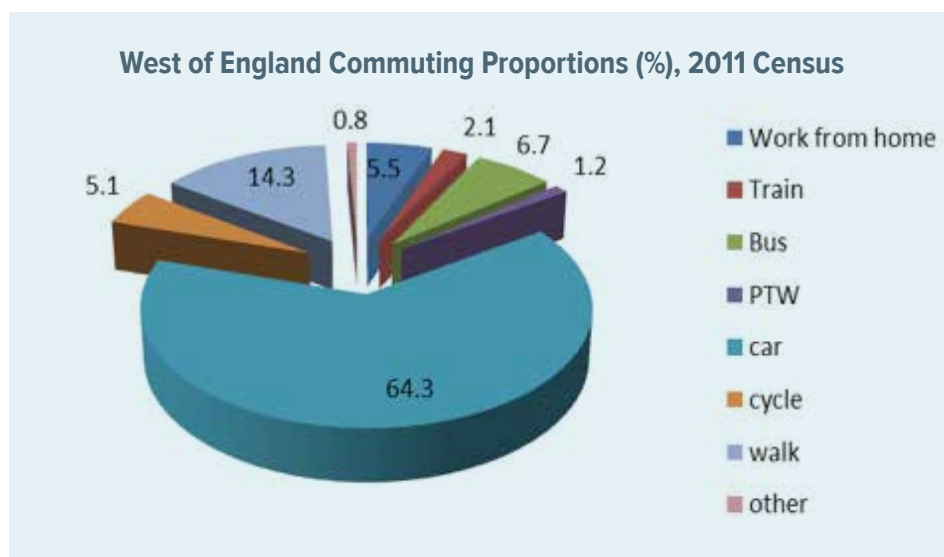
This consultation is taking place alongside a consultation on the Joint Spatial Plan (JSP). The JSP considers how future development up to 2036 should be managed. The JSP and our transport vision are closely linked and their joint impacts are discussed further below.



WHAT ARE THE CURRENT AND FUTURE CHALLENGES FOR OUR TRANSPORT NETWORK?

The transport network in the West of England experiences significant traffic congestion, and for many people transport options to make their journeys can be very restricted, with the private car sometimes being the only viable choice to travel to work, shopping, school or college. This situation is reflected in the fact that 64% of us commute by car, which also reduces air quality in our towns and cities and affects our health, and restricts people's ability to access job opportunities, particularly for those of us living in less affluent areas.

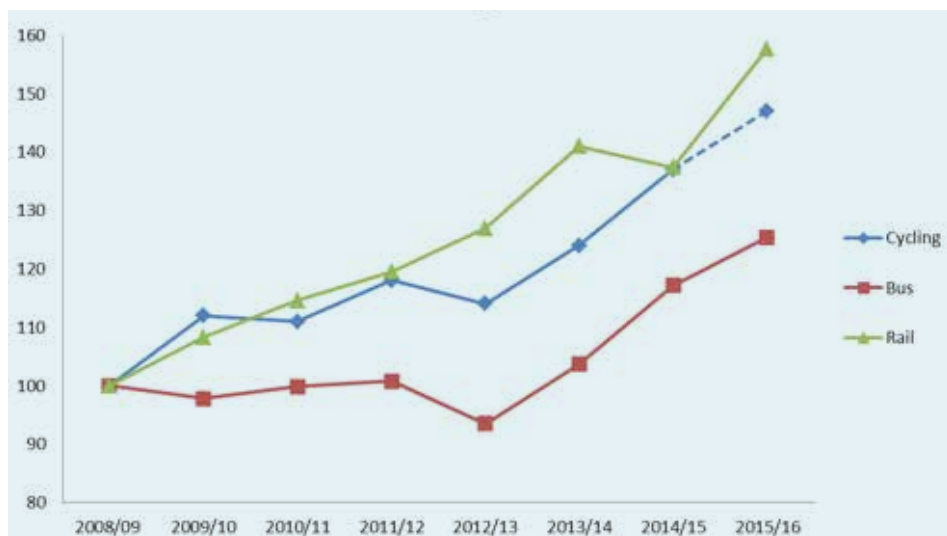
We need to turn this situation around, so that people no longer have to rely on driving a car to travel to work, and can make that trip by public transport, cycling or walking as their preferred choice. In particular, we would look to reduce our proportion of trips made by car substantially, and reduce



the amount of time it takes to make journeys across our network.

We are starting to make significant progress in encouraging sustainable transport choices. We have already delivered some major public transport improvements, such as the Greater Bristol Bus Network, Bath Package and

Weston Package. In particular, cycling, bus passenger and rail passenger numbers have all grown substantially as a result, and we travel by cycle and walking at a significantly higher rate than equivalent city regions like Birmingham, Leeds and Manchester.



Growth in sustainable transport modes in the West of England

Our strategic transport network, such as our motorways and railways, plays an important local, regional and national role, and its performance can have significant implications which affect the performance of the UK economy. This importance will be further emphasised through the need for connectivity to developments such as Hinckley Point and the southern coastal ports. Further improvements on the strategic network have also been completed, such as the M4/M5 'Smart Motorway' scheme (involving controlled use of the hard shoulder) by Highways England, and additional platform capacity at Bristol Parkway station by Network Rail. There are also significant proposals for redevelopment at Bristol Temple Meads station.

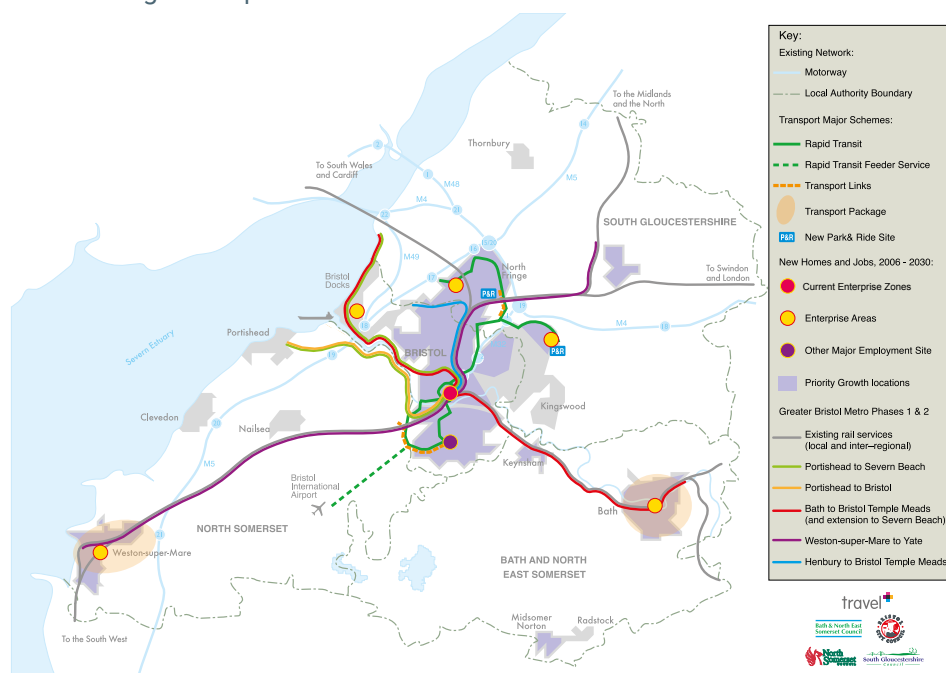
Moving forward, the West of England authorities have a clear programme of investment in further schemes; MetroBus and MetroWest, which are currently either under construction or are due to start in the next two years, with strong links to our Enterprise Zone

and Enterprise Areas, whilst Network Rail is implementing the Great Western Railway Modernisation (which includes electrification of the main lines from Paddington).

However, we still have a long way to go. The resilience of the strategic highway network is also vulnerable to incidents, which can have both local and regional repercussions.

Furthermore, many of our radial roads into the city centres struggle to provide for cars and goods vehicles, reliable public transport services and better cycling and pedestrian facilities.

The transport network also has a key role to play in supporting the continued economic growth and prosperity of the West of England. This means transport investment that better connects our key economic activity areas to enable us to remain competitive nationally and internationally. It also means supporting future growth in both housing and jobs, and will need to have a key role in improving the setting of our urban areas by reducing the impact of road traffic and promoting the use of sustainable transport modes. Some of this growth is already set out in the councils' local development plans which deal with development until 2026. Proposals for future development after this point to 2036 will be set out in the Joint Spatial Plan (JSP), which is closely linked to the transport vision.





OUR **PROGRESS** SO FAR

In November 2015, we asked for your views on challenges facing the current transport network, and the sort of schemes you would like to see delivered.

You advised us that you were concerned, in particular, about congestion and quality of life. You also said that investment in public transport and cycling corridors was a particular priority.

Since then, we have been considering different options and working up transport schemes

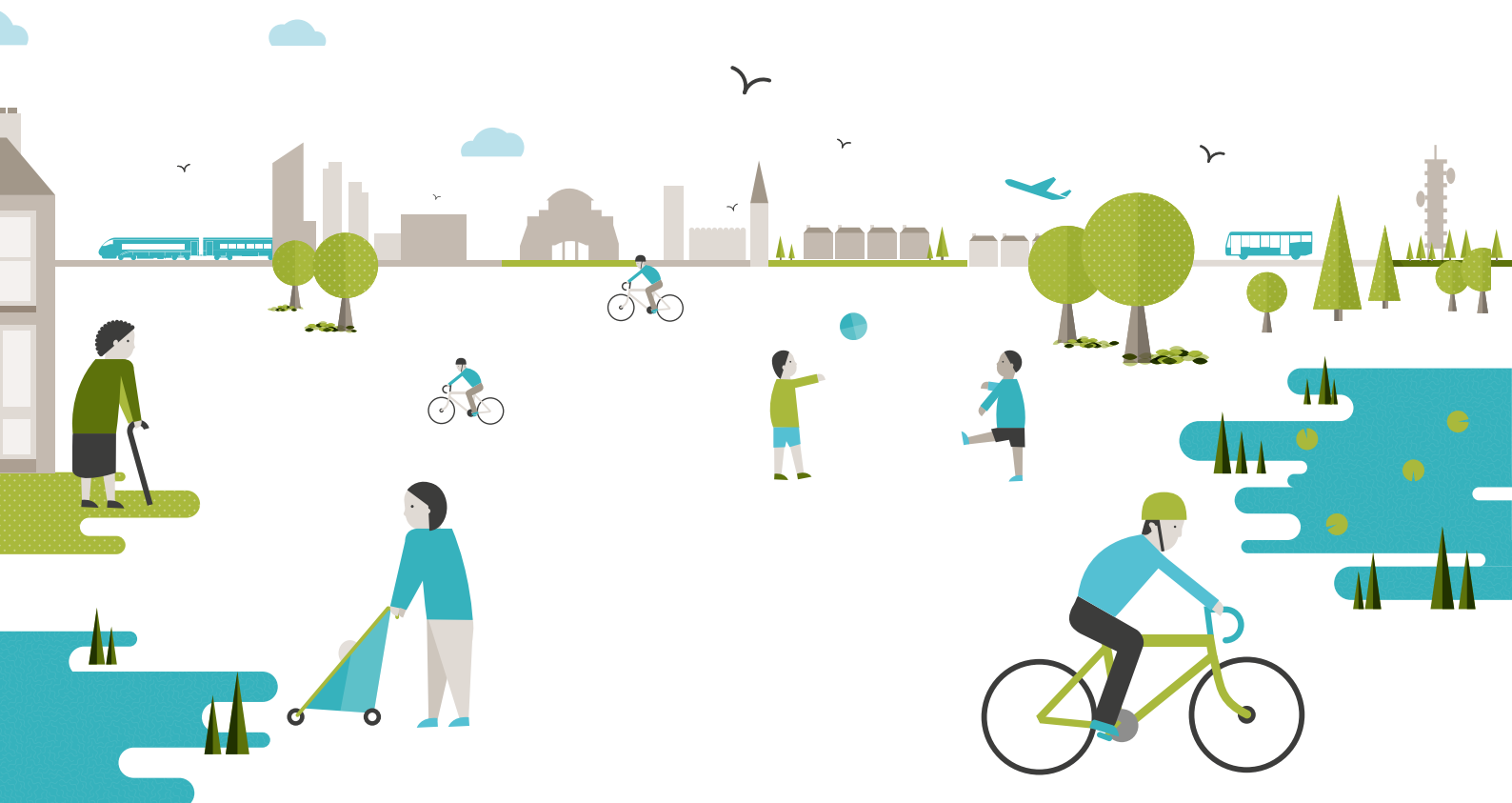
and packages that best deliver the transport objectives of the West of England area, taking on board your views from that consultation.

How ambitious should we be?

The West of England, on balance, is a net contributor to the HM Treasury. We need to plan for the future needs of one of the UK's fastest growing city regions, including supporting the delivery of new jobs and new homes by 2036. We need to improve connections across the West of England to ensure that

our future economic growth is not compromised by congestion on our transport network.

We are proposing a £7.5 billion Transport Vision for delivery over the next twenty years. This represents the scale of intervention which is necessary to tackle traffic congestion and ensure that our future economic growth can be supported. The transport vision has a major focus on public transport investment, and we will need to identify new funding streams to help deliver this scale of investment.





HOW DOES THE **TRANSPORT VISION** WORK?

The package is composed of a combination of investment in 'smarter choices' to promote walking, cycling and new technology to move around, alongside corridors of integrated, 'multi-modal' investment, to tackle congestion and promote a shift in trip making from the private car onto more sustainable transport modes. In particular, on some key transport corridors we are proposing to link highway and public transport investment together.

The suggested corridor packages would be delivered partly through a transfer of highway space on radial routes to public transport and cycling, and by partly providing better orbital connections so that traffic which does not have a local destination can be diverted onto more appropriate routes. This is intended to make the transport network more sustainable, by prioritising its use for more efficient travel modes. The picture above shows how sustainable transport modes can provide a more efficient use of restricted road space compared to private cars.

Restrictions on general traffic movement can be very challenging to deliver. The approach is not new - existing examples include The Centre in Bristol, Highwood Road in Patchway and Pulteney Bridge in Bath. In each case, through traffic is diverted elsewhere and space reallocated for public transport, cycling and walking. But it will be very challenging to deliver



Canberra transport photo

the next level of public transport and cycling investment without further radical schemes such as these.

What are our proposals for Cycling and Walking?

In line with our 'smarter choices' programme, we intend to progress the delivery of more strategic cycling and walking corridors with better infrastructure to support the use of these modes. In particular, the rollout of strategic cycling corridors is closely linked to better management of through traffic on radial roads. The diversion of through traffic movements frees up highway space for sustainable transport modes, as well as providing better conditions for cycling and walking due to the lower levels of car and lorry movements on the highway.

What are our proposals for 'Smarter Choices' and new technology?

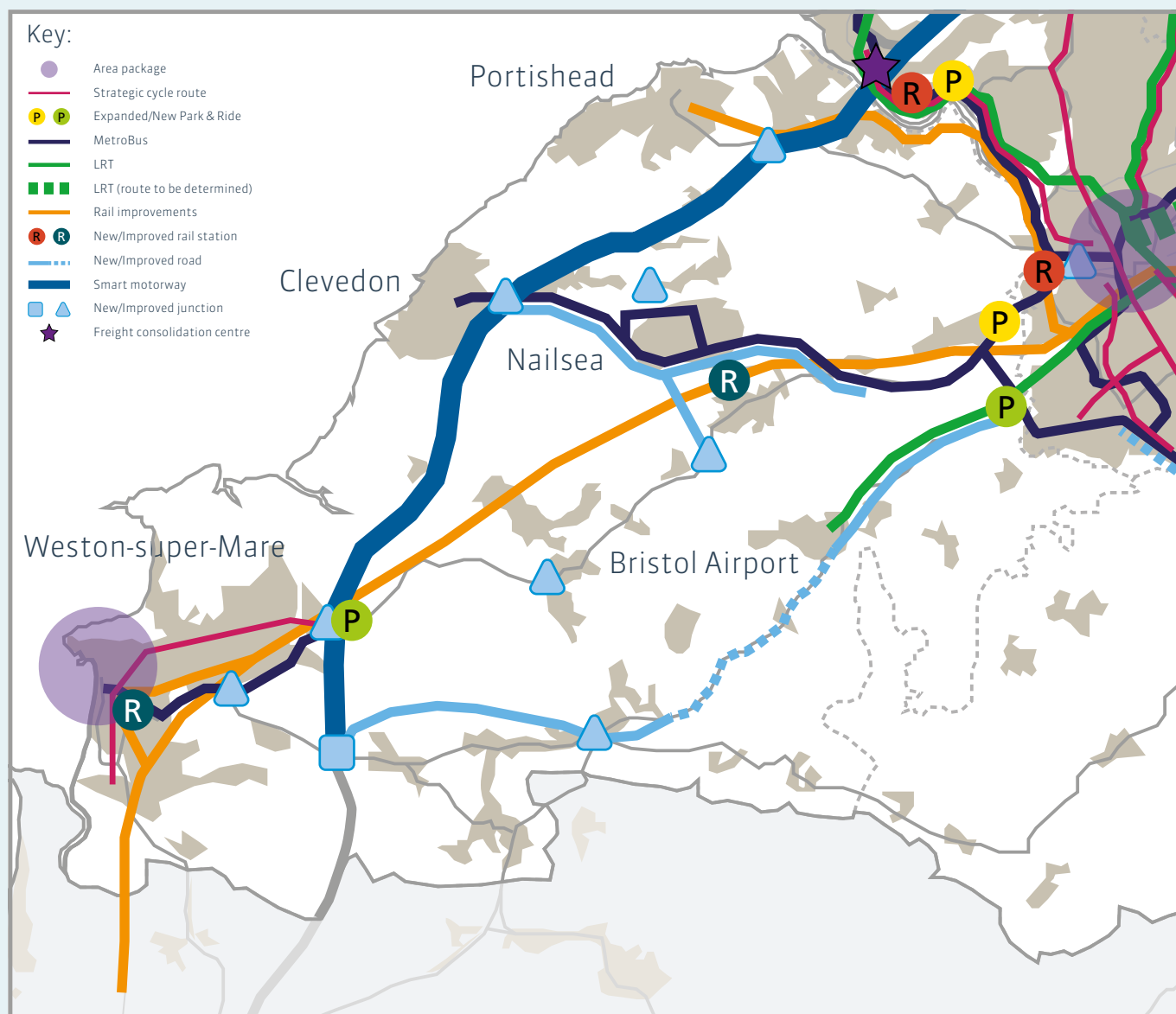
There are a range of other important interventions and ways to influence people's travel behaviour which will continue to be delivered.

These include continued funding for information to help promote 'smarter choices' to encourage public transport, walking, cycling and car-sharing, as well as ongoing investment in smaller schemes such as walking and cycling networks and traffic management measures.

We are also taking account of a wide range of potential impacts of new technology on travel choices and behaviour. Future developments include electric vehicles, driverless cars, alternative fuels, on-demand public transport and wider use of the internet to facilitate 'home working' and shopping. Personal mobility could be increasingly less dependent on car ownership which may change the way transport is delivered. Some of these developments are likely to reduce the amount of trips or their impact on the network. However, whilst some technology will reduce the demand to travel, there are also factors which may increase demand to travel in other areas which also needs to be borne in mind.



WHAT CORRIDORS ARE IN THE TRANSPORT VISION?

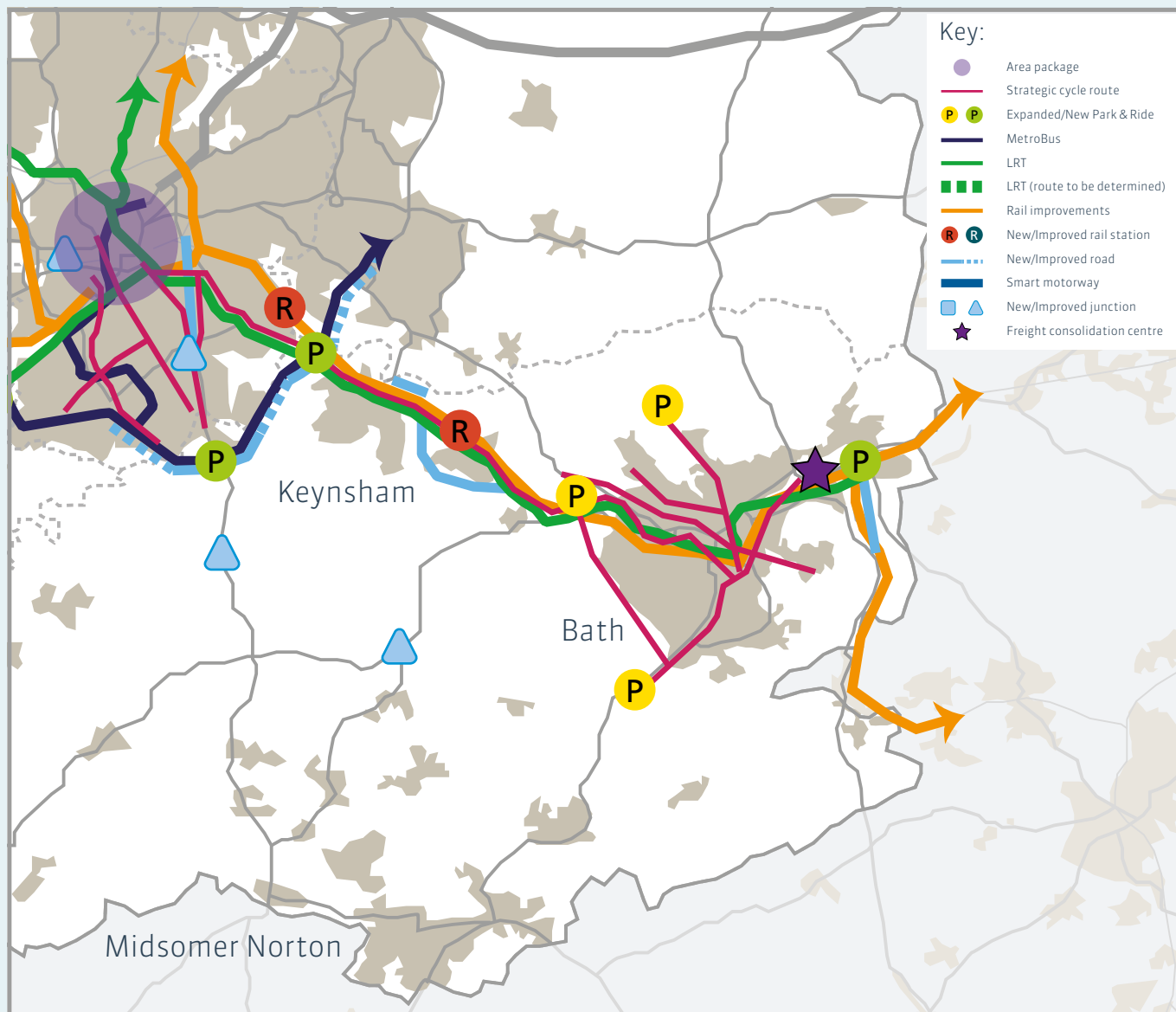


Weston-super-Mare to Bristol via A38

This corridor experiences severe congestion and this in turn restricts the role of Bristol Airport to accommodate future growth to serve the West of England and beyond.

The extent of public transport and highway improvements on the A38 is closely linked to future growth at the Airport. Dependent on this growth, our proposals include a mass transit link between Bristol city centre and Bristol Airport, highway improvements and bypasses on the A38, a new motorway junction on

the M5 and 'Smart Motorway' management, as well as further rail improvements such as higher frequencies and more seats for train passengers and more direct services from Weston-super-Mare to London. Highway improvements and bypasses on the A38 and A368/A371 will also relieve communities such as Banwell and Churchill of through traffic movements. Weston-super-Mare will also benefit from further cycling corridor infrastructure and an area package to promote active travel and sustainable transport modes.



Bath to Bristol Corridor

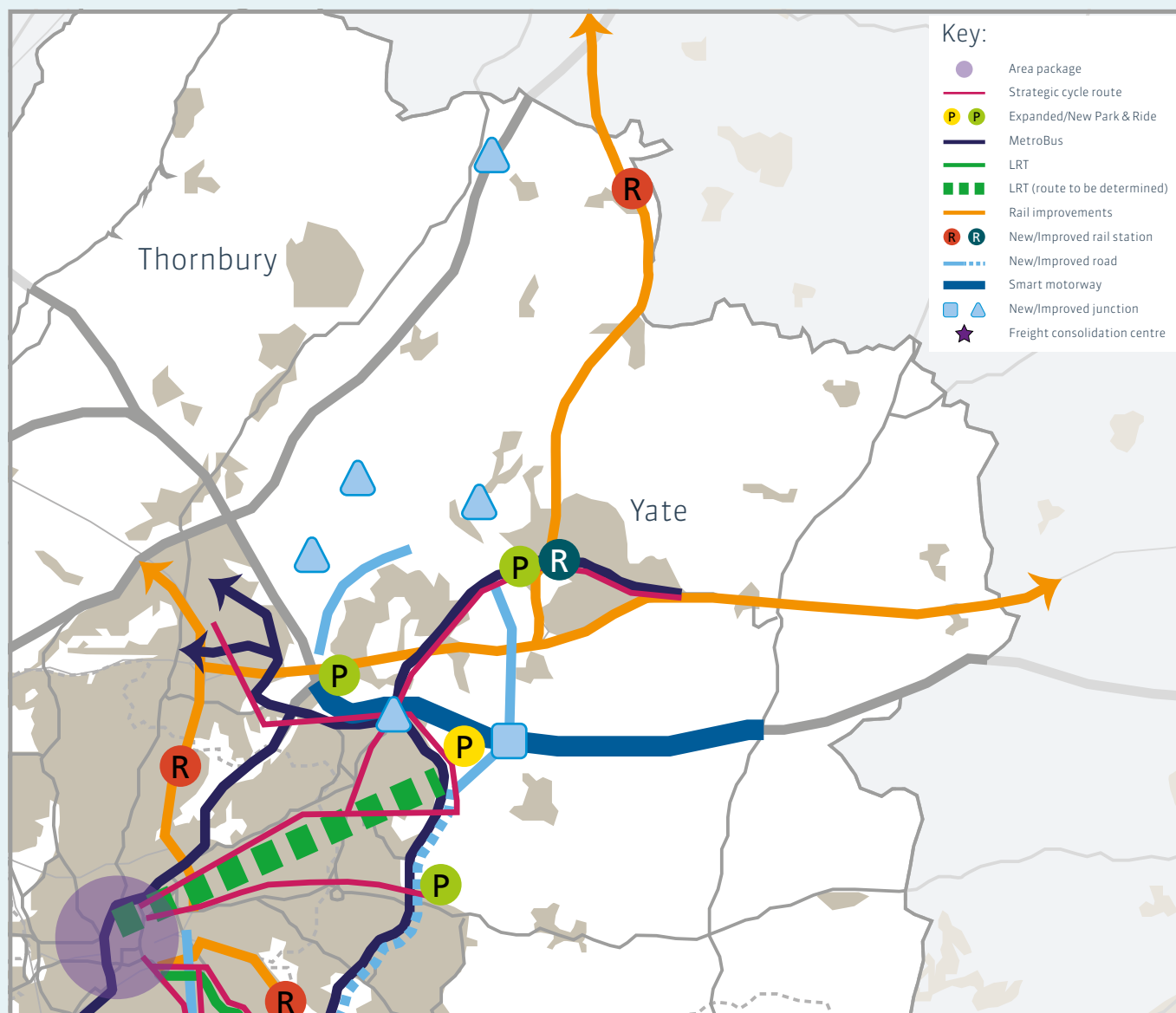
This corridor has high travel demand across car, bus and rail modes. It also experiences severe congestion throughout the day, and access to and from South Bristol affects people's access to job opportunities, and restricts inward investment and economic regeneration.

We are proposing to introduce a Rapid Transit public transport corridor between Bath and Bristol, to complement improvements on the existing rail corridor, and provide for a wider range of trip options. This would possibly be bus-based but our ambition is for a light rail (tram) solution along the A4 corridor. This would be delivered as a package with highway investment including a Salford Bypass, Callington Road Link and

better links between the A4 and A37 roads.

The highway schemes would provide new routes for through traffic enabling existing roads to be better used for Rapid Transit, public transport and cycling. Movements between the A4 and A37 could be either improvements to existing roads, new highway or a combination of the two.

We are also proposing further park and ride sites and better cycling facilities to serve both Bath and Bristol, a new road link between the A36 and A46 to the east of Bath (which would help tackle congestion in city centre), and possible further improvements on the A37 into Bristol from the south.



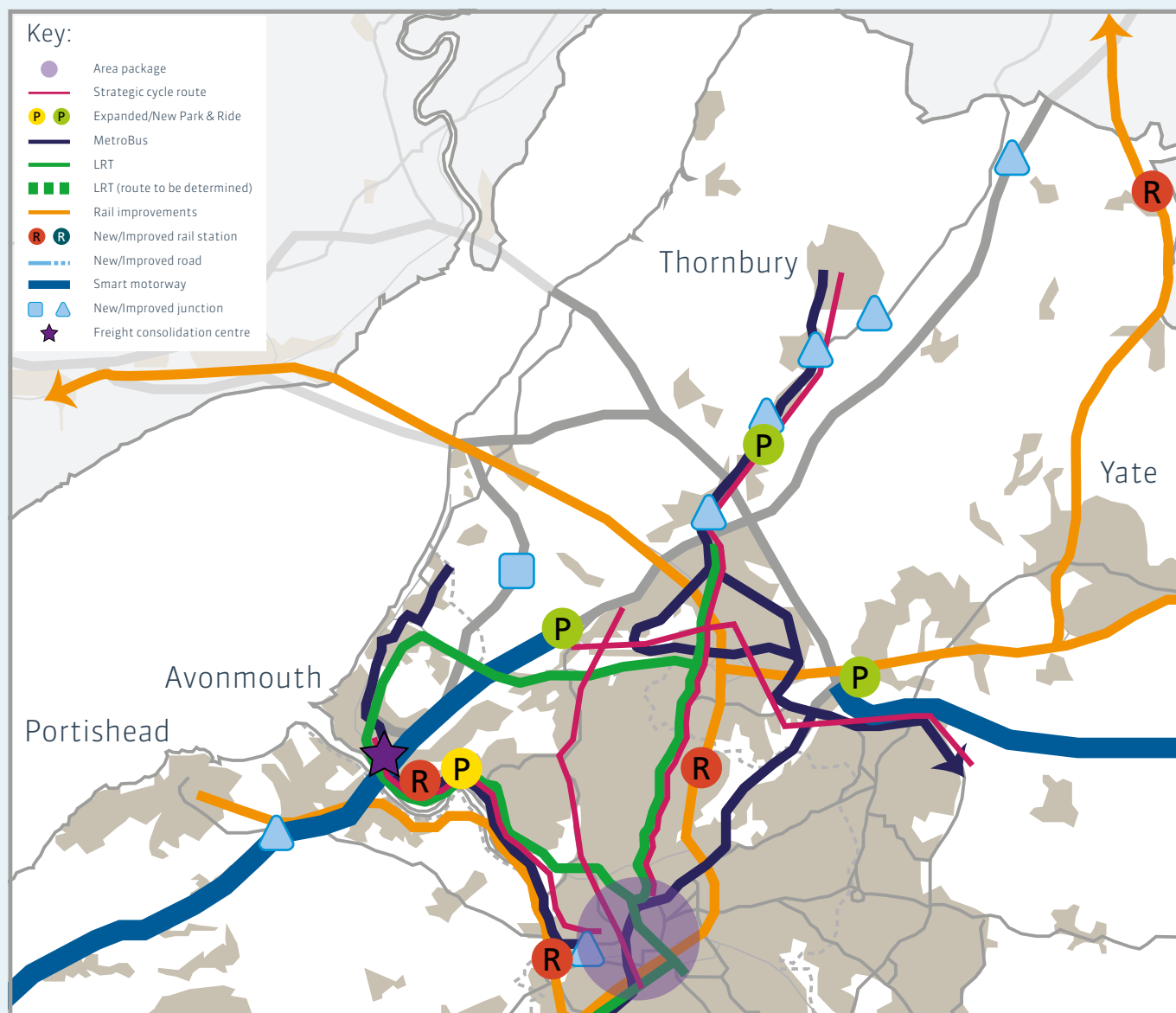
Yate and the East Fringe to Bristol

The sector of the urban area between the East Fringe and Bristol city centre is not well connected by public transport and experiences substantial traffic congestion, and consequent noise and air pollution problems. The delivery of MetroBus to Emersons Green and the continuing popularity of the Bristol to Bath railway path for cycling and walking will provide some relief but this whole sector has been identified by the study as needing further, significant investment in sustainable transport. The scope of this covers the full range of sustainable modes and looks broadly across the area.

We would like to know your views on what kind of interventions would be most appropriate to deliver this

upgrade to sustainable travel between the East Fringe and Bristol city centre.

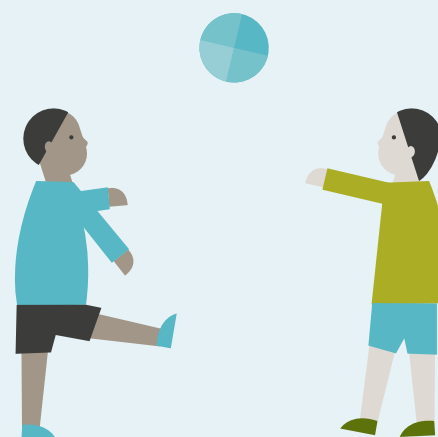
In the Yate to Bristol and North Fringe corridor we are proposing a package of highway and public transport schemes, including a highway and cycle link to a new junction on the M4 from the A4174 Ring Road (along with an extension of the 'smart' motorway management scheme), park and rides, plus a new road and cycle link north from this motorway junction to Yate and a MetroBus extension to Yate via the A432. The new road to Yate and the MetroBus extension form a package, with road space on the A432 prioritised for public transport and cycling.



North Fringe and Severnside to Bristol

These corridors link major employment and retail centres, for both passengers and freight trips. We are proposing rapid transit links, MetroBus extensions to Thornbury, new cycling routes and infrastructure to promote active travel, motorway junction improvements and park and ride sites to intercept trips towards Bristol from the local and strategic network, as well as local rail improvements, including a new station at Charfield.

Delivery of rapid transit between north-west Bristol and the city centre will, again, be challenging and require careful management of through traffic movements.





HOW AMBITIOUS SHOULD OUR ‘RAPID TRANSIT’ PROPOSALS BE?

Whilst rapid transit can be delivered in the form of a bus-based mode, our ambition on some core routes is for a light rail (tram) mode where the potential is greatest for high passenger numbers. Corridors which have potential for a light rail mode are:

- East Fringe to Bristol city centre;
- North west Bristol to city centre;
- Avonmouth and Henbury loop;
- Bath to Bristol; and
- Airport to Bristol city centre (light rail or heavy rail).

There will be different options between street running and full segregation from road in order to deliver these. Rail-based rapid transit systems are more expensive than bus-based systems, but can be higher quality and achieve a greater level of patronage, particularly from passengers previously using a car to make that journey.

In addition, extensions to the MetroBus network are proposed to Nailsea, Thornbury and Yate, and a consolidation package to build on the benefits of the first MetroBus routes currently under construction will further improve bus lanes and renew signal junctions, particularly in the city centre.

‘Tram-train’ options (where trams run on railways rather than tram lines for part of their journey) have been investigated as a possible alternative on some of the core corridors

highlighted. However, capacity on the rail network will be very constrained following the delivery of our MetroWest schemes, and adding further capacity to enable high frequency tram-train services could be very expensive. We will, however, continue to explore these options where possible.

What is proposed for local rail improvements?

The ongoing and committed improvements to the rail network in the area are substantial, including electrification, enhancements at Temple Meads and Parkway plus MetroWest Phase 1 and 2. Further service enhancements and new stations are envisaged thereafter, including: better links within the Avonmouth/Sevenside enterprise area; new rolling stock with increased capacity; and extensions to electrification are also possible. The redevelopment of Temple Meads station, whilst primarily promoting sustainable transport choices for trips to and from the station and surrounding area, also includes the return of rail services into the ‘passenger shed’ to increase platform capacity.

What is proposed for local bus services and Park and Ride?

Most public transport passengers will be on the local bus network. The structure of the network will need to change to reflect the redevelopment of the Temple Meads Enterprise



Zone, refocussing bus services to better serve this area including the Arena, and integrating more closely with better interchanges and rail and rapid transit services.

Local corridor improvements in the form of more bus lanes, new vehicles, better ticketing and information will follow the standard set through MetroBus, and be strongly linked to the growth in urban living within our main urban centres. We are also exploring whether new bus franchising powers or enhanced partnership arrangements that may be available to the authorities could help maximise the value of the network improvements for passengers.

The transport vision has an emphasis on a network of further park and ride sites on the core radial routes into Bristol, Bath and Weston-super-Mare. Further park and ride sites, with a wider network of services, are expected to reduce congestion on main roads and in urban centres, particularly where there are problems with air quality. The approach to Park and Ride is also strongly linked to bus and rapid transit routes, and the growth in urban living in Bristol, Bath and Weston-super-Mare, as it will help intercept car trips from further afield and enable capacity on radial routes to be prioritised for sustainable transport modes.

In addition, a Bristol city centre package aims to create better places and improve the reliability and resilience of the transport network in central Bristol. It includes a range of measures including: enhanced traffic management, increased bus priority, continuous safe cycle routes, and enhancements to the public realm.

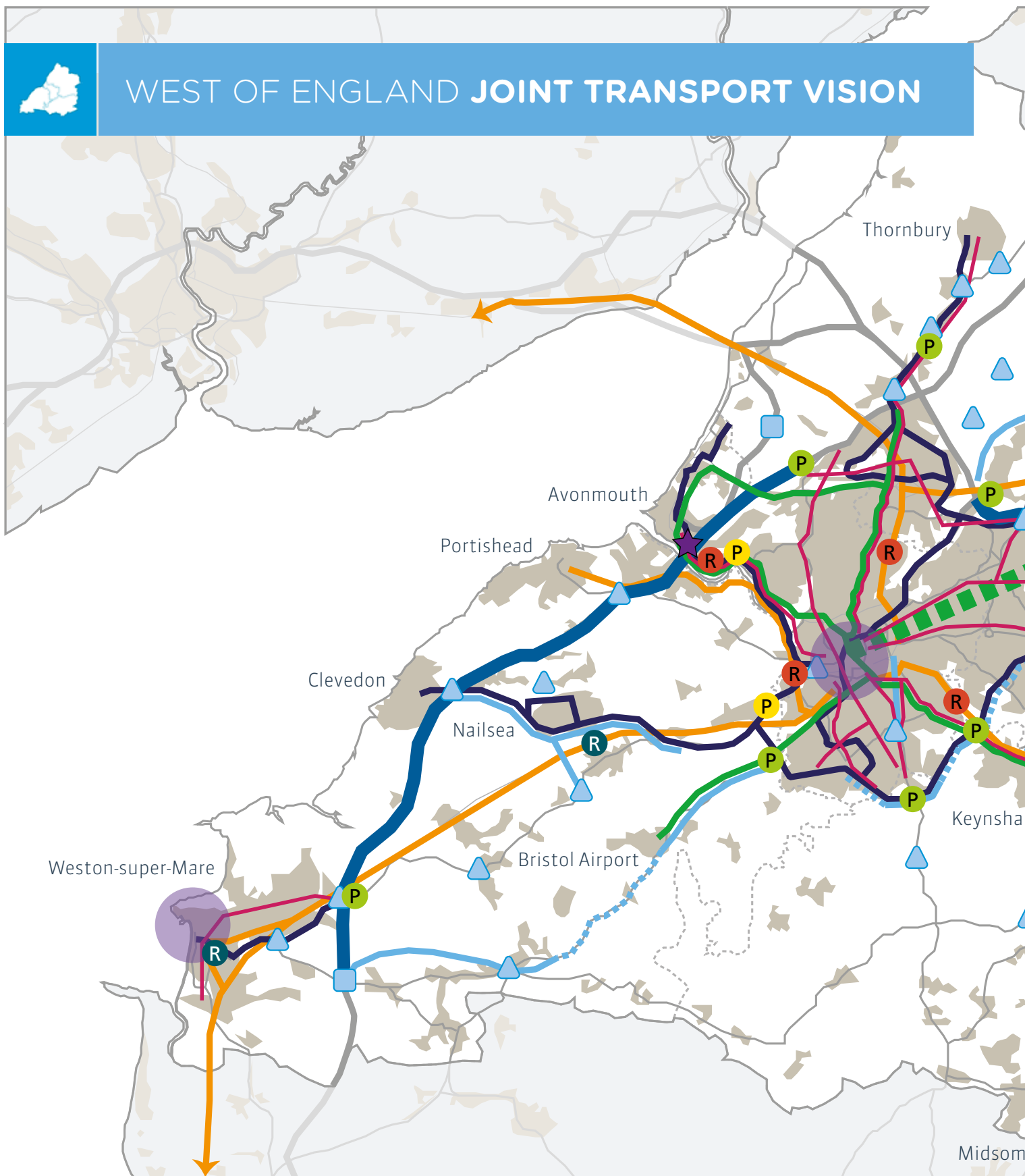
What is proposed for strategic routes and freight movements?

The West of England’s strategic transport network is of both national and local importance with significant benefits for trips being made from further afield. We will look to improve these routes including better strategic rail services to a range of locations including Oxford, Birmingham and the South West. We are also keen to improve links to Hinckley Point and north-south road connections, and are working with neighbouring authorities to develop complementary schemes along the A350 corridor to the south coast.

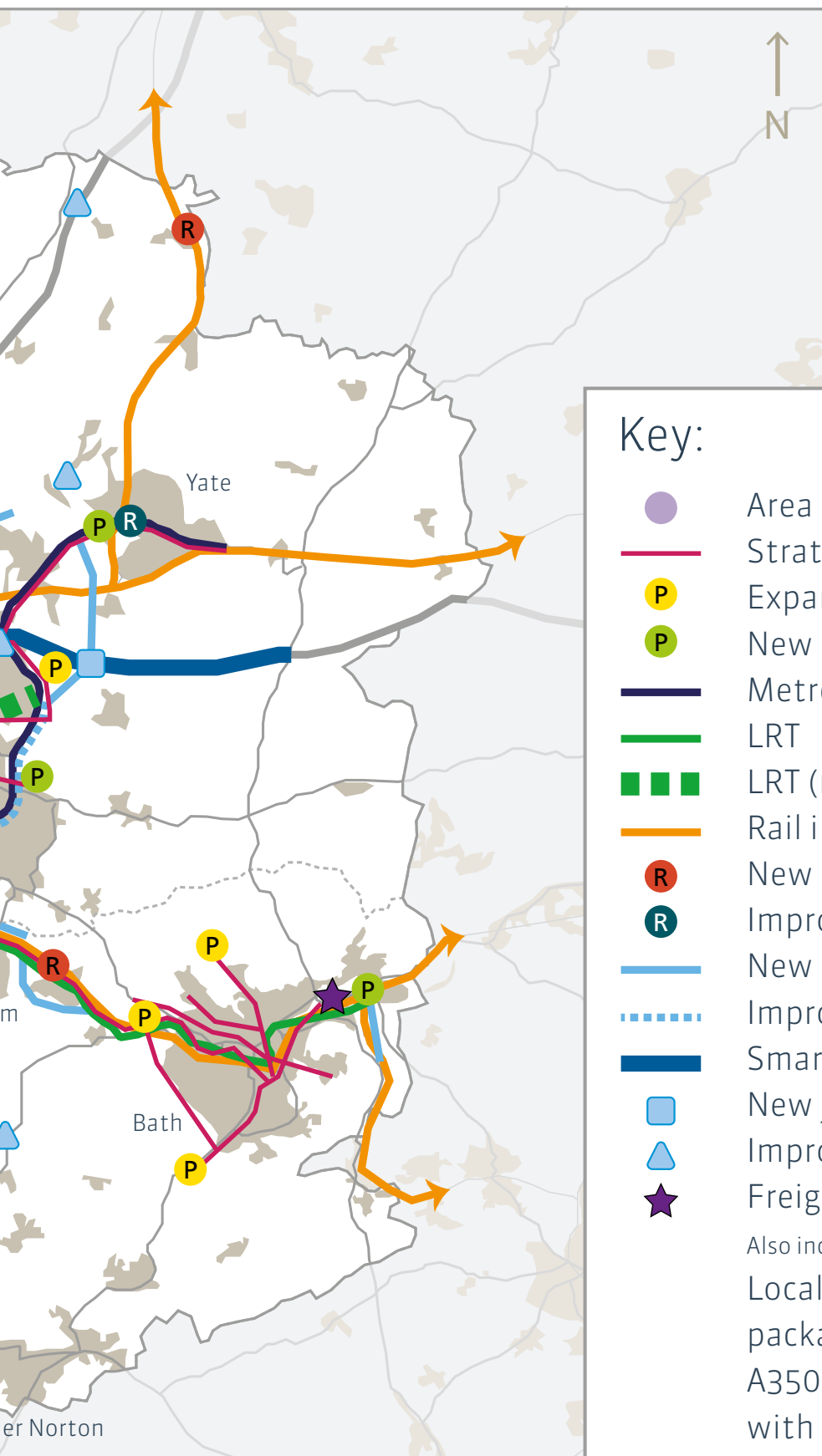
The West of England is a major origin and destination for freight traffic, including Bristol Port, whilst its strategic transport networks also cater for freight travelling through the area. There are high freight volumes on the motorway network and other major routes, and significant increases in van traffic are also forecast. We are looking to tackle congestion which will also benefit freight movements, particularly to and from Bristol Port. We will support the provision of capacity improvements to help facilitate rail freight movements on the strategic network, including those enabled through electrification.

We are proposing to improve routing and management of freight movements in urban areas, with a particular emphasis on air quality, including sourcing funding for Freight Consolidation Centres for Bath and Bristol to offload goods outside the cities and transfer them to their destination by low emission or electric vehicles.





Alignments in this plan are shown for illustrative purposes only and are not intended to indicate specific alignments



This figure shows the overall transport vision across all proposed travel modes, as well as those schemes which, whilst not addressing our current challenges, address the impact of the potential development locations outlined in the JSP.

Key:

- Area package
- Strategic cycle route
- Expanded Park & Ride
- New Park & Ride
- MetroBus
- LRT
- LRT (route to be determined)
- Rail improvements
- New rail station
- Improved rail station
- New road
- Improved road
- Smart motorway
- New junction
- Improved junction
- Freight consolidation centre

Also included in Vision but not shown on map:

- Local bus network improvement package
- A350 package to be discussed with Wiltshire Council
- Urban area
- Council boundary



WHAT DOES THE **OVERALL INVESTMENT PROGRAMME** LOOK LIKE?

The total package is likely to cost at least twice as much as the West of England councils are currently spending on building transport schemes. The investment programme has a heavy emphasis on sustainable transport modes (incorporating continued funding for smarter choice and technology changes), as shown in the accompanying breakdown. The link between public transport and complementary highways investment is also very important, as one links with and enables the other.

How will the Transport Vision be funded?

The West of England has tended to receive less money to spend on transport compared to most core cities in the UK.

Our potential funding has increased significantly from what we might expect through our existing funding channels and by our devolution proposals in some areas. We will also be expecting some of the programme to be funded by our partners (including Highways England and Network Rail), as well as contributions from developers. However, our funding requirement is still much higher than that made available

to date and we will need to lobby central government to highlight the need for and benefits of the package, both locally and for the national economy and national transport network.

We will also need to explore new funding sources and mechanisms. We need to target funding opportunities as they arise, with projects prioritised through a clear implementation programme, to enable economic growth whilst accommodating trips in a sustainable manner, including links with development locations and people's views expressed during the consultation.

There are opportunities for financial incentives and financial approaches to demand management to be considered at a local level. It is likely that the package will be more successful (and potentially quicker to deliver) if available funding for the package is boosted by additional revenue streams raised locally such as more extensive car parking charges, or other charging mechanisms. These could also reduce congestion and deliver better use of public transport, walking and cycling modes.

	Walking/cycling	£0.4 billion
	MetroBus	£1.0 billion
	Light Rapid Transit	£2.5 billion
	Rail	£1.0 billion
	Highway	£2.6 billion
	Total	£7.5 billion



HOW DOES THIS PACKAGE RELATE TO THE JOINT SPATIAL PLAN?

We are also asking for views on the draft Joint Spatial Plan (JSP) as part of this joint consultation. The JSP sets out proposals for housing and employment development from 2026 to 2036. Whilst the Transport Vision has a focus on dealing with current challenges on the network as well as supporting long term economic growth, some of the schemes in the package (with a value of around £1.8 billion) also help address the impact of new trips being made to and from the JSP development locations. Subject to the results of the consultation, the councils will carefully plan how to ensure that investment programmes are prioritised, so that new development locations come forward at the same time as the transport schemes which help to address their impacts on the network.

The cost of addressing the transport impact of the JSP will need to be augmented by additional funding (either locally generated or from central government) to deliver the Transport Vision, to improve the performance of the network

rather than just to maintain 'business as usual' in the light of housing and employment growth.

What happens next?

The consultation runs for six weeks until 19th December 2016. We will then take account of your comments and suggestions, and a final report and recommendations will be submitted to council members in Spring 2017. They will then decide how to update the Joint Local Transport Plan to take account of the study recommendations. Simultaneously, we will start the process of lobbying central government, with our strategic partners, to lever in the necessary funds to deliver the Transport Vision.

We would like your views on the proposed transport vision. Please complete the consultation survey online at www.jointplanningwofe.org.uk
We will be asking you the questions below:

Consultation Question 1

Is the level of ambition for the Transport Vision about right?

Consultation Question 3

To what extent do you agree with the principle of diverting non-local traffic, including onto new roads, to accommodate public transport and cycling schemes?

Consultation Question 2

Do you think we are proposing the right mix of public transport investment (bus, rapid transit, park and ride and train)?

Consultation Question 4

To what extent do you agree with the concept of a light rail (tram) solution on some rapid transit corridors?

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Consultation **Question 5**

To what extent do you agree with using financial incentives and financial demand management at a local level to raise funds to help pay for the transport vision?

Consultation **Question 6**

What kind of schemes would be most appropriate to deliver an upgrade to sustainable travel between the East Fringe and Bristol city centre?

Consultation **Question 7**

We'd like to know how much you agree with the following elements of the package?

- Marketing and education to change travel behaviour
- Area packages of improvements for pedestrians, cyclists and buses
- Strategic Cycle Routes - new or upgraded routes
- Park & Ride - new or expanded sites
- Bus network improvements
- Expansion of the MetroBus network
- Light Rail routes
- Rail improvements – improvements to existing services and facilities
- New railway stations
- Road improvements, including junction improvements & addressing bottlenecks
- New road connections
- Freight management including consolidation centres

Consultation **Question 8**

Are there any other schemes you would like to see in the package?

Consultation **Question 9**

Do you have any other comments about the proposed transport vision?

