

# PENINSULA TRANSPORT

## Rail Strategy

*Executive Summary*

---

**Peninsula Transport**

May

**2023**





# CONTENT

INTRODUCTION	04
THE IMPORTANCE OF RAIL	05
RAIL IN THE PENINSULA TODAY	07
OUR PRIORITY THEMES	14
PURSUING OUR PRIORITIES	18
WHAT DO WE NEED?	26
MANAGING THE STRATEGY	27

# INTRODUCTION

The Peninsula Transport Rail Strategy sits within the context of the Strategic Transport Plan. It sets out the key requirements needed from the rail sector to realise Peninsula Transport's vision and mobility goals.

This strategy places specific focus on rail, and in this sense is unique amongst the work packages comprising the Strategic Transport Plan. However, the inter-relationship with Peninsula Transport's other strategies has been considered throughout. In particular, rail has the potential to support the outcomes sought in other areas such as freight, rural mobility and carbon transition. These opportunities are highlighted in this strategy.

The strategy builds on the success of Closing the Gap, the 2016 plan for the development of the peninsula's rail network. Closing the Gap achieved great success, particularly in cementing cross-industry support for critical resilience upgrades to the mainline between Exeter and Newton Abbot in the wake of the sea wall collapse at Dawlish. However, many of the broader connectivity and capacity issues raised in the original plan endure, and new challenges have arisen in the five years since its adoption.

## COLLABORATIVE DEVELOPMENT

Closing the Gap was prepared by the Peninsula Rail Task Force (PRTF), whose membership now form the strategic rail sub group of Peninsula Transport. Peninsula Transport is made up of the five local transport authorities (Cornwall, Devon, Plymouth, Somerset and Torbay) with its co-opted members of Network Rail, National Highways and Heart of the South West LEP. This strategy has been prepared in collaboration with both Network Rail, Department for Transport and Train Operating Companies serving the peninsula.

The rail industry is in a period of significant change. The COVID pandemic has resulted in fundamental change to demand patterns, placing more emphasis on leisure travel and less on weekday commuting. Industrial relations issues are placing more uncertainty on travellers. The reforms put forward in the Williams-Shapps Plan for Rail are in the process of being enacted with the creation of Great British Railways, and the industry is tackling its challenge of decarbonising by 2040. These changes all sit within the broader context of inflationary cost pressures and the cost-of-living crisis placing further challenges on both customers and operators.

Peninsula Transport must influence these change processes, and ensure that the collective voice of the region is represented as key decisions are taken on the future of the industry. This strategy complements the infrastructure and service aspirations put forward in Closing the Gap with shorter-term initiatives and structural changes.

# THE IMPORTANCE OF RAIL

The findings of Peninsula Transport's Economic Connectivity Study demonstrate why preserving and improving rail is so important to the sustained economic health and social fabric of the peninsula.

The peninsula is blessed with world-renowned natural assets – two World Heritage Sites, two National Parks, nine Areas of Outstanding Natural Beauty, and miles of heritage coastline. These assets are central to the region's identity and underpin its visitor economy. They also serve as natural features which disperse the population and economic activity across a broad area.

Peninsula Transport's Rural Mobility Strategy found that those living in rural areas made 87% of their journeys by car. Funding for rural bus services has also declined. This dependency leads to "transport deserts" and social isolation for those without cars, alongside higher levels of expenditure on transport.

The peninsula's population is both growing and ageing. Between 2016 and 2041, population growth is projected to exceed national averages, driven primarily by inward migration – a scenario unique within England and driven by the net effect of high numbers of older people coming to the region and younger people leaving the region for education and employment. Much of this growth will occur in the rural parts of the region, creating development pressures and housing affordability challenges. This growth will drive the proportion

of elderly residents - already significantly higher than the national average – to over 30% by 2041. This demographic skew creates added pressure to find ways of delivering mobility to those who are increasingly dependent on others, and avoiding social isolation.

The economy of the region is evolving. Traditional sectors such as mining, manufacturing, fishing and agriculture are employing fewer people, with growth opportunities in knowledge-based sectors such as marine, aerospace, advanced engineering and health & social care. This is well illustrated in the Sedgemoor district, where the Hinkley Point C megaproject and Gravity campus development (north of Bridgwater) are expected to generate over 9,000 jobs. These sectors are more likely to cluster in our towns and cities, and at larger out-of-town science parks and development sites, and business will increasingly look for locations with strong sustainable access as they pursue their own Net Zero goals. Future generations are being equipped for this evolving economy in colleges and universities which are also clustered in our urban areas. This shift towards high-productivity employment will be needed to close the gap in economic growth and productivity between the peninsula and the rest of the UK.

The way in which people work and live is also changing – driven by technological and logistical advances. Even prior to the pandemic, more people

worked from home in the peninsula than the national average, and the number of days spent in the workplace each week was declining. With this hybrid pattern now the "new normal", it provides the opportunity for fewer, long-distance commutes. This will raise expectations around connectivity, comfort and productivity. The share of retail sales generated online has grown materially since the early 2000s. Whilst this reduces customer trips, it serves to drive up logistics trips such as delivery vans in the first/last mile.

The peninsula's socio-economic characteristics and its emerging changes result in significant demand for travel to, from and within the region. The changes described above are projected to result in significant trip growth over the coming decades.

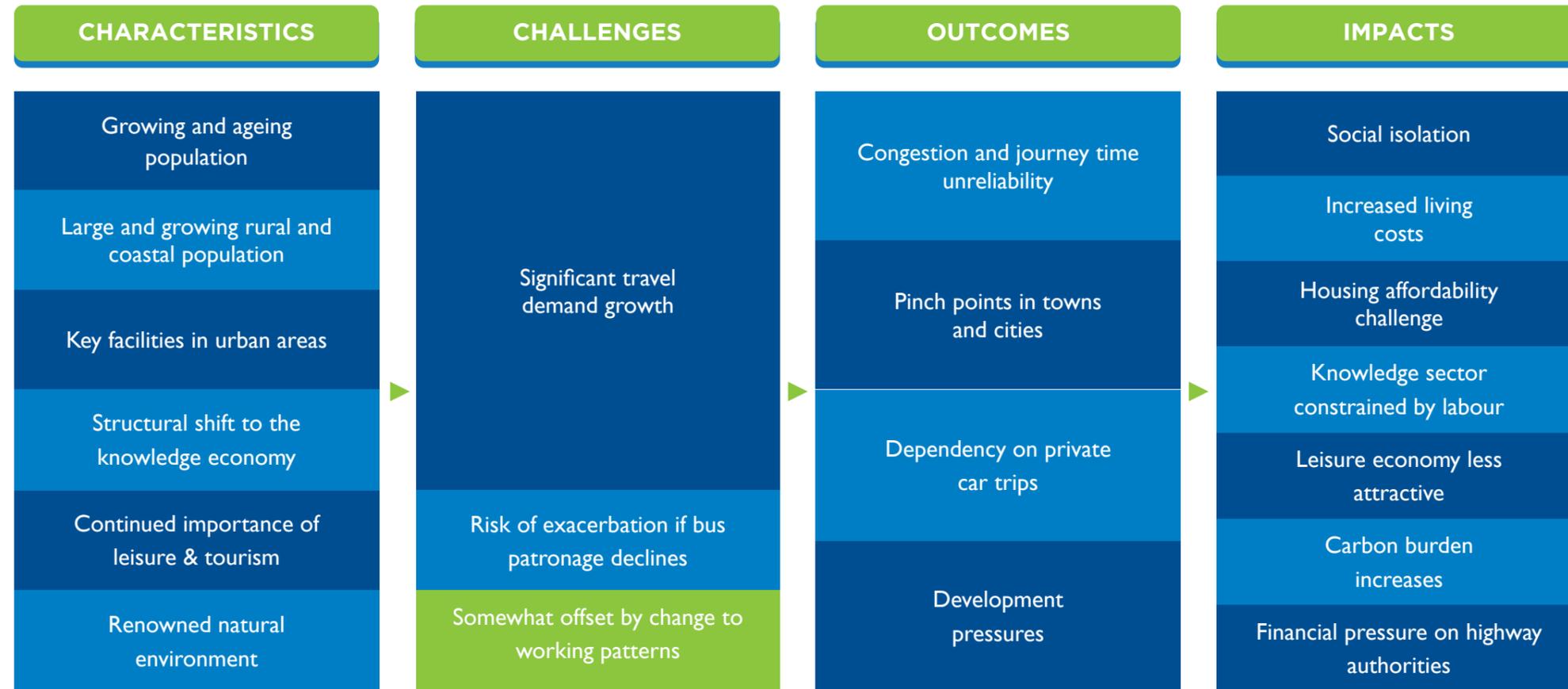
There are relatively few large urban areas to act as centres for services and hubs for knowledge-based employment. Combined with a broadly dispersed wider population, this places additional emphasis on travel to centres such as Exeter, Plymouth, Taunton, Torbay and Truro, often over long distances. In parallel, access to rural and coastal communities will continue to be critical to the leisure economy and to avoid the risks of social isolation among an ageing population.

Each year, vehicle journeys totalling 23 billion kilometres are made on the peninsula's roads. Around half of these trips are made on just 5% of the network – the region's Strategic Road Network (SRN) and Major Road Network (MRN). Some 35% of total demand is on the east-west spine network – the M5/A38/A30 and the A303/A358. Demand is projected to grow strongly across the whole network – by between 40-50% on motorways and trunk roads and 30-35% on other routes.

This population growth would require considerable financial investment to address the need for further capacity upgrades and relieve pinch-points in

towns and cities. This additional traffic (and construction activity) would add to the region's decarbonisation challenge and blight the natural environment, as well as causing congestion, severance and air pollution in urban areas. Rail plays a key role in reducing traffic and addressing congestion issues on the highway network. This is not only essential for meeting decarbonisation targets, but also to reduce journey times and improve economic productivity.

These ingredients, when combined, clearly demonstrate the importance of delivering a viable alternative to car travel. The logic map illustrates the consequences of "business as usual".



# RAIL IN THE PENINSULA TODAY

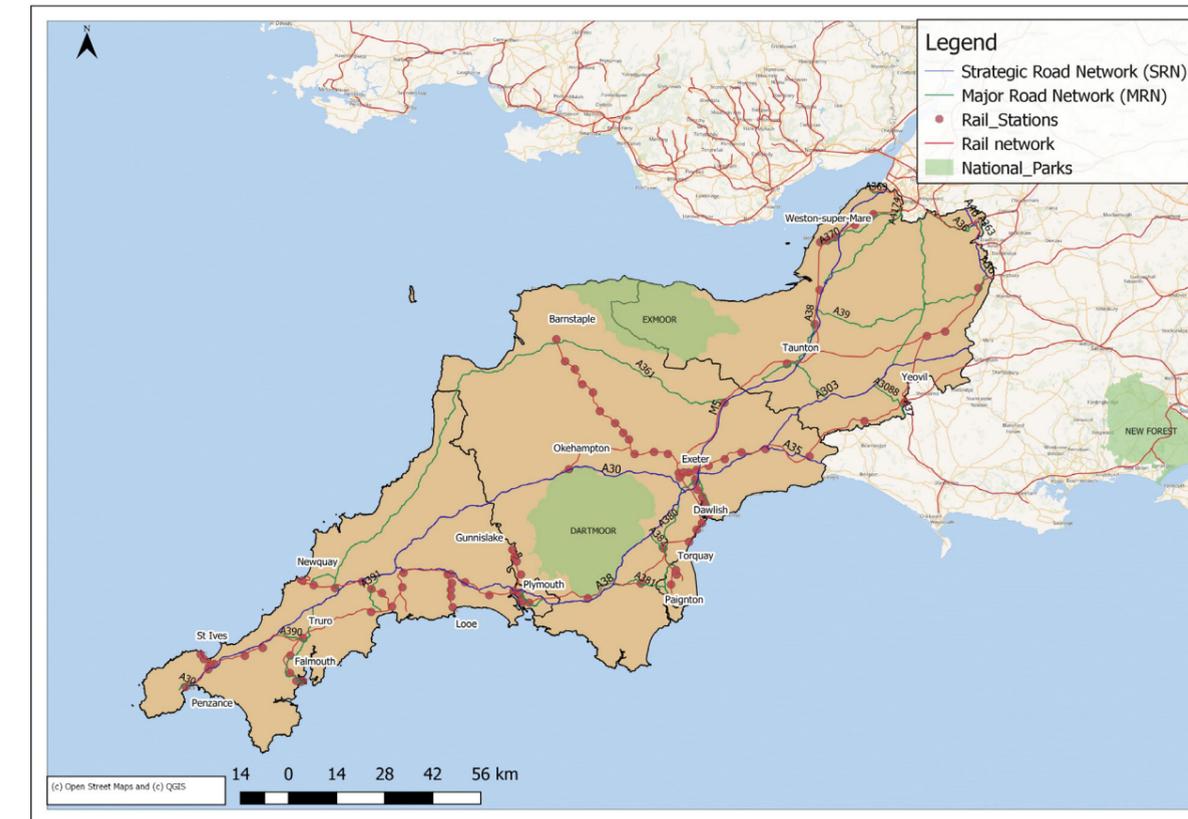
The peninsula's rail network mirrors its natural geography. To the east, the routes from London Paddington, Bristol and the north travel through Somerset where they converge at Taunton, whilst the main line from London Waterloo via Yeovil meets at Exeter St Davids. The main route then carries on to Torbay, Plymouth and onwards through Cornwall to Truro and Penzance.

This strategic spine through Somerset, Devon and Cornwall is vital to our businesses, access to education and our visitor economy. Direct trains to and from Birmingham & the North, Cardiff, & London provide direct connectivity to the rest of the UK.

In a configuration unique in Great Britain, a series of nine relatively self-contained branch lines tie into the spine, providing connectivity to communities across Devon and Cornwall. Three of our major resorts – Newquay, Paignton and Torquay - receive longer distance "summer seasonal services" to complement existing local services.

Exeter is a key hub in this network, sitting at the centre of lines towards Axminster, Paignton, Exmouth, Taunton, Barnstaple and Okehampton, the gateway to Dartmoor.

A combination of natural geography and historic changes to the railway means that large parts of our geography are remote from the network. This is particularly the case in the north of our counties and contributes to mobility challenges in these areas. The issue is not confined to rural and coastal communities, with significant towns such as Cullompton, Tavistock, and Wellington all lacking direct access to the network.



In many cases, rail in the peninsula is characterised by low service frequencies and long journey times. Low line speeds (<75mph) are common across the peninsula, and universal west of Newton Abbot. On many branch lines and at smaller main line stations, services are hourly or less frequent.

This combination constrains the travel catchment of the peninsula's cities, towns and rural communities, serving to isolate them both within the peninsula and on the national level.

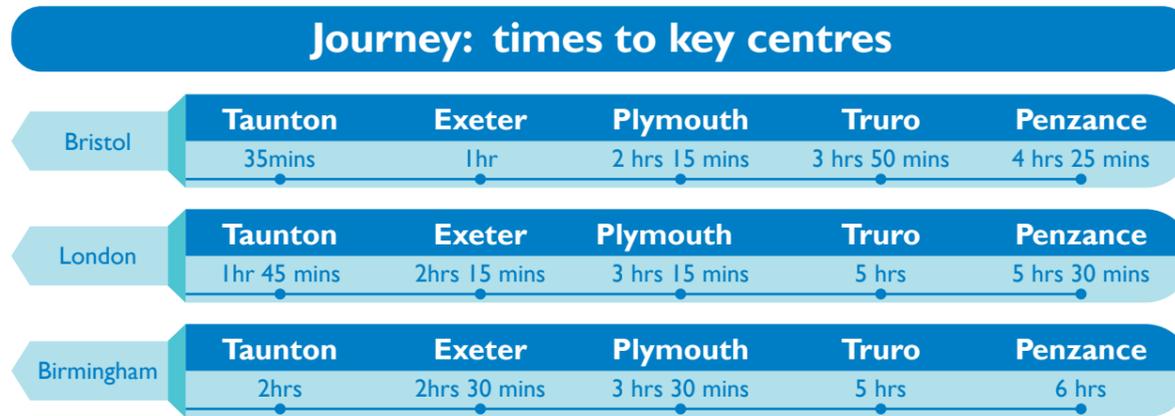
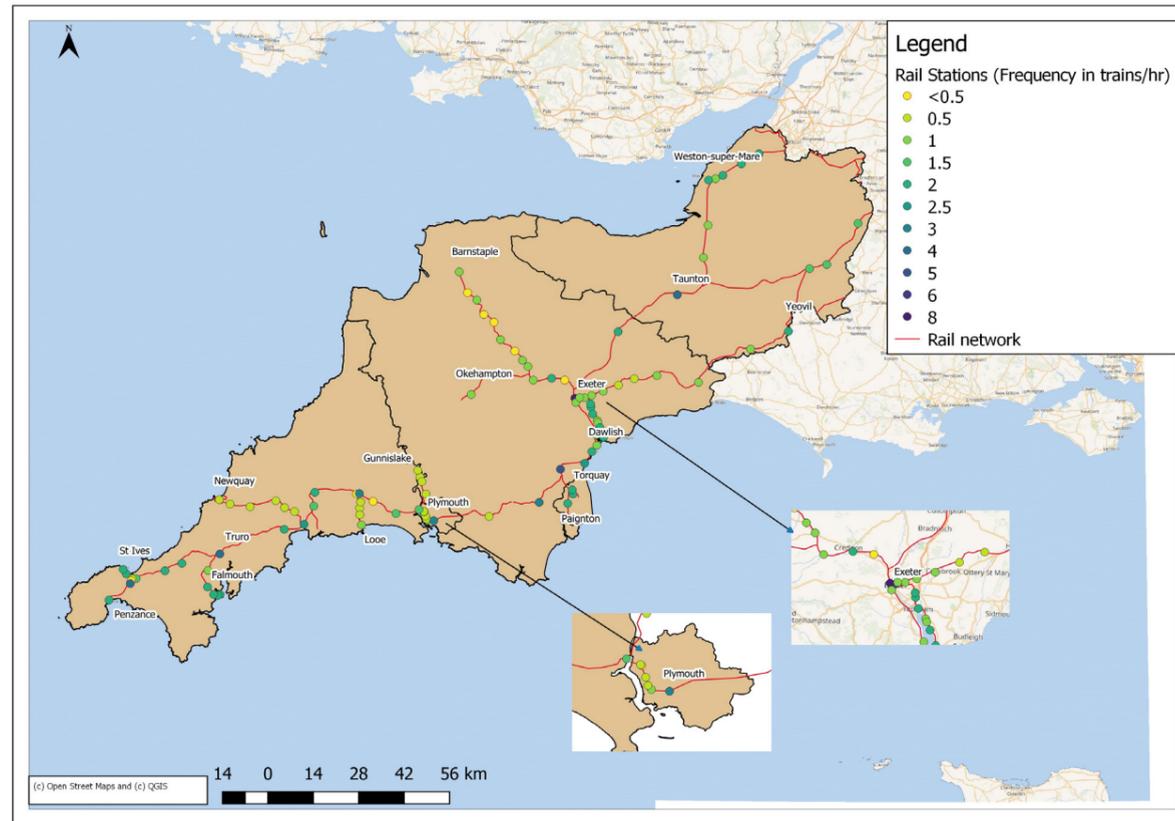
The primary constraint to the speed, frequency and reliability of services is the network's infrastructure characteristics.

Many of our branch lines are single-track with limited passing locations, which limits the frequency of trains able to operate and poses a risk to performance. There are also locations on the main line where single-track running is required, such as across our historic bridges and viaducts.

This is especially prevalent on the route between Exeter and Salisbury where 75% of the track is single line, acting as a constraint to both timetable and performance.

These constraints are often exacerbated by topological features. There are steep gradients in places such as Somerset and the South Devon Banks, and meandering alignments as the railway navigates our natural environment. Long signalling headways mean that the time between each train is longer than in many other parts of the UK network.

Despite these challenges, there have been repeated examples where unlocking these infrastructure constraints has led to material growth in usage. In 2009, a passing loop was installed on the Falmouth branch line which enabled the service frequency to increase to half-hourly. Usage doubled in less than four years, with passenger growth over a ten-year period exceeding 200% at some stations.



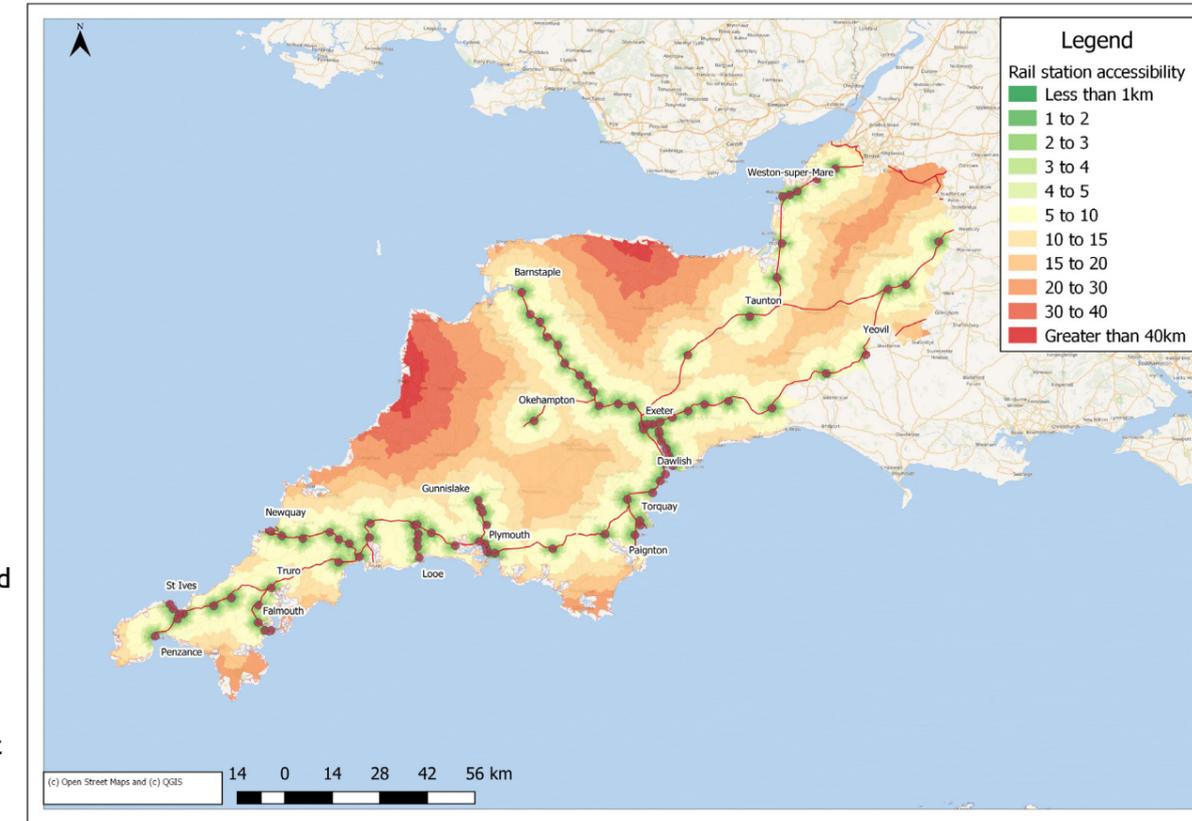
The dispersed nature of the peninsula's population presents a barrier to network access. Only 30% of the population live within walking or cycling distance of a station – and many of these are in urban areas where services and employment are generally closer, and alternative door-to-door journey options (such as bus) exist.

The rural South West, like many other areas, also lost many of its railway lines and stations following the Beeching cuts of the 1960s. This particularly affected smaller rural towns and villages which lost stations and branch lines compared to the larger urban areas which maintained more of their infrastructure and services.

The proportion of the population within 10 and 20km catchments is far greater. This emphasises the need for strong integration with bus and road networks, particularly in rural and coastal communities where door-to-door alternatives are more limited.

Further, there remain gaps in step-free station access across the peninsula network. Many of our highest-use stations do not provide a fully accessible environment, which constrains people with mobility requirements and travellers with luggage.

Distance to station	Peninsula population
800m (walking)	9%
2km (cycling)	30%
10km (driving/public transport)	69%
20km (park & ride)	91%



# DECARBONISING THE RAILWAY

Rail contributes only about 1% of the UK's transport emissions and produces significantly less emissions per passenger/freight journey than private cars and goods vehicles<sup>1</sup>.

All services in the peninsula are operated using either diesel-only or bi-mode rolling stock, which provide an important low carbon alternative travel option with similar journey times to cars at a lower cost. Investment in Class 802 bi-mode trains has delivered significant improvement to the quality of long-distance services, and ensured that these journeys are at least partly operated sustainably, taking the first steps towards full decarbonisation. However, it has also created a stark contrast with older 1980s and 1990s diesel rolling stock operating on the branch lines. Given the age of these trains, it is likely that they will require replacement prior to permanent decarbonisation solutions being available.

Decarbonising Transport, the Department for Transport's 2021 plan to decarbonise the UK's transport network, makes a commitment to remove all diesel-only trains from the network by 2040.

Network Rail's Wales & Western Regional Decarbonisation Strategy, building on the earlier national Traction Decarbonisation Network Strategy, puts forward solutions to achieve this. These focus on achieving decarbonisation via rolling stock replacement, including the deployment of battery traction, alongside targeted infrastructure investment in overhead line electrification.

However, battery traction is not yet proven at scale, and electrification schemes require considerable development time, preparation and investment. There is an opportunity for innovative solutions to help close this gap.

Despite its traction emissions, rail has a central role to play in the decarbonisation of transport. A better rail offer would reduce dependency on private car use, which even after migration to electric vehicles will contribute to congestion, accidents, severance and local air pollution via tyre wear.

The potential emissions reductions through modal shift (and the consequent benefits to health and quality of life) could exceed those emitted through traction.

## Decarbonising rolling stock in the peninsula

In 2022, Great Western Railway launched a trial service between London Paddington and Penzance (between which only 85km is electrified between London and Newbury) by electric-diesel-battery "tri-mode" trains developed by Hitachi Rail and Eversholt Rail. Installing the battery technology on its inter-city trains will cut fuel usage and reduce carbon emissions by at least 20%. The batteries will be charged by regenerative braking on non-electrified lines and by 25kv ac catenary when operating on electrified lines.

South Western Railway completed a trial of new emission-reducing technology in 2020. In partnership with Porterbrook and Eminox, South Western Railway trialed a new system that has real-world reductions in pollution from nitrous oxides (NOx) by over 80% and hydrocarbons, carbon monoxide and particulate matter (PM) by over 90%. The EmxS5 system by Eminox was fitted to the exhaust of a Class 159 train in full passenger use between London Waterloo and Exeter and is the first successful transfer of the technology into a rail environment.

<sup>1</sup> DfT statistics on carbon dioxide emissions by transport mode (Dec 2022)

# A RESILIENT RAILWAY

The peninsula's unique geography makes it reliant on a small number of strategic road and rail arteries. The topography of the region necessitates that these critical arteries run close to the natural features which, whilst providing spectacular views for travellers, pose risks to infrastructure.

This vulnerability was brought into focus by the sea wall collapse at Dawlish in 2014, which severed rail links to Cornwall and much of South Devon for a number of weeks. An ongoing programme of work is securing the rail route through Dawlish, but the road and rail network across the peninsula remains vulnerable to increasingly severe weather and rising sea levels.

Other sections of the network remain vulnerable to severe weather and rising sea levels. Cowley Bridge Junction, just to the north of Exeter, has historically suffered with flooding from the River Exe. Resilience work has included raising signalling and electrical equipment above flood levels and installing barriers that can be deployed across the railway to divert flood water away from key assets. This serves to reduce the amount of time the line is closed, but does not prevent closure altogether.

Similarly, the Somerset levels – one of the lowest areas in the United Kingdom – suffered severe flooding in early 2014. The area is very flat, and it is estimated 10% of it was underwater when flooding was greatest, with the Taunton-Bridgwater corridor the worst affected. Despite various resilience schemes tied to the wider projects in the region, flooding remains a risk in the area,



exemplified in January 2023 where rain caused water and soil to damage the West Somerset heritage railway at Combe Florey.

The Exmouth, Gunnislake and Looe branches also run close to estuaries and tidal rivers at a very low level, leaving them at risk of tidal flooding in the future as sea levels rise. The Looe branch already experiences such flooding and has done for many years; but this is likely to become more frequent and more challenging to manage. The Looe Flood Defence and Regeneration Scheme is looking to address this challenge with multiple construction projects (such as a tidal barrier and a southern breakwater). These projects will aim to be completed by 2028.

The St Ives branch, running at close to sea level along the tidal River Hayle, faces similar challenges. It also runs for some of its length along cliffs exposed to the Atlantic, where coastal erosion may become a challenge and risk in coming years.

## Edginswell new station

A new station at Edginswell, in the north-western suburbs of Torquay, will provide the large residential community with connectivity towards Paignton, Newton Abbot, Exeter and Exmouth. It will also unlock sustainable access to Torbay Hospital, Edginswell Business Park, and other nearby employment. In addition to connectivity benefits, the new station is aimed at alleviating congestion and parking problems in the area, making it a greener and more attractive place to live and work.

The new station is being funded via a combination of central government, local government and private sector contributions, as is being developed collaboratively between Torbay Council, Network Rail and GWR. Construction is expected to start in the Summer of 2023 and will be open and running by the end of 2024.

## Mid Cornwall Metro

The Mid Cornwall Metro will connect Newquay, Par, St. Austell, Truro, Penryn and Falmouth with year-round hourly rail services. It will also increase the frequency of main line services between Par, St Austell and Truro. Local and long-distance services will run concurrently along the Newquay branch.

Works to be carried out will include: a new platform at Newquay Station; a new passing loop at Tregoss Moor; upgraded level crossings; new signalling

at Goonbarrow; a new accessible lift bridge at Par Station; extended platforms at Falmouth stations; infrastructure at Newquay, Roche, Bugle, Penryn and Falmouth stations. The programme was awarded funding through the Government's Levelling Up Fund in January 2023, with Cornwall Council providing a local contribution. Cornwall Council are working in partnership with Department for Transport, Network Rail and GWR to deliver the programme.

## Dawlish long-term resilience programme

Following the collapse of the sea wall at Dawlish in 2014, a long-term resilience programme was developed to protect the railway and station. The programme of interventions aims to increase resilience to extreme weather and tides and provide enhanced amenities for local people and passengers.

- The construction of a new, taller sea wall between the two breakwaters.
- A wider, taller, public walkway incorporated into the wall with views on to the beach.
- Reconstruction of the timber Dawlish station seaward platform.
- A new, accessible station footbridge with lifts.
- New pedestrian ramped access to the beach from the promenade.
- Improved passenger experience through better protection from the sea.

The new £80m sea wall is being delivered in two phases. The first phase, which runs for approximately 400m from Colonnade underpass, west of Dawlish station, to Boat Cove was completed in July 2020. The second phase which runs for a 415m stretch between the Coastguards and Colonnade breakwaters is expected to finish in Spring 2023. When both phases are built, the new structure will better protect the railway through Dawlish for the next 100 years.



## Dartmoor Line re-opening

The Dartmoor Line is the first former line to be reinstated under the Government's Restoring Your Railway fund, opening to passengers between Exeter and Okehampton in November 2021 – nearly 50 years after it fell to the Beeching axe. The line now accommodates a regular hourly service to the gateway to Dartmoor, providing a sustainable access option for visitors whilst linking communities in west Devon to opportunities in Exeter and beyond.

Work undertaken by Network Rail included laying 17km of new track and installing 24,000 concrete sleepers and 29,000t of ballast in just nine months. Repairs have also been made to 21 structures along the route including four bridges and a range of works including vegetation clearance, earth and drainage works and fencing in preparation for the return of regular services.

A new, multi-modal West Devon Transport Hub will further build on the success of the Dartmoor Line after receiving funding through the Levelling Up Fund in January 2023. Situated on the eastern edge of Okehampton, the hub will provide an interchange with the A30 trunk route from Exeter and include a passenger lift, high quality cycle facilities and electric vehicle charging points on site to better connect communities and promote active travel.



# RAIL FREIGHT IN THE PENINSULA

Peninsula Transport and Western Gateway's South West Freight Strategy (SWFS) highlights the limitations imposed on the rail freight market by a lack of key infrastructure.

Freight is important to our region. Over 65 million tonnes of goods are lifted in, out and across the peninsula annually and our region's ports export around 1.5 million tonnes of freight every year.

There are some important rail freight movements in the peninsula. The transportation of aggregates from the Mendip Quarries to London is nationally significant, and vital for the construction sector in the capital. The flow of china clay from Cornwall's quarries for export at Fowey Dock and for domestic use in the Midlands underpins traditional industries both in the peninsula and elsewhere. The northern end of the Exeter-Bristol corridor provides access to the Portbury Docks, which is a major UK port for the automotive trade, used for vehicle import and storage.

However, the sector is generally heavily reliant on road transport, with rail freight holding only 5% of the market share. The steady increases in rail freight traffic observed elsewhere in the UK are not happening in the peninsula.

The SWFS sets out the principal reasons for this, with many being infrastructure constraints which also impact the passenger market:

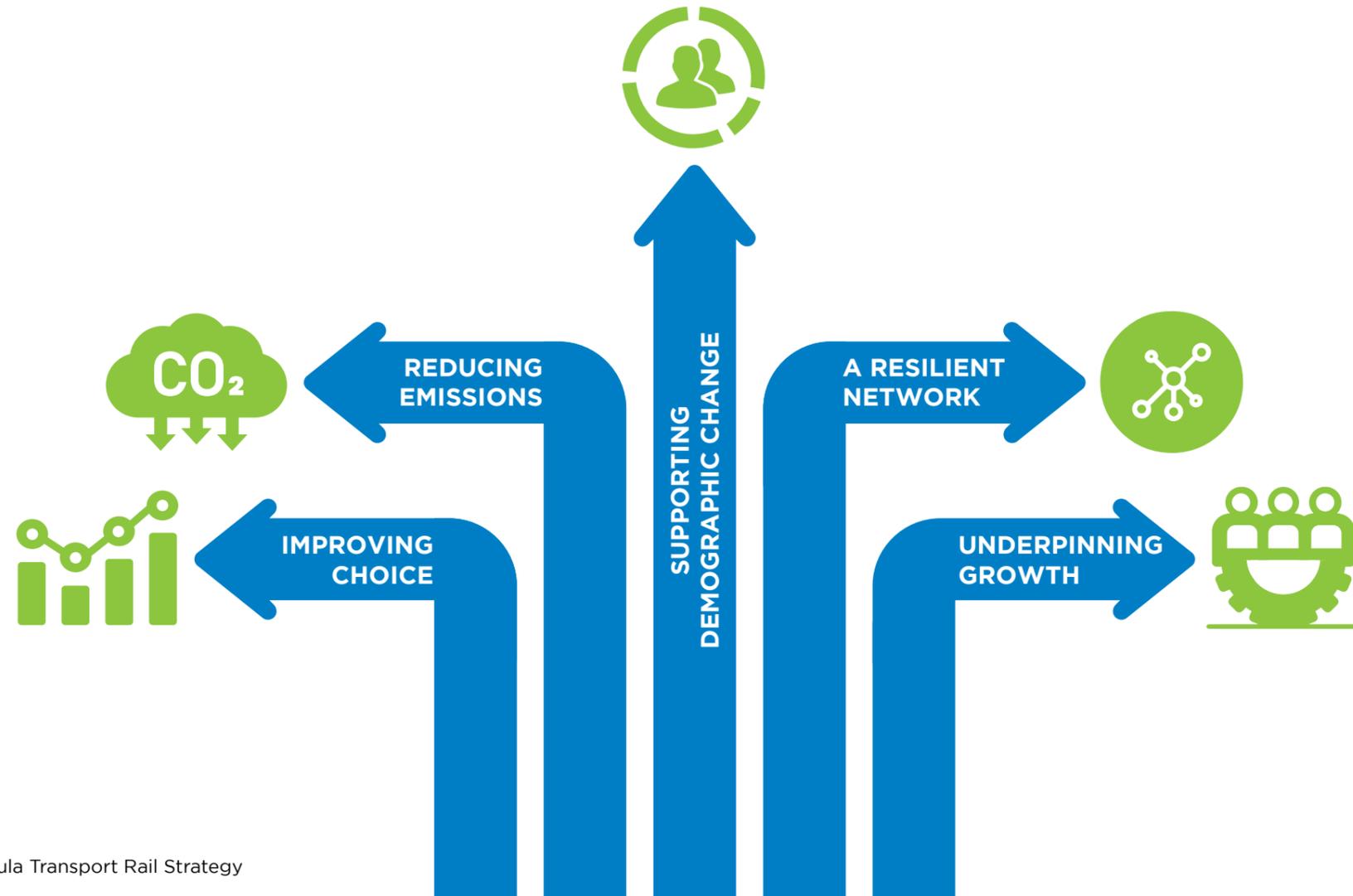
- A lack of intermodal freight terminals in the peninsula, either close to population centres or at the major ports. Some of the region's principal import/export hubs, such as Plymouth port, are not connected to the rail network.
- Generally low gauge clearance across the network preventing the movement of container traffic.
- A lack of network capacity and single-line running on many branch lines.
- The lack of electrification necessitating diesel haulage of all services.
- Risks posed due to the vulnerability to severe weather and flooding described previously.



# OUR PRIORITY THEMES

It is clear that, to preserve and enhance the railway's function in unlocking the growth and transition of the peninsula's economy, further development of the network will be required.

**We have identified five key themes to set out the outcomes we are seeking from our rail network:**



## Improving choice

A lack of journey opportunities – whether driven by unattractive journey times, inaccessible stations or a lack of freight facilities, restricts choice and leads to dependence on road travel. We will encourage the development of rail to make it a natural choice for the movement of people and goods.

Many of our routes and stations provide service levels which are uncompetitive with car equivalents, but there is considerable evidence from the region that higher service frequencies and new journey opportunities lead to significantly increased service usage. In some cases, both road and rail are slow, which can isolate communities from opportunity.

With a considerable portion of the population living 10km or more from a regular rail service, providing integrated mobility solutions will be vital. This is particularly true in our rural and coastal communities.

Consultation and policy goals show that passengers feel ticketing systems are inconsistent, too complex<sup>2</sup> and need to be better integrated with that of other sustainable modes, in particular buses but also hire bikes and local taxi services. Passenger information can also be fragmented across a number of national and local channels. Trialling and implementing technology to provide door-to-door journey information and the best-value fare across all modes of transport is a key element of this strategy.

Quicker, simpler and more affordable journeys will make it easier for more people to access our towns and cities, broadening labour pools and visitor catchments and relieving pressure on our roads.

## Reducing emissions

Decarbonising transport will be critical if the UK is to migrate to a Net Zero economy by 2050. Each of the peninsula's local authorities have declared a climate emergency, and the impact of cars and goods vehicles on our roads is a blight to our precious natural environment. Rail is already one of the cleanest

means of moving large volumes of people and goods. Migrating passenger and freight journeys to rail is the most effective way in which rail can support decarbonisation in the short term. However, we face a challenge to remove the remaining diesel-only vehicles from our network.

The peninsula benefits from bi-mode technology already, with Great Western Railway's 802 fleet partially decarbonising our longer-distance connectivity. The solution to our branch line network will require more complex and potentially innovative solutions, whilst still requiring long term electrification in many cases.

## Supporting demographic change

Our population is growing and ageing. We must plan for the challenges ahead to ensure that our communities remain active and connected. Making our stations accessible and welcoming to all will reduce dependency on car travel and preserve independence for people as they grow older. We will also work with the industry to reduce any mobility barriers caused by interchange, making this process as seamless as possible and reducing perceived challenges for those with additional mobility needs. Increased investment into infrastructure upgrades and collaborative working with local accessibility groups is needed to ensure the socio-economic objectives cover all demographics.

Enhancing the reach of our network into new communities will reduce isolation and help relieve the pressure of supporting our growing population.

In parallel, the way that people work and shop has changed. Already evolving prior to the pandemic, the shift to remote and hybrid working has had a profound impact on traditional commuting markets. The rail industry must keep pace with these emerging trends, and ensure that passengers are offered flexibility and value in their travel options. Working with Network Rail, Peninsula Transport is currently seeking funding to provide continuous mobile connectivity for rail passengers and lineside communities within the peninsula, enabling passengers to remain connected as they travel.

<sup>2</sup> Easier Fares for All, Rail Delivery Group

## A resilient network

The risks posed by climate change and the subsequent increase in extreme weather events are well understood within the region. The 2014 Dawlish sea wall collapse severed the strategic spine of our network. The rapid response and subsequent major works have made our railway stronger, but risks remain.

Many lines run close to coastlines, floodplains, estuaries and tidal rivers. Some of these already experience flooding, which is likely to become more widespread and severe as the effects of climate change are felt in our region. This will place additional pressure on a network already characterised by single lines in many places, where it can be difficult to recover quickly after unplanned disruption. The rail industry's response to unplanned disruption is often cited as a major factor influencing satisfaction and usage.

A combination of external factors have contributed to a 41-year high inflation rate in the United Kingdom. This is having a direct affect on the rail network with material and labour costs increasing, affecting all aspects of service delivery from maintenance to operations. Rail fares continue to increase, providing an additional hurdle for passengers when deciding to travel via train. In addition, on-going industrial action has caused significant cancellations.

“Passengers' needs” must be at the heart of decision making and transport operators must work together to ensure journeys can always be completed during disruption. The aim is to deliver a public transport service which fosters confidence that door-to-door journeys can always be completed.

The railway must also be resilient to the change in demand patterns observed following the pandemic. Our railways have experienced a strong recovery, driven by our leisure and visitor economy. However, certain markets may have changed forever, posing a financial challenge. While planning for the future, we must continue to encourage users on to the railway and continuously ensure that existing capacity is used effectively.

## Underpinning growth

The economic structure of the peninsula is changing. To realise the potential of our emerging specialisms and strengthen our existing key sectors we must broaden the catchment of our towns and cities. This includes people within the peninsula making daily trips and visitors travelling to, from and around our region.

Achieving this without sacrificing our environment will mean greater reliance on public transport and, in particular, rail. Our travel catchments are currently constrained by long journey times and infrequent services, and put at risk by enduring resilience challenges.

Our freight producers and exporters are constrained by a lack of facilities and network capacity, fostering reliance on HGV movements. Our ability to deliver new housing can often be constrained by a lack of alternatives to car access.

The theme of growth therefore underpins the preceding four themes, as growth generally occurs in locations with a strong choice of transport options, where access is resilient in the face of disruption and therefore positive socio-economic outcomes can be delivered. For the growth to be sustainable, emissions generated by transport to and from developments should be a key consideration at all levels of planning.

In parallel, the role of the rail sector as an employer and driver of social value should be preserved and enhanced. Diverse and resilient supply chains will foster innovation, improve skills and broaden access to opportunities.

Achieving these outcomes will require continuous collaboration, insight and investment.

To deliver material progress towards the outcomes, we have identified 13 priorities.

These reflect the current characteristics of our network and where we see improvement as most urgently being required.

The priorities will be used to define our work programme over the life of this strategy and articulate our requirements to decision-makers and funders.

Theme	Priorities		
Improving choice	<b>C1:</b> Improve the frequency and/or speed of services to provide more flexibility in travel options.	<b>C2:</b> Improve access to the network through joined-up mobility solutions.	<b>C3:</b> Deliver a virtually integrated network, with a one-stop-shop for information and the best fare from door to door.
Reducing emissions	<b>E1:</b> Optimise the network to capture passenger and freight journeys from the highway – particularly our strategic spine roads.	<b>E2:</b> Decarbonise the network by removing diesel-only trains	
Supporting demographic change	<b>D1:</b> Develop a set of station standards to prioritise investment towards a network that is accessible and welcoming to all.	<b>D2:</b> Support flexible lifestyles with consistent data connectivity.	
A resilient network	<b>R1:</b> Future-proof the network to protect against the impacts of climate change.	<b>R2:</b> Ensure train services operate when customers need and expect them to, and better manage things when they go wrong.	<b>R3:</b> Ensure that there is resilience to the key strategic spine of our network.
Underpinning growth	<b>G1:</b> Unlock the potential of rail freight through facilities and network capacity.	<b>G2:</b> Ensure that the network around our key towns and cities can accommodate future service growth.	<b>G3:</b> Ensure that rail maximises its potential to deliver social value through skills, employment and supply chain.

# PURSUING OUR PRIORITIES

## Short term initiatives

Whilst it is clear that achieving many of our desired outcomes will require sustained work over a number of years, we believe that meaningful progress can be made via a series of short-term initiatives.

Each of these initiatives will require careful development in collaboration with the rail industry and local partners, but we are confident that they are deliverable within the next 12-24 months. Critically, these initiatives do not require extensive infrastructure or rolling stock changes, but they retain ambition.

We want this to first step towards a broader programme of development which equips our network to support the peninsula as it evolves. The cross-industry support and investment being delivered at Dawlish provides the template for collaborative working, one which we will retain and improve through close partnerships.

### Initiative 1: Joined-up mobility (C2)

- Integrated fare and ticketing solutions between rail and other forms of local mobility.
- Timetable integration between rail and local bus services, and connection guarantees.
- Stations as local mobility hubs with targeted infrastructure investment.

### Initiative 2: One-stop-shop for rail (C3)

- Whole-system mapping, consistent across all modes.
- Combined portal for door-to-door travel information.

- Expansion of the Devon & Cornwall Rail Card to cover Somerset.
- Improved onward travel information at stations and on trains.

### Initiative 3: Trialling innovation (E2)

- Examining the potential for our network to be a test bed for emerging decarbonisation solutions.

### Initiative 4: Joined-up disruption management (R2)

- A joined-up approach to disruption management, covering rail and local mobility.

### Initiative 5: Improving accessibility (D1)

- Developing a minimum standard for our stations, and delivering priority investment.

### Initiative 6: South West Mobile Connectivity Trial (D2):

- The South West Connectivity Trial, under Network Rail's Project Reach, aims to reduce or remove connectivity dead zones along the region's network.

### Initiative 7: Short-term capital investment (D1, R1, R3, G3)

- Securing commitment to the development of Dawlish Phase 5.
- Securing funding to complete the transformation of Plymouth station
- Secure funding to deliver new stations at Wellington and Cullompton.



## Developing our network

Network Rail have conducted a number of strategic studies of the peninsula's network, in collaboration with Peninsula Transport partners and train operators. Collectively, the report's findings set out an evidence-led train service specification, accommodating the growth and expansion of the peninsula's network.

TSS State	Description
Stage 1	<p>Mid Cornwall Metro connects Falmouth and Newquay. Newquay branch frequency improved to hourly, plus additional 1 train per hour (tph) Par-Truro</p> <p>All Paddington – Plymouth trains extended to Penzance providing an hourly service</p> <p>Reinstatement of Tavistock branch delivers hourly Plymouth – Tavistock service</p> <p>New 0.5tph Paddington – Exeter semi-fast service to give an overall regular hourly service</p> <p>All North West – Bristol Cross Country services extended to Exeter to deliver regular 2tph</p> <p>Extending Cardiff-Taunton services to Exeter St Davids every two hours.</p> <p>Amending nine daily Manchester-Exeter services to call at Bridgwater</p> <p>Hourly Exeter St Davids – Axminster (potentially extending to Barnstaple) service to provide combined 2tph</p> <p>Second hourly service between Salisbury and Yeovil Junction</p> <p>Regular 1tph between Bristol and Weymouth</p>

TSS State	Description
Stage 2	<p>Extra service Liskeard – Looe provides 2tph on branch</p> <p>Extend additional 4tpd Paddington – Exeter to Paignton to total 8tpd Paddington – Paignton</p> <p>Extend additional 4tpd Midlands/North – Exeter to Paignton to total 8tpd Cross Country service to Paignton</p> <p>Hourly Paignton – Exmouth service provides 3tph Torbay cross-Exeter</p> <p>New hourly service Plymouth – Penzance calling all stations</p> <p>New seasonal weekly Cross Country service to Newquay (Fridays &amp; Saturdays only)</p> <p>New hourly service Penzance – St Ives provides 3tph on branch including 1tph direct to Penzance</p> <p>New hourly service Tavistock – Paignton providing 2tph on Tavistock branch and another cross-Devon main line service 3tph on Falmouth branch, new service extending to Newquay giving 2tph on that line.</p> <p>New two hourly service between Taunton and Exeter Central</p> <p>Extending all Manchester-Bristol services to Exeter</p> <p>Extension of double track at Yeovil Jn and of Axminster Loop giving additional 1tph diversional capability in both directions</p> <p>Restored service between Taunton and Bishops Lydeard, providing access to the West Somerset Railway</p> <p>Regular hourly service on the Heart of Wessex line between Bristol and Weymouth</p>

Delivery of the specification would increase services across the majority of the peninsula's network, and make considerable progress towards our priority of improving the frequency and/or speed of services to provide more flexibility in travel options.

Delivering the train service specification will require additional capacity as shown below. We now wish to proceed with the development of a whole-programme feasibility study and business case for the enhancements, within which individual assessments of each intervention can be structured.

Route	Baseline (tph)	Stage 1 (tph)	Stage 2 (tph)	Capacity requirements
Cornwall main line	2	2 (now all through services)	3	Headway reductions, particularly Plymouth – Exeter. Improved platforming at Exeter and Newton Abbot. Increased crossover speed at Exeter.
Devon main line	2.5	2.5	3	
Bristol - Exeter	2.5	3	3	Exeter St Davids additional platform capacity Signalling headway reduction Bristol – Exeter Four-tracking Bedminster – Parson Street Taunton area capacity enhancements
Exeter - Taunton	3	5	6	
Exeter – Salisbury via Yeovil	1	2 (Exeter – Axminster)	3 (Salisbury - Yeovil Jn)	Honiton Loop extension Whimple – Cranbrook new loop Yeovil Junction double track extension Tisbury loop extension Extension of Gillingham Loop – JTI of 14 mins between London Waterloo- Exeter St Davids
Barnstaple	1	2	2	Additional capacity via signalling improvements, targeted line speed increases and other infrastructure.
Bridgwater	1	1.5	1.5	Reinstatement of full Cross Country timetable
Falmouth	2	2	3	Passing loop at Penmere station to permit 3tph
Gunnislake	0.5	0.5	0.5	
Looe	1	1	2	Signalling and passing loop to permit 2tph
Newquay	0.5	~1	~2	Passing loop, reinstated platform at Newquay, accessible footbridge at Par
Paignton	2	2.5	4	
St Ives	2	2	3	New passing loop, review connection onto main line at St Erth
Tavistock	-	1	2	Reinstatement of infrastructure between Bere Alston and Tavistock
Heart of Wessex	~0.5	~0.5	1	Weymouth throat redoubling, Extension of Maiden Newton loop, Linespeed improvements, Extension of double track south of Castle Cary, Additional track/platform in Westbury area, potential for Yeovil south chord.

Beyond the train service specification, Network Rail's studies recommend a detailed examination of specific areas of opportunity:

#### Exeter Area Station Strategy (C2, G2):

Examining the potential of Exeter St Thomas station to provide a southern gateway to the city centre and unlock development. There are currently accessibility challenges at the station and additional services would be required.

#### Plymouth suburban stations (C2, G2):

Examining how the five stations in western Plymouth – Devonport, Dockyard, Keyham, St Budeaux Victoria Rd and St Budeaux Ferry Rd – could make a broader contribution to public transport provision within the city. The reinstatement of the railway to Tavistock would deliver a step-change in service provision which unlocks an opportunity to attract new users and support the development of the adjacent major employment sites around the dockyard.

#### West of Plymouth Railhead Strategy (E1):

A strategically-placed park and ride facility has the potential to relieve highway congestion on the A38 and western approaches to Plymouth. This could be at an existing station in east Cornwall or a purpose-built new facility. A study will be required to consider the issue in detail and identify and develop the preferred solution.

#### Network resilience (R1, R3):

The resilience improvements at Dawlish have significantly strengthened the strategic spine of our rail network. However, other areas of our network remain vulnerable. With climate change expected to deliver an increase in extreme weather events, we should continue to future-proof our network. Given the unique geography of the peninsula's strategic spine and network of branch lines, there is merit in a multi-modal assessment of climate change transport risks and mitigations across the region.

#### Peninsula Fares Study (C3):

Stakeholders have cited inconsistencies between fares for similar trips across the peninsula. There are also instances of poor integration between modes which serves to penalise those making door-to-door journeys. The fares study will identify these inconsistencies and inform future work between Peninsula Transport and the rail industry to resolve these over time.



### New stations and routes (C2, E1):

There is strong appetite to expand the reach of the rail network by opening new stations and new routes. In many cases, these would re-open facilities which were lost under the “Beeching axe” of the 1960s, which cut off communities from the access to the railway.

Our region has experienced great success securing funding for new and re-opened stations and routes. The Dartmoor Line to Okehampton opened in November 2021 and provides an hourly service between Exeter and the gateway to the National Park. The reopening has been a tremendous success, attracting over double the number of journeys originally forecast.

The Dartmoor Line will be enhanced further with the delivery of a new station and integrated transport hub to the east of Okehampton, after securing £13.4m from the Levelling Up Fund.

Elsewhere, the new station at Marsh Barton is due to open later in 2023, and funding has been secured to deliver a new station at Edginswell, the third station serving Torquay. Our ambition to re-instate rail services to the towns of Wellington and Cullompton has been backed by government with the award of funding to proceed to detailed design stage. Proposals to deliver a new station for Langport and Somerton are also being developed.

These successes demonstrate the potential offered when the railway is brought closer to the people it serves. There are ambitions to bring forward other new and re-opened stations and routes across the peninsula, with Network Rail already highlighting the potential value of a new station at Plympton, for example. We will prepare early feasibility work to examine the case for these openings, and work closely with local and industry stakeholders to support them through the process.



### Growing the role of rail freight

This strategy endorses the interventions put forward in the South West Freight Strategy, aimed at addressing the challenges faced by the rail freight sector. These interventions are:

SWFS intervention ID	Intervention
RL1	Feasibility study to operate intermodal container trains from deep seaports to intermodal sites.
RL2	Support electrification and gauge enhancement of the core rail network.
RL3	Pursue rollout of new alternative fuel locomotives and wagon technology.
RL4	Support and signpost businesses and local authorities to transition to rail freight.
RL5	Understand the availability of grants to help facilitate modal switch to rail.
RL6	Partnership working with stakeholders to promote South West priorities.
RL7	Encourage the establishment of rail freight terminals with a catchment of 1 hours’ drive time by HGV. Indicative locations might include; Bristol, Westbury, Poole, Bridgwater, Exeter, Plymouth and mid-Cornwall.
RL8	Safeguard rail freight sites through developing Supplementary Planning Guidance.
RL9	Allocate sufficient freight train paths on the main line and diversionary routes.

In addition, a number of the studies and initiatives put forward by this rail strategy will support the growth of freight – including our examination of network resilience and our ambition to increase network capacity and capability.



# WHAT DO WE NEED?

Delivering on our priorities will require sustained collaboration, focus and resources. Every stakeholder in the industry will have a role to play in delivering the initiatives and interventions necessary to transform our railway.

## Our commitments

As Peninsula Transport, we commit to:

- Fostering collaborative relationships between the rail industry, local businesses and planners, to ensure a joined-up approach across our economy and society.
- Along with our partners, leading the integration of our transport networks to deliver door-to-door mobility solutions.
- Sponsoring the technical work necessary to underpin and refine our ambitions.
- Targeted provision of match-funding to support the delivery of projects.
- Presenting a unifying voice for the region on the national level.

## Our requests

To deliver the outcomes set out in this strategy, we will need support from government:

- A provisional development fund to progress our package of short-term initiatives and mature our network design work.
- A meaningful, effective role for Peninsula Transport in the future structure of the rail industry.



# MANAGING THE STRATEGY

The Peninsula Rail Task Force (PRTF) is the strategic rail sub-group for Peninsula Transport. It makes recommendations to the Peninsula Transport Board on rail priorities for the peninsula through its own work with the rail industry. The PRTF oversaw the development of this strategy and will be responsible for monitoring progress and updating it as required.

PRTF was set up in 2013 following severe storms that damaged rail lines across the South West. Its formation saw local authorities and Local Enterprise Partnerships across Cornwall, Devon, Plymouth, Somerset and Torbay come together, speaking with one voice, to make the case for investment into the rail network to improve resilience and deliver better services for rail customers.

In 2014, PRTF responded on behalf of communities and businesses across the South West following the line collapse at Dawlish and flooding across the Somerset levels. Representatives attended Transport Select Committees, pressing both the then Prime Minister and Secretary of State for Transport on the need to invest in making the peninsula's rail network more resilient in the face of more frequent extreme weather events.

PRTF was the catalyst for local authorities working in partnership on all strategic transport matters across the region and in 2018, Peninsula Transport was formed. In 2020, PRTF became the strategic rail sub group of Peninsula Transport. Joining the two groups enabled the five local transport authorities to be able to take a holistic approach to strategic transport decisions across the peninsula.

PRTF meets with the rail industry quarterly, feeds back to Peninsula Transport at board meetings and has clear terms of reference. This strategy will guide the agenda of the PRTF, with progress reports being made quarterly to the Peninsula Transport Board.

PRTF is chaired by Councillor Mark Coker, Cabinet Member for Strategic Planning and Transport at Plymouth City Council and is supported by a rail officers group made up of representatives from each of the constituent local authorities and the Heart of the South West LEP.





Transforming the economic performance of the South West