



PENINSULA RAIL
TASK FORCE

Closing the gap

The South West Peninsula strategic rail blueprint

November 2016





For the South West, investment into the rail network will unlock a host of benefits, generating an additional £7.2bn of GVA and £1.8bn of transport benefits in the coming years, transforming the economy and our communities. With passenger growth at 128%, we consistently outstrip industry forecasts and our potential is growing. 75% of SW businesses stated that rail is vital to their business and that reducing the journey time to London by 45 minutes would have a significant positive impact on their productivity.

Since the severe weather incidents of 2014 when the line was severed at Dawlish, and floods engulfed the Somerset Levels, the South West has been working hard to develop a strategic plan for our rail network. Starting with the formation of the Peninsula Rail Task Force – a partnership of local authorities, LEPs and stakeholders, it has gone on to work with South West MPs to respond to a commission by Government for a plan. This is the result: ‘Closing the gap’, our blueprint for rail.

Our plan is not a quick fix, a long term view is required. The South West has lost out because of poor transport investment for over 20 years, averaging £35/head compared to a national average of £98/head – leaving our region some £2bn behind other areas. Our regional rolling stock is the oldest, dating back to the late 1970s. The Met Office says climate change incidents will become more frequent, and with Network Rail warning that the line at Dawlish will suffer closure every four years by 2065, the South West remains more vulnerable than many parts of the UK. Our economy depends on good connectivity, but unlike other areas, we do not have a good network to start with.

Our initial priorities of greater resilience, faster journey times and more capacity and connectivity remain. Our last report, ‘On Track’, set out the importance of maintaining the iconic mainline through Dawlish, creating real journey time savings and greater capacity, as well as increasing the opportunities for communities to interconnect

with other areas. Links to Bristol, Birmingham and London, as well as other travel hubs such as Heathrow, Gatwick and Southampton are vital, as are our interregional provision. The report clearly calls for reliable and high quality services, accessible to all, enabling passengers to work and travel in comfort.

Since the initial report, we have undertaken extensive studies with partners Network Rail, the Department for Transport, Great Western Railway and the University of Plymouth to look at ways to achieve our aims.

Our immediate priorities to 2019 are:

- **Invest £284m in resilience**, including commencing the securing of the main rail line through Dawlish and Teignmouth
- **Completion** of committed flood relief schemes
- **Introduce trains** capable of operating along the seawall in all weathers
- **Invest £2.5m** in GRIP 3 options for the diversionary route East of Exeter
- **Invest £22m** in GRIP 3 options for reducing journey times
- **Increase frequency** to 2 direct trains an hour from Plymouth to London in the new franchise, reducing journey times by up to 10 minutes, whilst at least maintaining existing services
- **Work with the rail industry** to maximise the benefits of the new trains from Dec 2018 and **invest £25m** to make our journeys more productive through on board travelling office, media and mobile/Wi-Fi connectivity.

Over the medium term to 2029, we are focused on continuing investment:

- **Invest £301m** to complete Dawlish seawall and cliffs resilience, the diversionary route between Exeter and Castle Cary and estuary flood protection

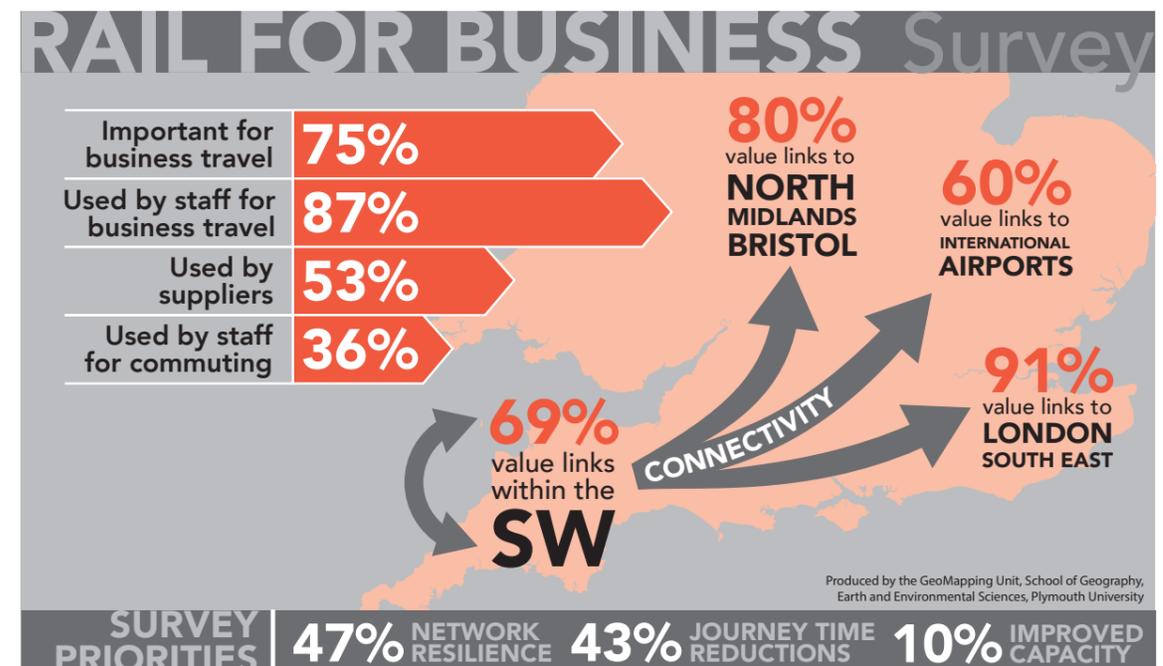
- **Invest £1.5bn to reduce journey times** by up to 14 minutes to Penzance, through infrastructure improvements, partial electrification and franchise renewals
- **Invest £150m** reducing journey times and increasing core capacity on the Exeter –Waterloo line
- **Invest £358m** to improve capacity and comfort through new rolling stock, infrastructure enhancements and phased opening of the Northern Route
- **Increase frequency** to 2 trains an hour west of Exeter to Bristol and the Midlands

We want to realise our true economic potential and contribute to UK PLC. With exceptional opportunities such as Hinkley, world-class aerospace, nuclear and marine industries, outstanding natural assets such as the North Cornwall and Jurassic Coasts, UNESCO Global Geopark and national parks, we have significant prospects to exploit. As investments into other areas are realised, such as Crossrail and HS2, the gap between the South West and the rest of the UK will become more pronounced. But we strongly believe that new infrastructure can, and will, redress this imbalance.

The UK’s record of investment into infrastructure is mixed; in the South West we strongly believe a new approach is needed. Other countries are using different ways to invest and deliver their infrastructure, successfully: on time and on budget. We want to work with Government, Network Rail, train operating companies and private sector partners to explore new avenues and bring benefits to the South West as soon as possible.

Our message to Government is plain: there must be real enhancements to our rail network, improving existing provision. Reduced services, loss of connections and slower trains are unacceptable. Whilst our rail network cannot be transformed overnight, we must tackle the decades of underinvestment, we must start now and we must hold true to that course in the years to come.

PRTF Chair Councillor Andrew Leadbetter





Endorsements

"I congratulate all those involved in compiling this 20 year plan which when implemented will see increasing benefits brought to our region. I now call upon government to deliver and ensure that the South West has a rail service fit for the 21st century."



Gary Streeter
MP for South West Devon

"Never again" – That is what I hear from communities across the South West Peninsula when I ask about connectivity from our region. Never again can we be cut off from the rest of the country because of creaking infrastructure and severe storms.



Oliver Colvile
MP for Plymouth Sutton and Devonport,
Chair of the SW Rail All Party Parliamentary Group

This report, which is the culmination of years of hard work by people across the South West, gives a sound and forward-thinking blueprint for the next generation of rail travel to the Peninsula.

The storms of February 2014 forced Government to sit up and listen to what we had been saying for years – that the South West has been chronically under-funded for decades, resulting in millions of pounds lost in growth over a 6 week period. Whilst the Government gave the commitment to sort the line out at Dawlish and the Orange Army of Network Rail engineers fixed the line, it has taken a united front, speaking with one voice, to get to this point.

This is a serious report, which I know will spark a serious discussion about how we deal with a historical lack of funding into our region. Better connectivity means better, higher paying jobs and in turn, greater growth for our region.

It took a shock to the system to reach this point, but I am sure that this report will lay the foundations for a golden generation in connectivity to and from the South West.

Our economy

Our economy has many strengths but it cannot realise its full potential due to constraints on connectivity. The South West is perceived to be distant from centres of commerce as a result of journey times, deterring inward investment. The economy is further restricted by long journey times, an equally fragile road network and the dispersed nature of our towns and cities. Greater connectivity would promote more employment, more opportunities for investment and greater accessibility for investors.



Photo © Tony Jackson



Cornwall Devon Plymouth Somerset Torbay

SOUTH WEST SALARIES BELOW NATIONAL AVERAGE



WORKPLACE GVA

UK	£24,600
South West average	£22,300
Devon	£20,150
Plymouth	£19,900
Somerset	£18,381
Cornwall	£17,300
Torbay	£15,500



trips by rail for TOURISM & HOSPITALITY

14.7 million to London

25.6 million to the SW

aerospace
marine
manufacturing
hi-tech
creative

50% SW businesses classed as innovative



Last major investment Paddington to Penzance HST 1976

No major timetable improvements Paddington to Penzance for 30 years

REGIONAL SPEND PER HEAD



128% passenger growth in 21 yrs

over last 20 years

£2,530,000,000 has not been spent

Produced by the GeoMapping Unit, School of Geography, Earth and Environmental Sciences, Plymouth University



Resilience and reliability

Resilience – the ambition: The Dawlish mainline remains our top priority. We expect resilient and reliable services that our travellers can depend upon.

Resilience and reliability – the benefits

A reliable railway is the top priority from our business community. The events at Dawlish showed the need for greater resilience across our transport networks with an ongoing impact on our trade and commerce. Network Rail warns unless action is taken, events similar to those in 2014 between Teignmouth and Dawlish that closed the railways for several months, will increase by over 600% to 1 in every 4 years by 2065. Investment into the network will ensure more resilience for businesses, communities and the leisure industry. It will increase

business confidence, boost potential inward investment and expansion, and safeguard against future losses.

Greater transport resilience will broaden the travel to work area, create more sustainable travel links, and maximise our environmental assets, contributing to economic growth. It will unlock housing development opportunities, and employment prospects. From Exeter westwards the region is served by a single rail line, making key cities like Plymouth and Truro vulnerable to regular disruption and loss through lack of resilience in key rail infrastructure.

RESILIENCE?



DAWLISH

36 DAYS DISRUPTION
in last
2 YEARS
despite major improvements



Less than
50%
of our long distance trains arrive on time

£1.2 billion
costs in disruption at Dawlish and the Somerset Levels

SOMERSET LEVELS

FLOODING
cost
£105 million
communities & businesses isolated for months

Cowley Bridge floods the Great West mainline affecting
CLOSED for **15 DAYS** **2000 trains**

Produced by the GeoMapping Unit, School of Geography, Earth and Environmental Sciences, Plymouth University

South west rail infrastructure vulnerability





The South West is particularly vulnerable to the impacts of climate change. Investing into asset resilience reduces the potential for disruption significantly. Consequently, sea, coastal and inland flooding defences have wider benefits than just transport.¹ Key to this is partners working together, to realise collective results and economies of scale. Network Rail, the Environment Agency, Local Enterprise Partnerships and different Governmental departments beyond transport must work towards our ambition.

Resilience and reliability – the case

The South West peninsula is dependent on a limited strategic transport network, especially west of Taunton:

- Our weakened and deteriorating infrastructure is a legacy of underinvestment and our potential opportunities for growth are being jeopardised as a result.
- It has been severely damaged by climate change extreme weather: breaching of sea defences at Dawlish, flooding at Cowley bridge and the Somerset levels and coastal erosion has cost our business and communities up to £1.2bn and the rail industry a further £91m.²
- Network Rail warns that there will be an increase in disruption and closures, rising by over 600% to once in every 4 years by 2065.
- When our mainline west of Exeter is closed for maintenance there is no alternative route at present.

- Since Dawlish reopened in 2015, there have been 36 days of disruption,³ with Cross Country trains unable to run in adverse weather.
- Fewer than 50% of our long distance trains arrive on time.⁴
- Improving the diversionary route between Exeter and Castle Cary will allow both London trains and local services, creating an economic benefit of £50m over 30 years.
- The development of future freight, distribution and logistics hubs such as Bridgwater and maintenance of existing activity e. g. maintaining our national nuclear deterrent to transport nuclear waste from Devonport to Sellafield and China clay can only happen if we have a resilient network.



1 Tomorrow's Railway and Climate Change Adaption May 2016
 2 PRTF The South West Extreme weather resilience 2012/13 & impact of flooding in Devon and Somerset 2013 & PRTF Economic Impact study 2014 & Devon Maritime Forum 2014

3 DAL Assessment PRTF Feb 2016
 4 Network Rail right time performance figures p4 2016 (GWR LD 45%, XC LD 45%)

Resilience and reliability – the recommendations

Resilience must mean: reliable services, resilient infrastructure and improvements that enhance and protect our assets, including rural and coastal communities.

The rail lines through Dawlish and the Somerset Levels are national assets. It is essential that the key partners work together, building on existing schemes, such as the Somerset Flood Action Plan. Providing and upgrading sufficient and suitable routes is also crucial, providing diversionary routes for trains without compromising local services, or extending travel times for passengers to London or the Midlands. Any enhancement or improvement should not cause our services or standards to deteriorate further.



Photo © CrossCountry Trains

Resilience: Key asks up to 2019

- £10m for development of options for Teignmouth cliffs and Dawlish seawall resilience scheme
- £270m to commence critical initial phase of Dawlish seawall and Teignmouth cliffs resilience scheme
- Completion of flood resilience works at Cowley Bridge, Somerset Levels, and Hele & Bradninch
- £3.4m for Exeter – Yeovil – Castle Cary route development study
- CrossCountry trains capable of operating along the seawall in all weathers

Total cost £284m



Creating a resilient mainline

Critical resilience work between Exeter and Newton Abbot

Network Rail have now completed the range of detailed investigations and technical studies to determine the programme of improvements required over the next 20 years which will make the line more resilient.



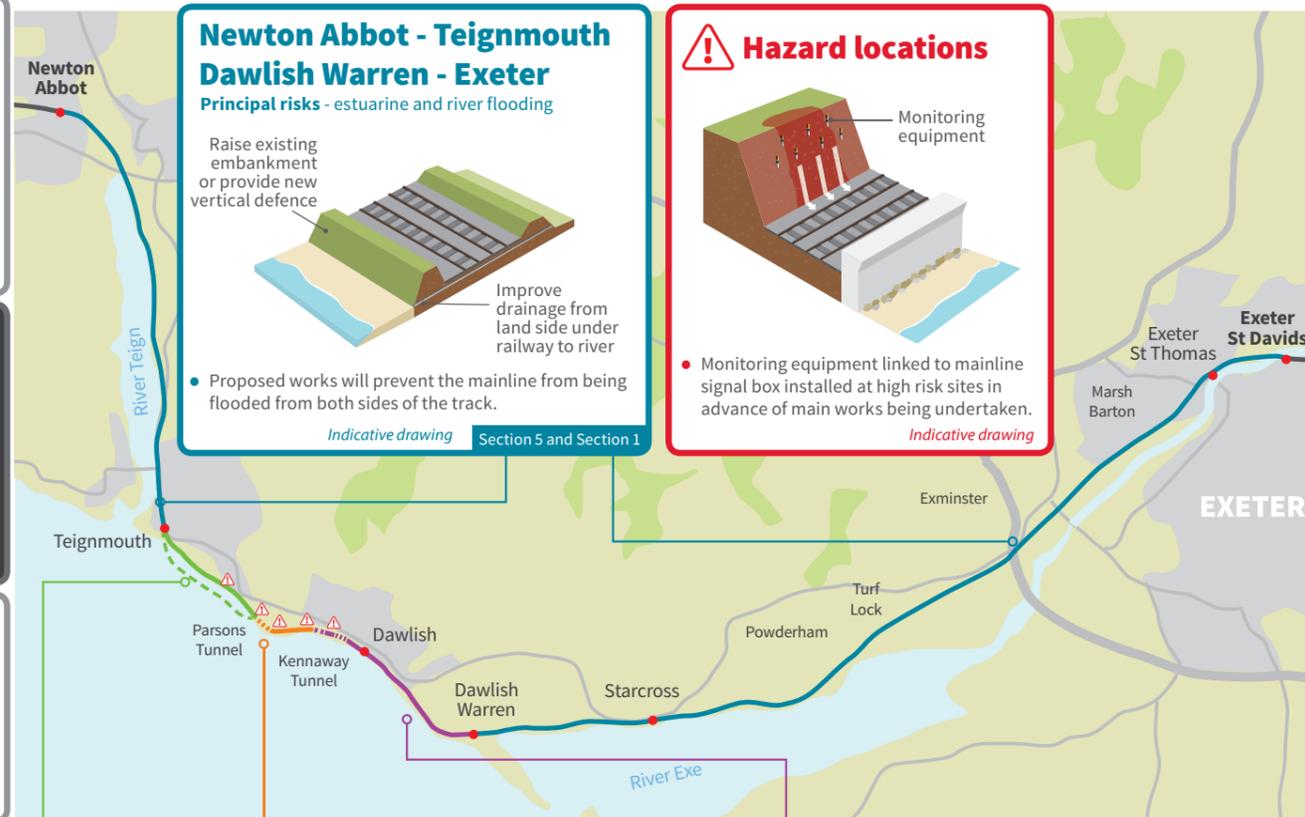
West of England Mainline

- Difficult terrain inland between Newton Abbot and Exeter led Brunel to adopt a coastal route for the West of England mainline.
- 32km (20 miles) section via Dawlish which opened in 1846, has become an iconic stretch of railway but is dependent on a series of vulnerable engineering structures located in an extremely challenging environment.
- 134 trains carry around 12,500 passengers along this section each weekday.
- Up to 14 freight trains also use this section each weekday.

Closure of mainline

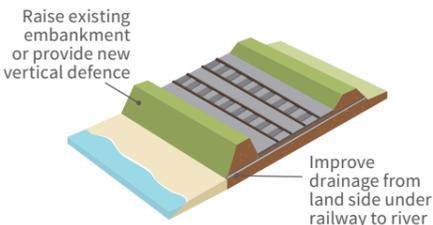
- Exceptional weather caused the catastrophic destruction of a portion of the Dawlish sea wall and blockage of the line by landslides in February 2014.
- Rail services were suspended for eight weeks, with passengers carried on replacement bus/coach services and additional flights.
- Final cost to the rail industry of this incident was £45 - 50m.
- Longer-term reputational damage to the South West economy may not be fully known for some time.

Current predications show that events similar to that of 2014 have a **1 in 25** year likelihood of reoccurrence today. By 2065 this increases to **1 in 4** years. By 2115 that will increase to **1 in 1.5** year. For lesser events that would close the line for between 2 and 7 days this would alter from **1 in 3.5** years today to **1 in 0.7** years in 2065 and **1 in 0.38** years by 2115. We cannot accurately forecast when a failure will occur, but the cliffs will fail and the sea wall collapse again.



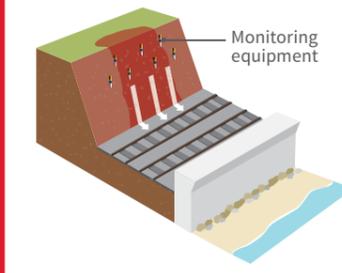
Newton Abbot - Teignmouth Dawlish Warren - Exeter

Principal risks - estuarine and river flooding



- Proposed works will prevent the mainline from being flooded from both sides of the track.

Hazard locations



- Monitoring equipment linked to mainline signal box installed at high risk sites in advance of main works being undertaken.

Working towards delivery

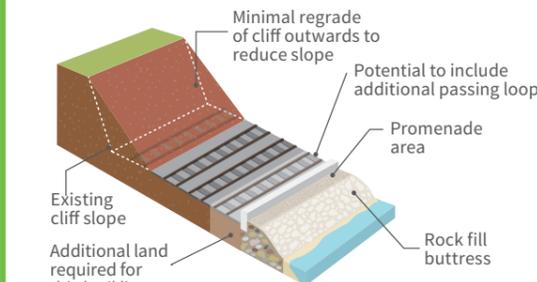
- Network Rail have submitted the final report on proposed improvements between Newton Abbot and Exeter to the Department for Transport.
- In the Budget announcement in March 2016, the Government announced a further £5m to continue the work until Summer 2017.
- Funding is still to be identified to continue to develop, consult on and deliver these improvements from Autumn 2017 onwards.
- The Peninsula Rail Task Force are expected to include these improvements in their 20 Year Plan due to be submitted to Government this Autumn.

Proposed improvements

- Network Rail has spent £3m carrying out detailed investigations and technical studies to identify the improvements required to make the mainline more resilient.
- The mainline between Exeter and Newton Abbot has been split into 5 sections with the specific improvements required over the next 20 years identified for each.

Teignmouth - Parsons Tunnel

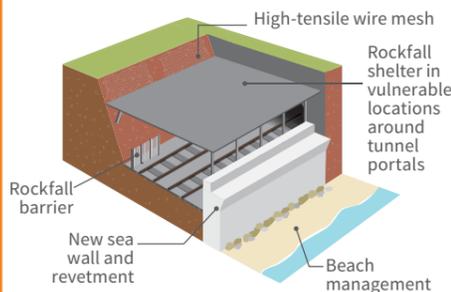
Principal risks - marine erosion, cliff failure and landslides



- Proposed works will prevent further land slips and rockfalls onto the track and protect the properties above, increase protection from storms, create a new promenade area and potential to increase the capacity of the mainline.

Parsons Tunnel to Kennaway Tunnel

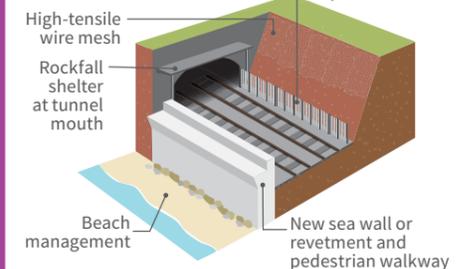
Principal risks - marine erosion and rockfall



- Proposed works will prevent further land slips and rockfalls onto the track and increase protection from storms.

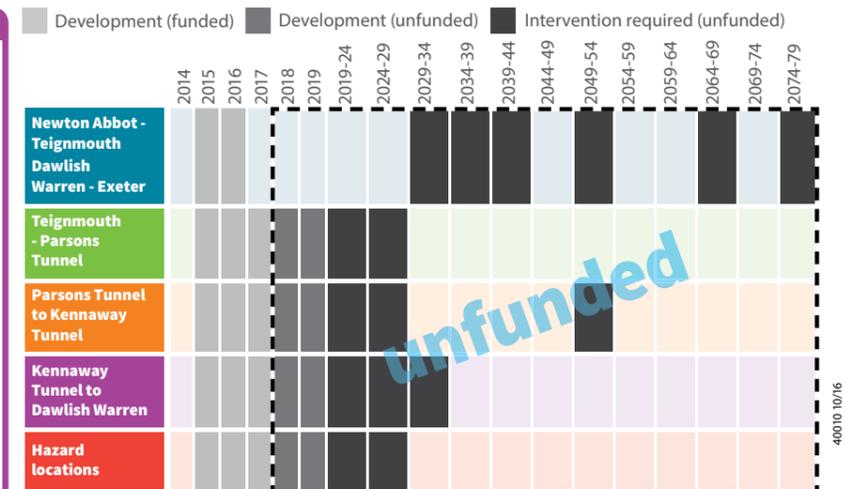
Kennaway Tunnel to Dawlish Warren

Principal risks - marine erosion and cliff instability



- Proposed works will prevent further land slips and rockfalls onto the track and increase protection from storms.

Delivery programme

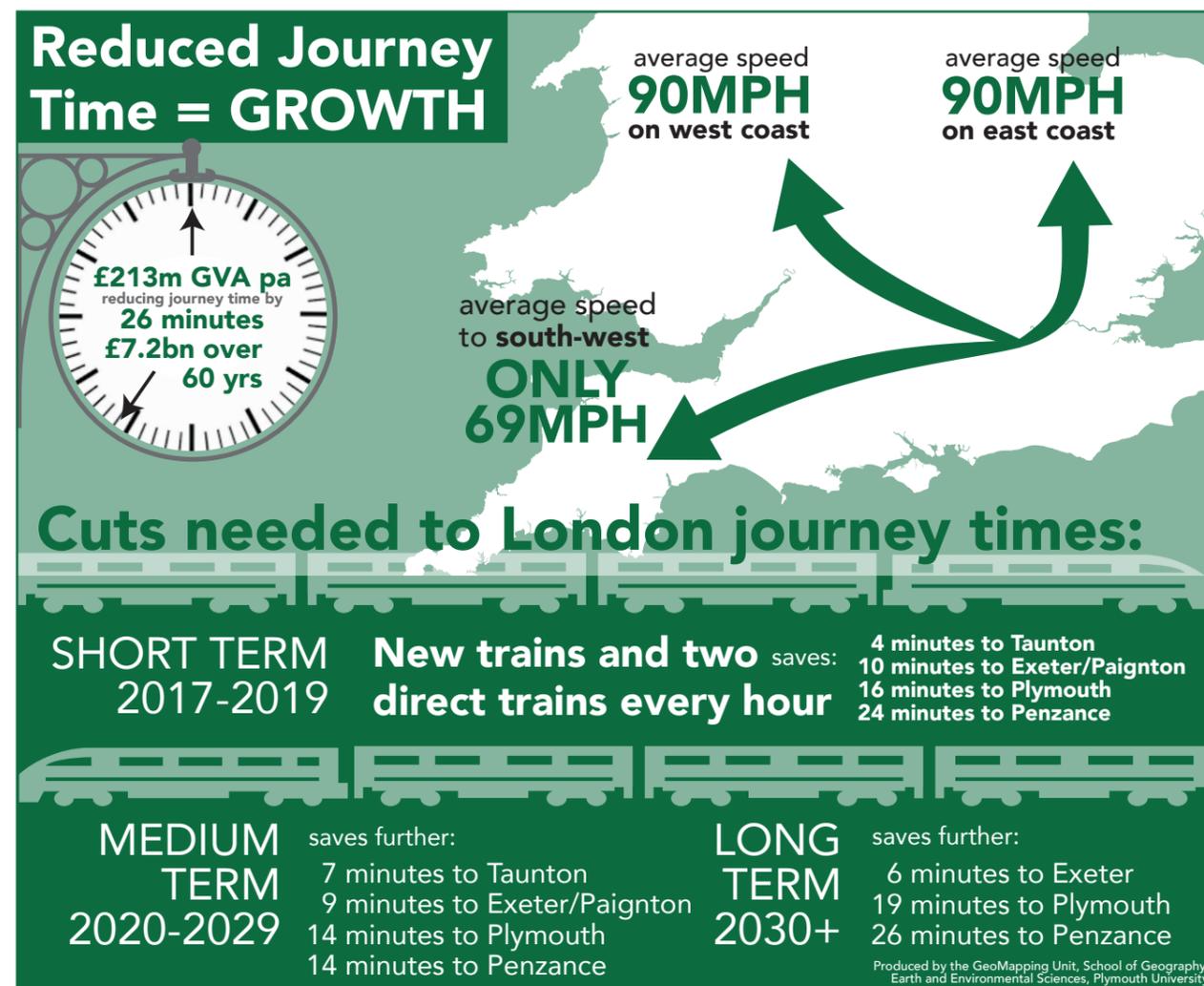


October 2016



Reduced journey time and improved connectivity

Journey time improvements – the ambition: Our ambition is for faster journey times between our key UK markets, including; to London from Taunton in 1:30hr, Exeter in 1:45hr, Plymouth and Paignton in 2:15hr and Truro 3:30hr.



Reduced journey times and improved connectivity – the benefits

Investing in journey time improvements will open up opportunities for the South West peninsula to improve connectivity and productivity, improve our contribution to the UK economy and unlock growth.

Improved journey times and increased connectivity improves access to education, housing, employment, leisure opportunities and increases social inclusion, which is vital to any thriving economy. More frequent connections to London, Bristol and the Midlands will boost productivity. Vital international connections via Heathrow, Manchester, Bristol, Southampton and Gatwick airports will make business more competitive. Improved access to Heathrow through the Western rail link is welcome.

Through better connectivity and faster journeys there is opportunity and the environment to enable a modal shift to rail, relieving congestion on our roads and improving efficiency and certainty for business. This modal shift also reduces pollution, improves air quality and is an opportunity to maximise the efficient use of the UK's assets. Improving connectivity between urban and rural parts of the South West peninsula also opens up scope for growth with broader travel to work areas, increased tourism opportunities and improved community links.



Reduced journey times and improved connectivity – the case

- £1.5bn investment generates £7.2bn in GVA⁵ and £1.1bn in direct transport benefits by reducing journey times by 26 minutes between Paddington and the South West peninsula.
- £155m will generate £677m in direct transport benefits by reducing journey times by 36 minutes between Exeter and Waterloo.⁶
- 69%⁷ of businesses want greater opportunities for connection between mainline and regional services
- 75% of business respondents rated journey times as important for business travel.⁸
- Faster regional links will support Government policy to rebalance the national economy and add value through initiatives such as Crossrail, GWML electrification and HS2.
- Support housing growth along the Plymouth - Bristol - Birmingham corridor and the development of Hinkley Point C, by providing for improved rail access at Bridgwater.
- Promote relocation, regeneration and inward investment opportunities, with business survey respondents stating that a 45 minute reduction in journey times will have a significant beneficial impact on their business.
- Service levels to the South West have not kept pace with economic growth, and are now a constraint.

5 Heart of the South West Lep study-Economic appraisal of rail network upgrade proposals May 2016
 6 Heart of the South West Lep study-Economic appraisal of rail network upgrade proposals May 2016
 7 HoSWLEP Business survey June 2016
 8 HoSWLEP Business survey June 2016



Reduced journey times and improved connectivity – the recommendation

The scope to reduce journey time is ongoing, with some immediate opportunities through the December 2018 timetable changes and the introduction of new trains. By maximising the capacity and benefits of the new trains, and the introduction of two direct trains an hour from Paddington to Plymouth, further benefits can be realised.

Looking further ahead, infrastructure improvements are the principal route for reducing journey times to a comparable level with other parts of the UK, and specifically focusing on both the Penzance to Paddington and Exeter to Waterloo routes.

Journey time reductions: Key asks up to 2019

- Delivery of Intercity Express Trains, sleeper upgrade, Dec 2018 timetable improvements with depot / station enhancements
- £17m for a development of the GRIP 3 Paddington to Penzance infrastructure improvements to reduce journey time
- 2 direct trains per hour between London and Plymouth from December 2019⁹
- £5m to develop and deliver a GRIP 3 study to reduce journey times and improve capacity between Exeter and Waterloo

Total cost £22m



9 Whilst at least maintaining existing services

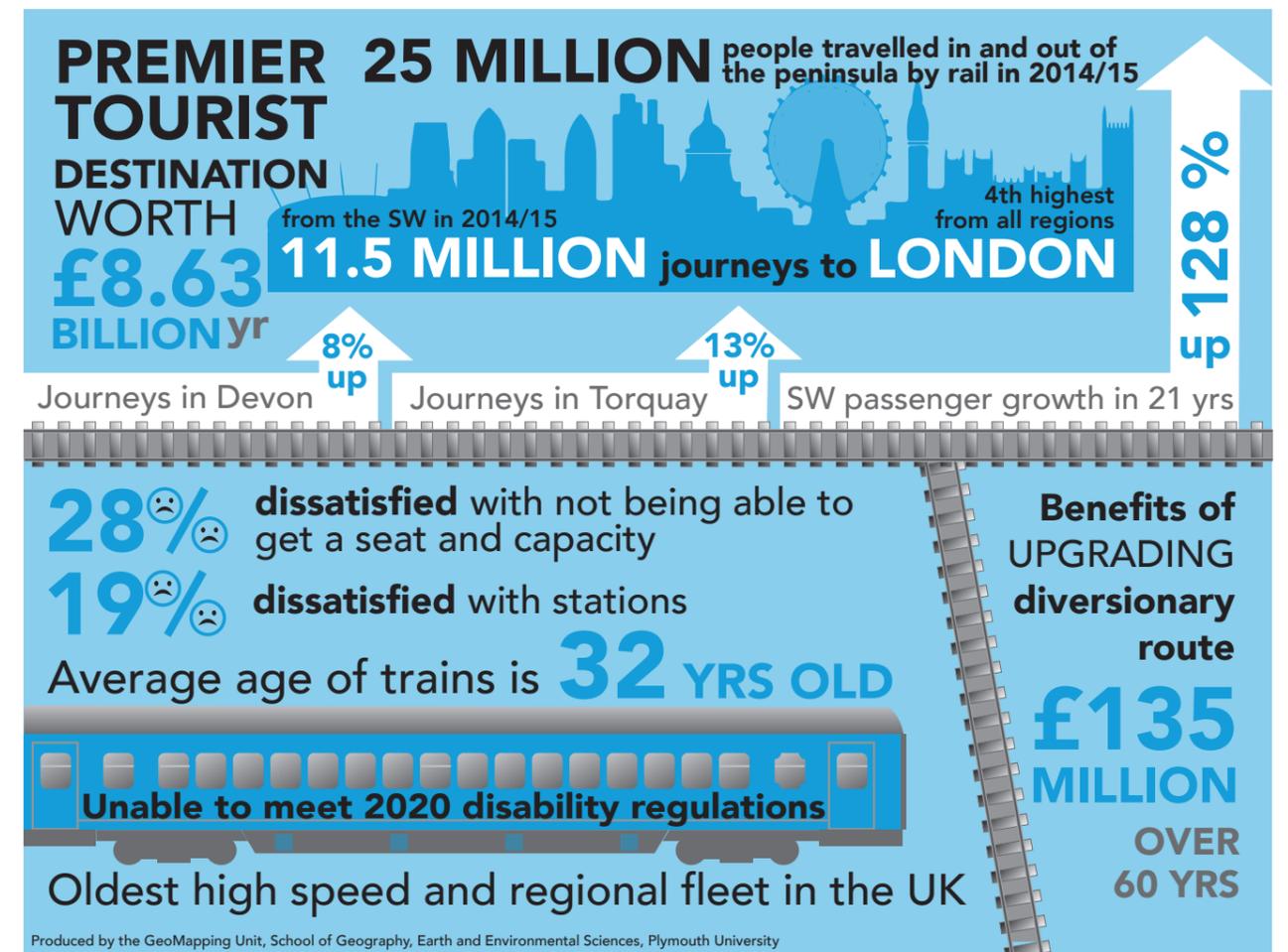
Capacity and comfort

Capacity and comfort- the ambition: Our ambition is to transform our connectivity by increasing the frequency of trains, the number of seats and pioneering digital services to drive a world leading quality passenger experience.

Greater capacity and comfort – the benefits

Future proofing our network now, providing more capacity, smart technology and high quality services will provide greater value for money, making the choices easier for passengers to choose rail. As people opt to use trains over cars, it will reduce

congestion, delays, and increase productivity. The development at Hinkley provides an opportunity for rail to improve supply chain links; it will also provide a sustainable, long term solution to work force and local community requirements.





There are also opportunities to review our freight potential, opening up routes, providing new sources of revenue.

As a premier tourist destination, with strong sporting and cultural links, visitor spend is key to the South West economy, worth £8.63 billion a year.¹⁰ High quality transport services are essential, responding rapidly to demand and accommodating a large number of visitors in comfort.

Greater capacity – the case

- Our passenger growth over the last 21 years is 128%, twice the national average, and patronage is still growing. Throughout this period growth has outstripped the industry forecasts each year. Our growth is twice the industry assumptions used for planning for future investment.
- 25m people travelled into and out of the peninsula by rail in 2014/15, the 5th highest of the 11 UK regions, with 11.5m journeys to London, higher than the number of journeys from the North West to London¹¹ and making us the 4th highest from the UK regions.¹²
- Our passenger numbers have increased by 114% at Taunton, Exeter by 150%, Paignton by 106%, Plymouth by 100% and Truro by 174% in the last 15 years.¹³
- Our rolling stock is unable to meet the equality regulations required by 2020 making it unsuitable for passengers with disabilities
- The average age of our trains is over 32 years old making it the oldest high speed and regional fleet in the UK.¹⁴

- More on train passenger capacity is needed between Exeter and Plymouth by 2026, with more track capacity needed at Exeter¹⁵ and between Exeter and Newton Abbot by 2043.¹⁶
- Free Wi-Fi on trains is the 4th highest national priority for business travellers.¹⁷
- £68m has been invested by South West Local Authorities in rail related improvements since 2000.
- Greater frequency of services drives economic growth through increased connectivity, whilst more seats provide more revenue for investment into South West rail.



Photo © Rob Thomas

Capacity – the recommendations

More track capacity is needed on our network to meet passenger growth in and out of the South West peninsula. Thought needs to be given to the future, so that our network is futureproofed. Integrating new digital technology into planning and operations is essential. Equally, creating more services through ensuring sufficient capacity, including passing loops and resignalling, will be critical.

Travellers expect quality, fast, reliable broadband and dependable mobile signals as they travel and work, this should be our minimum standard. On trains, additional investment is required to improve the productivity of business users and the passenger experience using the new AT-300 fleet, and other long distance services:

- A travelling office for business - one ticket to provide a seamless and productive journey, including reserved parking and Wi-Fi & mobile connectivity for the entire journey and a consistent quality at seat service across the day.
- Entertainment centre - to provide long haul airline style media entertainment service including Wi-Fi & mobile connectivity for the entire journey, at seat service and increased luggage space.

The South West peninsula is more dependent on its connections to other regions to support housing growth and employment, as well as those within the region such as planned east of Exeter and Bristol. We must maximise opportunities to increase connectivity to London and other regions, including Dorset and Wiltshire, through improving frequency, quality, competition and journey times between Exeter and Waterloo.

A phased development of rail links serving Exeter and Okehampton, and Plymouth and Tavistock will deliver improved travel to work connectivity

with added tourism benefits for Dartmoor National Park and links to North Cornwall. As economic and housing market conditions allow, the opportunity for a full reopening of the ‘Northern’ route should be explored from Exeter to Plymouth via Okehampton. Similarly capacity and connectivity improvements between the west of Exeter and Bristol will support the growth and development of communities to the north of the peninsula. The Dawlish additional line and 2 fast trains per hour to Bristol will be required to address the predicted increase in growth and capacity demands over the network.

The focus must be the passenger and a step change to a quality passenger experience for all in order to promote healthy, inclusive and vibrant communities. Stations should be the accessible gateway to public transport facilities, particularly for people with disabilities, older people and people travelling with children so that they can have a quality and affordable travel experience.

Capacity and comfort: Key asks up to 2019

- Deliver on Cornish Mainline signalling scheme
- £25m to improve the customer experience on trains and at stations with major wifi upgrade, improved mobile connectivity and on-board travelling office and media/entertainment
- £1.5m for development of the Tavistock to Plymouth line
- Development and enhancement of connections and services to the Midlands and Bristol

Total cost £26.5m

10 Visit England 2014 data
 11 Regional Rail Usage (passenger Journeys) 2014-15 Annual Statistical Release January 2016
 12 Regional Rail Usage (passenger Journeys) 2014-15 Annual Statistical Release January 2016
 13 Regional Rail Usage (passenger Journeys) 2014-15 Annual Statistical Release January 2016
 14 ORR Data Portal June 2016

15 Network Rail Western Route study 2043 ITSS
 16 DAL Assessment PRTF Feb 2016
 17 Transport Focus –Priorities for improvement



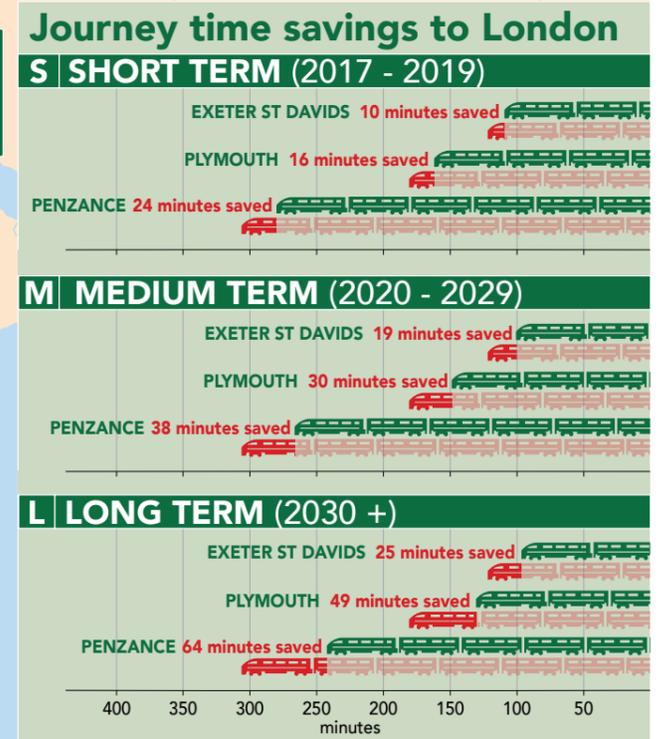
Capacity and comfort requirements

Resilience requirements

Journey time savings requirements

S Two direct trains/hour LONDON to stations west of EXETER by **DEC 2019** saving **10 minutes**

S NEW TRAINS from Dec 2018 saving **5 - 14 minutes**



Produced by the GeoMapping Unit, School of Geography, Earth and Environmental Sciences, Plymouth University





The blueprint for investment

Peninsula Rail Task Force strategic outputs and outcomes								
PRTF strategic outputs	Key Benefits	JT savings to Plymouth	Possible Delivery vehicle	Committed £m		Investment Need £m		Total £m
				Industry	Local	Industry	Local	
Resilience - Short Term Strategy 2017-2019								
Teignmouth cliffs and Dawlish seawall resilience scheme development.	Allows continuation of improved resilience scheme and speeds up delivery within CP6.		Network Rail	5		10		
Commencement of the critical initial phase of Dawlish seawall and Teignmouth cliffs resilience scheme (Note see medium term for detail).	Commence the critical elements of essential of a long term plan to improve resilience on the sea wall		Network Rail			270		
Flood resilience works at Cowley, Somerset Levels and Hele & Bradninch.	Reduce the effect of flooding on the rail network and improve resilience leading to better reliability.		Network Rail/EA	31.3				
Cross Country Trains capable of operating along the seawall in all weathers.	Delivery of reliable services all year round.					Franchise		
Development of the Diversionary route- Exeter to Castle Cary, via Yeovil scheme to GRIP 3 on the diversionary route (DfT Large Major schemes Development Fund bid).	This work will identify the infrastructure requirements to accommodate diverted GWR trains between Exeter and Castle Cary during Somerset Levels flooding and maintenance work.		Network Rail			2.5	0.9	
Total 2017-2019				36.3		282.5	0.9	319.7
Resilience - Medium Term Strategy 2019-2024								
Dawlish Resilience Plan- Construction of new sea wall and beach nourishment at Kennaway Tunnel and adjacent to Rockstone Footbridge, Central tunnels (rock shelters, drainage and meshing works), Dawlish cliff works (toe barrier and dentition), Teignmouth reclamation and cliff works, including new tunnel portal, throat and track realignment at Parson's Tunnel, new bridge at Smugglers Lane, and meshing and toe barrier at Slocums Bridge.	Commence the critical elements of essential of a long term plan to improve resilience on the sea wall and associated estuaries and reduce the likelihood of weather related disruption.		Network Rail			See short term funding		
Castle Cary to Exeter Capacity upgrade *, Additional double track sections on the routes between Castle Cary and Yeovil and Yeovil and Exeter St Davids.	Enables the provision of additional local services into Exeter under Devon Metro Phase 2 and improved reliability for long distance services by providing an enhanced diversionary route.		Network Rail			150		
Resilience - Medium Term Strategy 2024-2029								
Dawlish Resilience Plan - Central tunnels (rock shelters, drainage and meshing works), Dawlish cliff works (toe barrier and dentition), Teignmouth reclamation and cliff works, including new tunnel portal, throat and track realignment at Parson's Tunnel, new bridge at Smugglers Lane, and meshing and toe barrier at Slocums Bridge.	Continuation of a long term plan to improve resilience on the sea wall and associated estuaries and reduce the likelihood of weather related disruption.		Network Rail			151		
Total 2019-2029						301		301
Total Resilience funding requirement to 2029				36.3		583.5	0.9	620.7
Resilience - Long Term Strategy 2030+								
Dawlish Resilience Plan - Construction of new sea wall and beach nourishment at Dawlish beach and station, Construction of new rock revetment between Langstone Rock and Dawlish Warren, Construction of new embankment at Powderham Banks, Construction of steel sheet pile wall at Starcross.	Continuation of a long term plan to improve resilience on the sea wall and associated estuaries and reduce the likelihood of weather related disruption.							
Notes: *Recommendations from Western Route Capacity Improvement Programme Castle Cary to Exeter study to confirm likely scope for CP6.								



PRTF strategic outputs	Key Benefits	JT savings to Plymouth	Possible Delivery vehicle	Committed £m		Investment Need £m		Total £m
				Industry	Local	Industry	Local	
Journey Times - Short Term Strategy 2017-2019								
Development of the Paddington route infrastructure schemes with strong business cases from GRIP 2 to GRIP 3, covering Paddington to Penzance.	Clear scheme development and identification of benefits.		Network Rail/ PRTF			17		
Exeter-Waterloo timetable study and GRIP 3 infrastructure development for redoubling of track and passing loops between Salisbury and Yeovil.	Enables 2tph trains in both directions between Yeovil junction and Salisbury, significantly reducing journey times and upgrading capacity between Exeter and Waterloo.		Network Rail/ PRTF			5		
Intercity Express Trains introduction, sleeper upgrade and major frequency improvements supported by depot and station capability works.	Improved customer experience through new and upgraded trains and major station upgrades. Improved connectivity and capacity delivered through improved frequencies and longer trains.Reduced journey times Exeter 5 minutes, Plymouth/ Paignton 6 minutes, Penzance 14 min.	6	Franchise	350	14			
2 direct trains per hour between London and Plymouth. Major service improvements through hourly semi-fast services supported by electrification to Bedwyn and major capacity and linespeed improvements between Newbury and Westbury.	Revision of calling patterns to allow 1 train per hour fast and 1 semi fast to stations west of Exeter, reducing fast train journey time by 10 minutes.	10	Franchise					
Total 2017-2019		16		350	14	22		386
Journey Times - Medium Term Strategy 2019-2024								
West of Great Bedwyn to North of Market Lavington (JTI 4)# Infrastructure enhancements.	Reduce journey times by 2 minutes.	2	Network Rail			150		
Selective electrification of Dainton bank#, Electrification of railway between Aller Junction and Totnes.	Improved journey times and reliability of 1 minute.	1	Network Rail			29		
Journey Times - Medium Term Strategy 2024-2029								
West of Southcote to Kintbury (JTI 2)#, Infrastructure enhancements.	Reduce journey times by 2 minutes.	2	Network Rail			231		
West of Westbury to West of Taunton (JTI 6)#, Infrastructure enhancements.	Reduce journey times by 5 minutes.	5	Network Rail			513		
West Newton Abbot to Totnes (JTI 10) #, Infrastructure enhancements.	Reduce journey times by 4 minutes.	4	Network Rail			570		
Total 2019- 2029		14				1493		1493
Total Journey times funding requirements to 2029				350	14	1515		1879
Journey Times - Long Term Strategy 2030+								
Improvements between Exeter and Newton Abbot, Hungerford avoider and around Westbury (JTI 8/3/5)#, Infrastructure enhancements to raise line speed by 10 minutes.	Reduce journey times by 10 minutes.	10	Delivery vehicle to be confirmed based on the agreed scheme.					
Dawlish Additional Line, Provide alternative line to avoid Dawlish and reduce journey time to Plymouth and beyond.	Reduce journey times 5 minutes, improve resilience and provide additional network capacity.	5						
Remaining infrastructure changes from GRIP 2 study JTI 1&7#, Infrastructure enhancements.	Reduce journey times by 2 minutes.	2						
Totnes to Penzance infrastructure changes from GRIP 2 study #, Infrastructure enhancements. Totnes to Plymouth linespeed upgrade *, New railway alignments on sections of extreme curvature.	Reduce journey times by 2 minutes.	2						
Notes: * Major linespeed increases not considered on this stretch by Speed to the West but possible if significant infrastructure work undertaken. Indicative of the possible strategic approach only. # Costs taken from Speed to the West study.								



PRTF strategic outputs	Key Benefits	JT savings to Plymouth	Possible Delivery vehicle	Committed £m		Investment Need £m		Total £m
				Industry	Local	Industry	Local	
Capacity and comfort – Short Term Strategy 2017-2019								
Improved customer experience facilities on trains and at stations including major Wi-Fi capability upgrade and on-board entertainment.	Allows business to be productive whilst travelling, and provides improved customer experience, Can be built into new trains for delivery.		Franchise			25		
Cornish Mainline additional signals scheme.	Improved customer experience through deployment of air conditioned regional stock on mainline stopping services. Improved service frequency at stations throughout Cornwall through provision of additional local services to create 2tph service frequency.		Network Rail	6	15			
Development and enhancement of connections and services to the Midlands and Bristol.	Improved journey times and uplift in rolling stock and passenger experience to provide choice and increased regional connectivity.		Franchise					
Development of the Tavistock to Plymouth line to GRIP 3.	To allow continuation of the scheme development for delivery.		Local Authority			1.5		
Total 2017-2019				6	15	26.5		47.5
Capacity and comfort - Medium Term Strategy 2019-2024								
Services running between Okehampton and Exeter and Plymouth to Tavistock	Passenger services restored, connecting market towns to major peninsula cities, delivering first phases of Northern Route reopening.		NR/Franchise/LAs		11.5	48.5		
Replacement of Cross Country fleet with new bio mode trains that allow step change in service delivery and passenger experience.	Able to utilise the electrification currently provided on sections of routes, increase in capacity, allows 2 trains per hour Exeter to the peninsula, increases resilience to extreme weather.		Franchise					
Improvement to the Cross Country services between Bristol and Exeter.	Timetable to deliver 2 trains per hour to meet passenger growth.		Franchise					
Newbury to Westbury capacity upgrade ****, New and extended loops, including extended up/down reliefs in the Newbury area and a 4th platform at Westbury.	Improves service reliability and enables the provision of frequency enhancements through capacity to accommodate additional passenger and freight in a reliable manner.		Network Rail			150		
Electrification to Bedwyn **, Electrification of railway between Newbury and Bedwyn.	Enables deployment of new electric trains between London and Bedwyn improving dwell times and releasing IETs for use on semi-fast services.		Network Rail			100		
Capacity and comfort - Medium Term Strategy 2024-2029								
Additional on train capacity to meet predicted growth between Exeter and Plymouth.	Improved capacity to meet predicted demand, improved customer experience.		Franchise					
Castle Cary to Cogload junction capacity upgrade. Additional signal sections to increase capacity by reducing headways.	Improved service reliability and additional capacity.		Network Rail			10		
Dartmoor Northern Route Phase 1B *, Upgrade of the railway between Coleford Jn and Okehampton and additional double track between Cowley Bridge and Coleford Jn.	Enables increase in services to Okehampton and improved journey times on the Barnstaple line.		Network Rail			50		
Exeter to Waterloo line redoubling of track and passing loops between Salisbury and Yeovil	Faster journey times to raise line speed by 36 minutes on 2nd strategic route, also delivering capacity enhancements.		Network Rail/ Franchise			150		
Total 2019-2029					11.5	508.5		520
Total Capacity and comfort funding requirements to 2029				6	26.5	535		567.5



PRTF strategic outputs	Key Benefits	JT savings to Plymouth	Possible Delivery vehicle	Committed £m		Investment Need £m		Total £m
				Industry	Local	Industry	Local	
Capacity and comfort - Long Term Strategy 2030+								
Dartmoor Northern Route Phase 3. Completion of the northern route through a 90mph predominantly single track route between Coleford Jn and Tavistock including a North Cornwall Parkway station.	Provide passenger services to an area of poor accessibility and rural deprivation. Improves connectivity to northern Cornwall. Improves resilience through provision of a diversionary route.							
Inclusion in the long term rail industry electrification programme to the South west peninsula, building on partial electrification that has taken place.	Improved resilience, performance benefits, fuel savings and environmental benefits.							
Notes: * Assumed similar cost to the Tavistock reopening to cover upgrade of the Okehampton route (GSM R and linespeed etc), creation of long dynamic loop around Crediton by converting and upgrading the parallel single lines to Coleford divergence and extending the existing loop eastwards. **Capacity between Westbury and Reading for mix of passenger and freight was identified as the prime constraint on capacity by the Western Route study. Resolving this is essential to provide reliable journey times. ****Costs taken as approximates from ARUP 2013 study for DfT.								
Total costs for short and medium term improvements								
Short term strategy	2017-2019	16		392.3	29	331	0.9	753.2
Medium term strategy	2020 - 2029	14		0	11.5	2302.5	0	2314
Long term strategy	2030 onwards	19		Cost to be identified				
Notes: The above summary table is only a snapshot of the types of outcomes that could be achieved if the full programme were fund. The costs indicated are purely illustrative of the scale of funding likely to be required, and will be subject to change based on further development and future option. A more detailed assessment of costs would be needed once the scope of each improvement was more clearly defined. Service frequency improvements may necessitate consideration of capacity enhancements east of Reading, which are currently being considered within the Western Route Capacity Improvement Programme. Includes £431m for Dawlish resilience work		49		392.3	40.5	2633.5	0.9	3067.2



Rail Industry and Local schemes for delivery through local delivery partners								
Industry and Local supporting outputs	Key Benefits	Delivery	Committed £m		Investment Need £m		Total £m	
			Industry	Local	Industry	Local		
Short Term Strategy 2017-2019								
Major station improvements and a range of investment in easier access, car parking, gatelines and sleeper lounges at other stations. In total 1100 additional parking spaces along the route between Newbury and Penzance. Stage 1 of the Plymouth station redevelopment to meet Mayflower 2020 agenda. Some local stations being opened. Bristol to Exeter economic and service capacity options development.	Improved access to stations delivered through improved interchange, greater availability of car parking and additional step free access. Identification of options for service improvements to support Bristol Metro.	Network Rail/ Franchise	82.6	47.8	10.5	15	155.9	
Medium Term Strategy 2019-2024								
Elizabeth line and world class interchange at Paddington Crossrail station open. 2 major station improvements and a range of investment in improved interchange and car parking at other stations. In total 600 additional parking spaces along the route between Newbury and Penzance.	Improved connectivity and customer experience through the revolutionary impact of the Elizabeth line bringing the heart of London closer than ever before. Improved customer experience and access delivered through further station upgrades including improved interchange and greater availability of car parking.	Network Rail/ Franchise			145	24	169	
Major regeneration and station upgrades completed at Exeter, Plymouth and Paignton, providing a minimum 300 additional parking spaces. Electrification around Bedwyn and some infrastructure upgrades including Cornwall resignalling. Resignalling and speed enhancements between Bridgwater and Bristol.	Improved customer experience and access delivered through major station regeneration upgrades including key urban regeneration, interchange, retail and station facility improvements at the heart of the two principle cities of the Peninsula. Reduced journey times and increases in capacity in the Bristol area.	Network rail/ Franchise/ Local Authorities						
Replacement of local rolling stock with new fit for purpose and compliant with regulations.	Replacement of oldest rolling stock in UK, improve performance, compliance and the customer experience.						Franchise	
Medium Term Strategy 2024-2029								
Delivery of Devon Metro phase 2, with service improvements between Exeter and Axminster/Honiton. Introduction of services between Plymouth and Tavistock and improved frequency on the Exeter to Barnstaple route and hourly services to Okehampton.	Improvement of operational flexibility and the connection of a large part of North Devon and East Cornwall to the railway network.							
Long Term Strategy 2029 +								
Continued development of local station and services to meet the needs of the South West peninsula.	Improvements in connectivity and economic growth of the region.							
Short Term strategy		2017-2019	82.6	47.8	10.5	15	155.9	
Medium Term strategy		2020-2024			145	24	169	
Total							324.9	



PENINSULA RAIL TASK FORCE

The Peninsula Rail Task Force is a partnership of local authorities and LEPs: Cornwall Council, Devon County Council, Plymouth City Council, Somerset County Council and Torbay Council plus Cornwall and Isles of Scilly LEP and Heart of the South West LEP. Formed in 2012 in response to severe weather damage to the region's rail network, the group has a Government commission to develop a strategic rail investment plan across the South West. It is chaired by Councillor Andrew Leadbetter.

The Task Force works with our MPs, neighbouring authorities including Bristol City Council, Wiltshire and Dorset County Councils as well as the private sector through our stakeholder group, chaired by Richard Stevens. The Department for Transport, Network Rail, Great Western Railway, Cross Country and South West Trains are also key partners.

We are grateful for the support of all of our stakeholders in putting this report together, Tim Absalom and Dr Jon Shaw at Plymouth University for the supply of the infographics and Devon County Council for design and publication.

The partners of the Peninsula Rail Task Force come from across the entire South West Peninsula. Speaking with one voice, we support the 20 year plan for investment and believe that the improvements to the rail network will not only safeguard the economy but drive prosperity within the region. Investment will deliver a 21st century railway that works for our businesses, communities and visitors. We have worked collaboratively to identify the gaps in our rail network and now it is time to close those gaps.



The Royal Albert Bridge - © Plymouth Photographic Interest Group



Dawlish sea wall at sunset - © Rob Thomas

**“Connectivity equals jobs.
It’s as simple as that.”**
Sir David Higgins, Chair HS2

**“Rail is an enabler. It should enable growth
and promote prosperity”**
Mark Carne, Chief Executive Network Rail

For more information

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