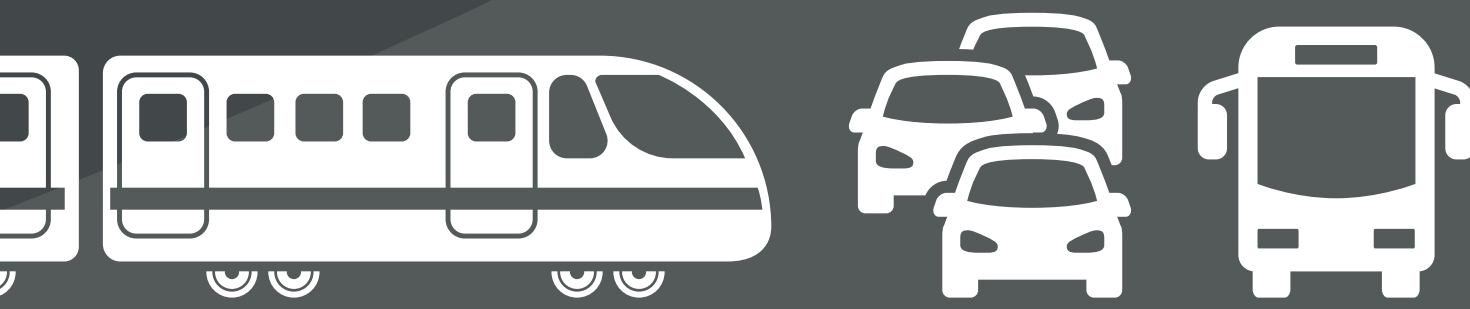




Making the right choices

Issues and opportunities
for the Strategic Transport Plan
2025-2050



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1.0

Foreword

The Western Gateway Sub-national Transport Body (STB) is an alliance of eight local authorities and one combined authority that are committed to working together beyond local boundaries to tackle the important transport challenges affecting our region as a whole.

All of the local authorities in our region have declared a climate emergency. Yet car use, which contributes most to carbon emissions, is set to grow here, with congestion an ongoing problem across our roads. How do we best deliver schemes for decarbonisation and manage a shift away from cars as quickly as possible, while addressing the need to improve our north-south links, ensure accessible transport in rural areas and incorporate plans for housing growth? How do we tackle the issues of freight, with its high emissions and slow journey times, to ensure the region remains economically competitive and sustainable for the future?

These are just some of the issues Western Gateway STB is already working to address. And now, as we look towards developing our Strategic Transport Plan up to 2050, we would like your views on how we define and achieve our aims across all transport modes over the plan period.

Our vision is to speak with one regional voice, to design a long-term investment programme that will deliver a well-connected, clean, resilient and reliable strategic transport system that creates opportunities, boosts productivity and provides a better quality of life for people across the region. And for this we need your help.

Thank you for your time in reading this paper and responding to the questions we ask at the end. Your views have never been more important to us.

We look forward to hearing from you.



Councillor Mike Greene

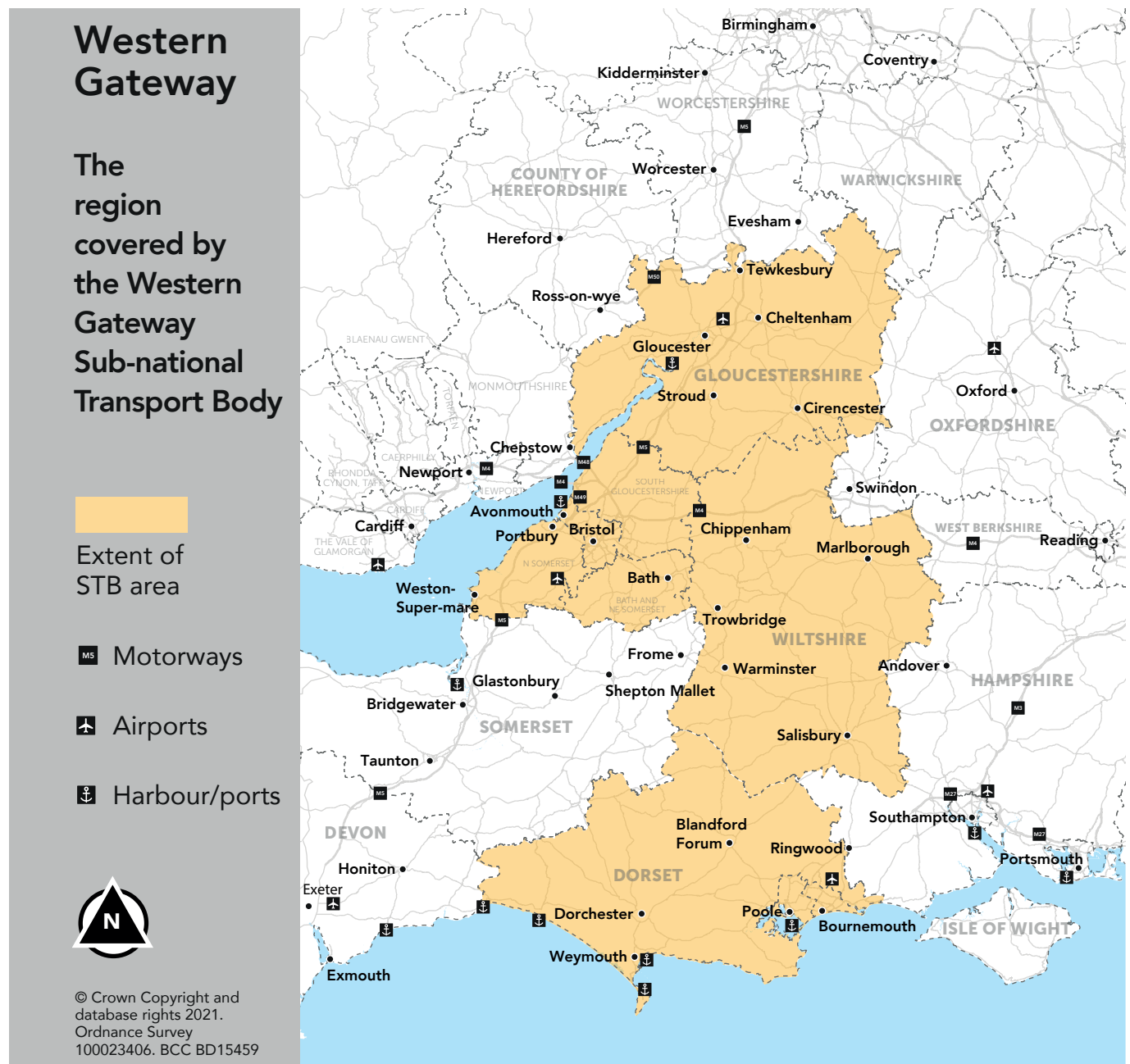
Chair of Western Gateway Sub-national Transport Body

2.0

Introduction

The Western Gateway Sub-national Transport Body (STB) stretches from Gloucestershire down through Bristol, Bath, Wiltshire and Dorset to Bournemouth. Acting on behalf of the nine local authorities that make up our area we are the regional voice for transport, helping to champion the region, prioritise interventions, take on the big challenges and work beyond local boundaries. By working regionally we save on unnecessary duplication and money and provide technical support. Our funding comes through a Department for Transport (DfT) grant and contributions from our nine local authorities.

Figure 1 – Regional map



In light of the period of change facing our region, with housing and employment growth and the need to decarbonise, the purpose of this Western Gateway STB issues and opportunities paper is to develop an understanding of these issues and consult on the potential proposals to remedy them. This will then inform the development of our Strategic Transport Plan 2025 to 2050.

The issues and opportunities outlined in this paper have been informed by a baseline report on the state of existing transport in the region as well as various supporting transport planning documents (e.g. Network Rail's strategic rail studies), carbon emissions reports and the contribution of local knowledge provided by local authorities.

This paper also considers the issues that are nationally pertinent to the country as a whole ('The big issues') as well as those specifically affecting the key transport routes through the Western Gateway STB area ('Issues in our region'). It outlines the issues and opportunities facing the region in terms of planning for future transport growth and takes into consideration both national and local priorities.

Do you think the highlighted issues are correct and what should our priorities be to tackle these? What else would you like to see?

3.0

Identifying the issues

The big issues

The government has highlighted a number of top priorities that STB Strategic Transport Plans should try to overcome. Reflective of the national 'big issues', these priorities include:

- a. Achieving Net Zero** - developing a pathway to decarbonise the transport system in the region by 2050 through targeted investment.
- b. Enabling economic growth** - helping to grow productivity by moving people and goods, facilitate international trade and delivering value for money.
- c. Levelling up the region** - making all parts of the region better places to live, with more job opportunities and more accessible transport that tackles transport-related social exclusion.



Issues in our region

Specific issues and potential interventions to overcome these issues have been identified across the Western Gateway STB area by four important and influential travel corridors (see figure 2 on the next page for maps depicting the locations of these corridors).

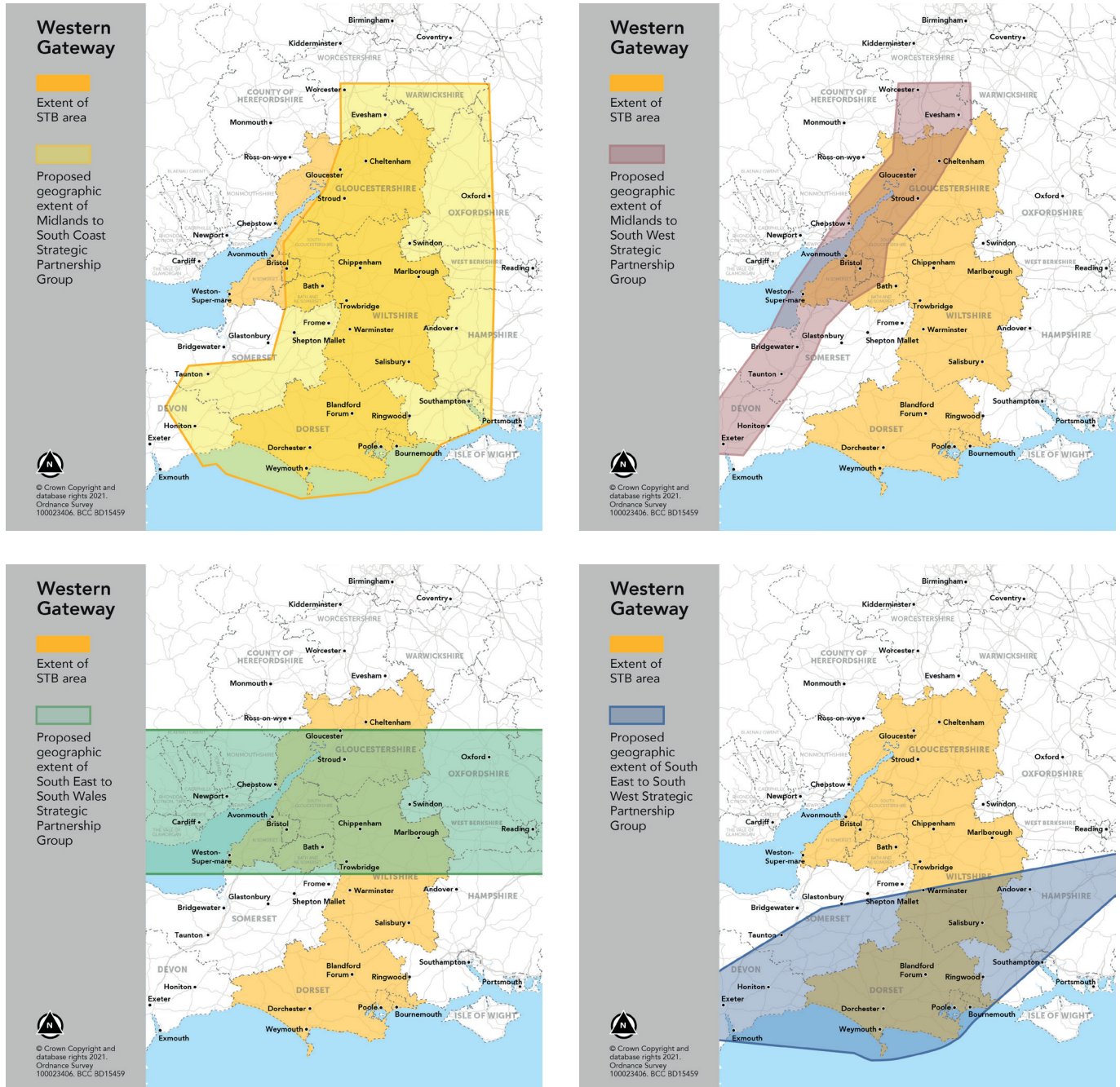
These corridors have been selected based upon the understanding that they include the key routes into, within and out of the region.

The key corridors identified in the Western Gateway STB plan area include:

- 1. Midlands to South Coast corridor,**
connecting Birmingham and the Midlands to Bournemouth, Poole and Dorset
- 2. Midlands to South-West corridor,**
connecting Birmingham and the Midlands to the Peninsula (Somerset, Devon and Cornwall)
- 3. South-East to South Wales corridor,**
connecting London to Cardiff and Swansea
- 4. South-East to South-West corridor,**
connecting London to the Peninsula via South Wiltshire and Dorset.

Many of the issues are shared in common across each of the corridors and within the region as a whole. The issues facing each corridor will be treated thematically in terms of their relevance to the national priorities highlighted by the DfT, with section 4 outlining our proposed options to overcome these challenges.

Figure 2 – The four strategic transport corridors





Issue 1: Achieving Net Zero

Decarbonisation

Following the adoption of the government's net zero targets ¹, transformational change – encompassing practices such as significant modal shift and access to sustainable transport from the outset for newly developed areas – is needed to meet locally and nationally adopted 2030 or 2050 decarbonisation targets. An example standout issue related to decarbonisation is that rural/suburban car journeys have been measured to contribute most to carbon emissions². Consequently, increased multi-modal connectivity to these areas is important, and presents an opportunity to overcome such carbon surpluses. An added issue is that carbon emissions generated by the Strategic Road Network (SRN) and our region's airports largely lie outside of the control of the local authorities.

Air quality

A number of towns and cities within the Western Gateway STB region are subject to Air Quality Management Assessments ³. Transport emissions are the most significant contributor to this poor air quality. These are typically located within urban/industrial areas and along major roads and, along with particulates from vehicle brakes and tyre wear, are a major contributor to long-term health issues.

Rural journeys

Travel in rural areas with limited alternatives available is heavily dependent on the private car. Along with freight movements this means our rural areas account for more carbon emissions than our major urban centres. Typically rural journeys are longer, where journeys between five and 25 miles account for 46% of all transport carbon emissions ⁴. Our rural landscape with several Areas of Outstanding Natural Beauty is one of the region's greatest assets and will continue to be protected. We recognise this brings with it constraints on our ability to deliver some potential transport interventions.

Car use

Within the Western Gateway STB area car use is predicted to grow in the period spanning 2031 to 2051. It is projected that there will be a 12-15% increase in trips during peak hours (7am to 9am and 4pm to 6pm) compared to 2019. The areas subject to the greatest impact from this growth are the M4 and M5 motorways and stretches of the A350 (for example, near Westbury), where flow capacity will hit 80-100% during peak hours ⁵. This again points to the need for multi-modal interventions to move demand away from car use and in particular to reconsider the traditional predict and provide approach to providing more road capacity.

¹Net Zero Strategy: Build Back Greener, 2021.

Available at: <https://www.gov.uk/government/publications/net-zero-strategy>

²Western Gateway STB Transport Carbon Model [forthcoming]

³A list of AQMAs is available at: <https://uk-air.defra.gov.uk/aqma/>

⁴South West Rural Mobility Strategy, September 2022.

Available at: <https://westerngatewaystb.org.uk/our-work/rural-mobility/>

⁵Western Gateway STB Technical Baseline [forthcoming]

There are also challenges surrounding the need to provide the necessary infrastructure to support the electrification of the transport fleet considering legislative changes around ICE (Internal Combustion Engine) in 2030 ⁶.

Freight emissions

Heavy goods vehicles and vans account for 32% of all transport carbon emissions in the Western Gateway area⁷. Road freight in the Western Gateway generates 1.4 million tonnes of CO₂⁸. Empty running lorries both into and out of our area account for 20% of this. Much has been achieved with newer and cleaner lorries but they still emit a disproportionate amount of greenhouse gases. Moving more freight by rail will reduce carbon emissions and even more so if electrification of the network is extended. The lack of active rail freight terminals, however, is the most immediate barrier to achieving this. More terminals are needed as well as tackling issues around the lack of alternative routes, constrained loading gauges, steep gradients and lack of allocated train paths for freight trains. Potential sites for new rail freight terminals need to be safeguarded. A lack of rail electrification through the region also raises issues regarding the needed phasing out of diesel trains to meet the 2050 decarbonisation targets of the Net Zero Strategy 2021 ⁹.



⁶Department for Business, Energy & Industrial Strategy, 2020.

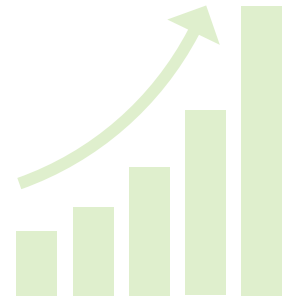
Available at: <https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution>

⁷Western Gateway STB Transport Carbon Model [forthcoming]

⁸South West Freight Strategy, July 2022. Available at: <https://westerngatewaystb.org.uk/our-work/freight/>

⁹Net Zero Strategy: Build Back Greener, 2021.

Available at: <https://www.gov.uk/government/publications/net-zero-strategy>



Issue 2: Enabling Economic Growth

Housing

There is significant housing growth planned along the Midlands to South-West corridor, particularly close to the M5. Using the planning system through higher density and mixed-use development and incorporating transport hubs we can establish sustainable travel from the outset in these proposed growth areas. Areas planned to grow within the plan period include places such as Tewkesbury, Yate, Weston-Super-Mare and within the Bristol urban area.

Seasonal traffic

There is a noted need to manage seasonal increases in road traffic, concentrated mainly on cross-regional travel from the Midlands and North along the M5 and from London and the South East on the M4 and A303 routes. This is particularly pertinent to issues of summer capacity on the SRN¹⁰ when the South West becomes a major tourist and visitor attraction.

Road congestion

There is limited capacity and many delays on important strategic routes including the A350, A31, A35, A338, A36, A303, A37 and A46. The traffic volumes are generally highest on the A36 and A350, particularly around Salisbury and the Bournemouth, Christchurch and Poole urban area. In addition, the local highway network is impacted following any accidents on the M4/M5/A303. Parallel routes to the M5, such as the A38 and A46, have also seen significant growth over the last 10 years.

Constrained urban networks are also present within the historic centres of Bath, Cheltenham and Salisbury. There are capacity issues on both the SRN and the local road network, as well as with capacity issues on the A31 around Bournemouth and Poole; in Salisbury; on the A350 north of Blandford; around Westbury; and on the A37 corridor and to the A35 west of Dorchester. Frequent narrow sections on the A350 between Shaftesbury and Blandford cause slow journey times for freight traffic.



¹⁰Western Gateway STB Technical Baseline [forthcoming]

Alongside tackling congestion, safety and resilience are key issues for our transport network. We will need to improve the strategic resilience of the network for all trips. Reducing the number and severity of casualties for all road users will remain key to the work of our local authorities and National Highways.

The attractiveness of the rail network as an alternative to road travel is limited by major capacity constraints on the network at locations such as Westerleigh Junction on the London to Cardiff and Bristol to Birmingham lines, at Westbury where north-south and east-west services meet and the single track sections on the West of England line between Salisbury and Yeovil. Electrification brings modern and attractive trains but whilst the Great Western Main Line is largely electrified there remain gaps between Chippenham and Bristol Parkway to Bristol Temple Meads. With the exception of the line to Bournemouth and Weymouth there are no other parts of our network that are electrified. Many areas are without convenient access to stations; delivery of proposed new stations through Restoring Your Railway funding at Devizes Gateway, St Annes Park, Corsham and Somerton would help to address this.

Opportunities for other new stations, and better public transport connectivity at existing stations, will continue to be explored. For rail freight, narrow loading gauges prevent the use of the most modern container trains.

North-south connectivity

The need to improve north-south rail and road links between the Midlands and South Coast is a fundamental challenge that the Western Gateway STB region needs to address, especially in relation to accessing international ports for freight. The existing A350 and A46/A36 corridors struggle as strategic links between the M4 and south coast ports, causing additional cost and delays for businesses. Traffic flows have increased between 2009 and 2019 in the majority of locations on the north-south corridor, with the greatest increases on the A36, A350 and A338. Salisbury remains a bottleneck for travel via the A36, A338 and A354. National Highways' 'M4 to Dorset Coast' study is looking to address these north-south connectivity issues. On rail, long journey times and infrequent services between Bristol and the Dorset south coast on the Heart of Wessex Line are also present ¹¹. Rail network capacity constraints are an issue with long stretches of single line operation limiting enhanced services. Connections at Yeovil for the West of England Line and capacity at Westbury are also issues.



¹¹See Dorset Connectivity Study. Available at: <https://www.dorsetcouncil.gov.uk/roads-highways-maintenance/transport-planning/improving-north-south-connections-between-the-m4-and-dorset>

Seaports and airports

The region's seaports and airports suffer from limited connectivity by public transport. This again points to the need for measures to increase the multi-modal connectivity of these destinations, alongside improving road access constraints to the seaports of Poole and Portland. Increased connectivity is especially important considering the planned expansion of Bristol Airport.

Freight

As highlighted in the South West Freight Strategy ¹², constraints to existing freight routes include limited route choice in and out of the Western Gateway STB region on the SRN, particularly along the M5/A38, A303/A30/A35 and A361 corridors. Furthermore, there are slow journey times between the M4 and the south coast, particularly during summer months. These constraints on the SRN are increased by noted poor rail connectivity in the region impacting upon the potential for modal shift to rail for the transport of freight goods throughout the South West.



¹²South West Freight Strategy, July 2022. Available at: <https://westerngatewaystb.org.uk/our-work/freight/>



Issue 3: Levelling up the region

Rural connectivity

As highlighted in the South West Rural Mobility Strategy ¹³ report for the Western Gateway STB plan area, people most commonly travel by car to town centres, food stores, secondary schools, further education institutions, local facilities/services and employment sites. Indeed, rural areas are notably disconnected to these destinations, reflected in the higher rates of car use outside urban areas. Recent cuts to bus services in rural areas have further increased this car dependency. This points to the need for measures to increase such destinations' multi-modal connectivity and schemes to inspire behaviour change.

Deprivation

There are pockets of deprivation in the Western Gateway STB area. These are concentrated in parts of Bristol, Gloucester, Bournemouth and Christchurch, alongside rural pockets in the Forest of Dean authority area ¹⁴.



¹³ South West Rural Mobility Strategy, September 2022, Available at: <https://westerngatewaystb.org.uk/our-work/rural-mobility/>

¹⁴ Indices of Multiple Deprivation 2019. Available at: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>

4.0 Opportunities

Opportunities in our region

Given the national and regional issues highlighted above, the long-term solution for our region is a wide-ranging and effective shift from car use to other modes of transport to reduce congestion, increase connectivity and access, and support decarbonisation.

The table on the next page shows how the pursuit of a combination of opportunities (see list) for the development of the Western Gateway STB Strategic Transport Plan will contribute towards achieving this over the plan period.

As with the issues identified in this paper, the opportunities below share common themes particularly when it comes to the drive to achieve net zero. It is imperative that decarbonisation and sustainability are at the forefront of future transport planning in our region.



List of opportunities:

AF. Alternative fuels: Promoting alternative fuels

AT. Active travel: Encouraging and enabling active travel

BC. Bus and coach: Enhancing bus and coach services

DM. Demand management: Managing the demand for travel

M. Multi-modal: Enabling multi-modal journeys

R. Rail: Rail improvements for passengers and freight

RN. Road network: Improving the road network for all users

Figure 5 – Proposed opportunities and their potential impact

NATIONAL ISSUE	REGIONAL ISSUE	OPPORTUNITIES (see list above)
Achieving Net Zero 	Decarbonisation	AF, AT, DM, M, R, RN
	Air quality	AF, AT, DM, M, R
	Rural journeys	AT, BC, M, R
	Car use	AT, BC, DM, M, R
	Freight emissions	AF, DM, M, R
Enabling economic growth 	Housing	AT, BC, DM, M, R, RN
	Seasonal traffic	BC, M, R, RN
	Road congestion	AT, BC, DM, M, R, RN
	North-south connectivity	BC, M, R, RN
	Seaports and airports	BC, M, R, RN
	Freight	M, R, RN
Levelling up the region 	Rural connectivity	AT, BC, M, R
	Deprivation	AT, BC, M, R

AF: Promoting alternative fuels

The promotion of alternative fuels is necessary to fully decarbonise the transport network, in particular the roll out of suitable electric vehicle (EV) charging infrastructure for private vehicles. Indeed the Western Gateway STB has commissioned an additional piece of work on the joint Peninsula Transport and Western Gateway STB Alternative Fuels for Freight Strategy. This will look at areas less well served by the potential network of electric charging and hydrogen refuelling stations identified by the strategy. The revised strategy will be completed in Spring 2023.

AT: Encouraging and enabling active travel

The emerging strategic study of the Western Gateway STB region's cycle network has highlighted a number of schemes to both improve and fill in gaps in the region's existing cycling network. The plan should ensure that adopted schemes be approved by Active Travel England and have compliant active travel elements to them. Further the plan should support reallocating road space to active travel and incentivise active travel modal shifts, such as supporting employers and education institutions to implement infrastructure provision. Encouraging and enabling active travel has the added benefit of contributing to active and healthy lifestyles, crucial to combatting health issues associated with sedentary lifestyles and reducing the burden on the National Health Service and social care services.

BC: Enhancing bus and coach services

Throughout the region it has been noted that there is a need to substantially increase the number of bus and coach users in order to achieve a multi-modal shift. The emerging South West Coach Strategy is likely to recommend improving urban and rural coach connectivity across the Western Gateway STB region by providing potential new bus and coach routes; increased service frequencies; better integration with other transport modes; a consistent adoption of new technologies across the Western Gateway STB region (such as alternative fuels, smart ticketing and live service information); and improved coach stops, interchanges, drop-offs, layover parking facilities and better facilities for drivers. Improvements rest upon service interventions targeting convenience and punctuality.

The enhancement of bus services can also play a role in improving first and last mile transport to and from railway stations. Flexible bus services could provide a sustainable way to support access, particularly in rural areas, when coupled with high frequency fixed services. Reliability and journey times could be improved through road space being better managed to provide more advantage to bus and coach services. Whilst noting the recent cuts to many local bus services there remains the potential for more cross boundary links.

DM: Managing the demand for travel

Adoption of demand management schemes, such as the use of clean air zones, congestion charging regimes, workplace parking levies and car clubs to encourage alternative ways to travel. We will need to ensure that people are not priced out of using transport as a result.

M: Multi-modal: Enabling multimodal journeys

Active travel, private vehicles, bus, coach and rail are all part of an integrated and multi-modal transport system. Trips by more than one form of transport need to be as seamless as possible. This can help reduce car dependency, manage the demand for travel, maximise capacity, efficiency and resilience and contribute to decarbonisation. More integration is needed including integrated ticketing and timetabling, journey information and an enhanced network of multi-modal hubs for passengers and freight. Our local authorities Local Plans and Local Transport Plans have a major role to play in planning the infrastructure for this.



R: Rail improvements for passengers and freight

In terms of passenger travel the Western Gateway STB has a key priority to improve north-south connectivity, focusing on increasing services on the Heart of Wessex Line from Great Malvern through Bristol via Bath and Trowbridge to Dorchester and Weymouth. This is further supported by the Western Gateway STB's Rail Strategy ¹⁵, which identified the need for greater connectivity and more frequent services on the Bristol to Weymouth route. In terms of rail freight, the provision of additional intermodal rail freight terminals is also an option in order to move more freight onto rail and achieve significant carbon reduction benefits.

RN: Improving the road network for all users

Given the widely understood need to achieve decarbonisation, balancing different network needs to approach the existing capacity constraints at road capacity bottlenecks is required. This is inclusive of offering solutions such as realistic multi-modal shift to replace demand for car travel, whilst also renewing, maintaining and operating the existing road network where constraints are present¹⁶.

¹⁵ Available at: <https://westerngatewaystb.org.uk/rail-strategy-2020-2040/>

¹⁶ See DfT 'Decarbonising Transport: A Better Greener Britain', 2021. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009448/decarbonising-transport-a-better-greener-britain.pdf

5.0

Issues and opportunities: your views

The Western Gateway STB is already working in many of the areas identified in this paper. However, as we develop our Strategic Transport Plan 2025 to 2050, we would like to know your views on the issues and opportunities facing our region.

Do you think the issues we have highlighted are correct, are there others we should include, and what should be our priorities in addressing them? We will use this information to shape our long-term vision.

Please help us by answering the following questions:

- 1. Do you agree we have identified the key issues our region is facing? Are there other issues you think need to be addressed?**
- 2. Please rank the issues in order of what you consider to be the priority in our region.**
- 3. Do you agree we have identified the right range of opportunities? Are there other opportunities you think we should consider?**
- 4. Please rank the opportunities in order of your preferred priority.**
- 5. Please let us know any other views you have on the issues and opportunities we have outlined here.**

To submit your responses to these questions (plus any relevant evidence), please email WesternGatewaySTB@westofengland-ca.gov.uk by Friday 19th May 2023.

When responding, please state whether you are responding as an individual or representing the views of an organisation. We do not collect personal information for commercial purposes.

Please note that your comments will not be published on our website, but your comments will contribute towards a high level summary report of the responses received which will be available online.

Thank you for taking the time to help us shape the future of transport in our region.



Western Gateway

Sub-national Transport Body



The Western Gateway STB is formed by an alliance of the following local authorities:

**Bath & North East
Somerset Council**

