

RAIL STRATEGY REPORT



SWINDON AND WILTSHIRE RAIL STUDY

RAIL STRATEGY REPORT

IDENTIFICATION TABLE

Client/Project owner	Swindon and Wiltshire Local Enterprise Partnership
Project	Swindon and Wiltshire Rail Study
Study	Rail Strategy Report
Type of document	Report
Date	12/07/2019
File name	
Framework	N/A
Reference number	107523
Number of pages	54

APPROVAL

Version	Name		Position	Date	Modifications
1	Author	D Bishop / J Jackson		16/03/2019	
	Checked by	A Sykes		21/03/2019	
	Approved by	D Bishop		21/03/2019	
2	Author	D Bishop /		12/07/2019	
	Checked by	J Jackson		12/07/2019	
	Approved by	A Sykes		12/07/2019	

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
A DYNAMIC CONTEXT FOR RAIL GROWTH	6
TODAY’S RAILWAY IN SWINDON AND WILTSHIRE	6
A VISION FOR RAIL IN SWINDON & WILTSHIRE	7
KEY RECOMMENDATIONS	7
DEVELOPMENT AND DELIVERY	8
1. INTRODUCTION	10
2. SWINDON AND WILTSHIRE RAIL NETWORK	11
2.2 THE WILTSHIRE RAIL NETWORK	11
2.3 GREAT WESTERN MAINLINE	14
2.4 BERKS & HANTS ROUTE	14
2.5 WEST OF ENGLAND LINE	15
2.6 TRANS WILTS CORRIDOR	15
2.1 DEVELOPING THE NETWORK FOR THE FUTURE	16
3. THE ECONOMY AND ACCESSIBILITY	17
3.2 THE ECONOMY OF SWINDON & WILTSHIRE	17
3.3 ACCESSIBILITY	19
3.4 TRIP RATES FROM SWINDON AND WILTSHIRE STATIONS	22
3.5 LIMITED ACCESS TO THE RAIL NETWORK	23
3.6 ACCESS TO THE RAIL NETWORK FROM NON-RAIL SERVED TOWNS	25
3.7 THE RAILWAY & THE ECONOMY	26
4. ENGAGING WITH STAKEHOLDERS	27
5. OPTION DEVELOPMENT	28
5.2 CONNECTIVITY GAPS	28
5.3 MAINTAINING & IMPROVING LINKS	29
5.4 ACCESS & INTEGRATION	29
6. ASSESSING SCHEMES	33
6.2 GREAT WESTERN MAINLINE OPTIONS	34
6.3 BERKS & HANTS OPTIONS	36

6.4	WEST OF ENGLAND OPTIONS	37
6.5	TRANS WILTS OPTIONS	38
6.6	ACCESS TO THE RAIL NETWORK OPTIONS	39
6.7	REGIONAL AND NATIONAL INTERVENTIONS	41
7.	THE STRATEGY	42
7.2	GREAT WESTERN CONNECT	42
7.3	BERKS & HANTS LINE	44
7.4	WEST OF ENGLAND LINE	45
7.5	TRANS WILTS CORRIDOR	47
7.6	NETWORK-WIDE CHANGES	49
8.	DELIVERING THE STRATEGY	50
8.2	THIRD PARTY DELIVERY – CONTEMPORARY DEVELOPMENTS	50
8.3	APPROACHES SWLEP AND PARTNERS MAY WISH TO CONSIDER	51
9.	CONCLUSIONS	52

LIST OF FIGURES

Figure 1.	Wiltshire Rail Network (showing key stations only)	13
Figure 2.	Average Speeds to Strategic Locations (mph)	19
Figure 3.	% GVA within rail travel time bands of Swindon	21
Figure 4.	Economies and their connections with Swindon and Wiltshire	22
Figure 5.	Existing Rail Stations in Swindon & Wiltshire	24
Figure 6.	Great Western Connect Proposed Service Pattern	43
Figure 7.	Berks & Hants Line Proposed Service Pattern	45
Figure 8.	Westbury Hub Service Pattern	48
Figure 9.	5-stage 'Rail Network Enhancements Pipeline' process	51

LIST OF TABLES

Table 1.	Trip Rate per resident estimates (3km Catchment) for 2011 and 2017 in rank order	23
Table 2.	Proportion of Population within distance bands from a rail station	25

EXECUTIVE SUMMARY

A dynamic context for rail growth

Swindon and Wiltshire (the 'county') is a prosperous economy, worth £18.42bn in Gross Value Added (GVA) every year, with its 699,000 population in 2014 forecast to grow by 9% to 764,000 by 2026.

Demographic growth within the county has been variable with Swindon growing by 17% and Wiltshire by 7% between 2001 and 2011. Within that that figure there has been a 14% increase in both the working age population aged over 35 and a similar increase in the population aged over 65, but a 10% reduction in the 25-34 year old population, suggesting a need to attract a new younger working-age population.

GVA growth of 22% since 2010 is strong, but behind the 27% of the UK as a whole. Swindon and Wiltshire LEP (SWLEP) has a clear ambition to grow the economy over the period to 2036.

An innovation-based economy is key to future success, building on existing strengths in advanced engineering, health and life sciences, financial and professional services, digital and information technology and land-based industries, all requiring excellent UK-wide connectivity.

SWLEP has identified 3 core growth areas within Swindon and Wiltshire, the Swindon/M4 'east-west' corridor, the A350 north-south corridor between Chippenham and Salisbury, and the A303 Salisbury 'east-west' corridor, each including principal rail corridors serving the county.

Today's railway in Swindon and Wiltshire

Today Swindon & Wiltshire is served by high frequency Great Western Main Line (GWML) express services between Paddington, Bristol and South Wales, regional commuter services on the Exeter-Salisbury-Waterloo corridor, regional/local services between Bristol, Swindon and the South Coast, and limited express services between Paddington, Westbury and the West of England.

However other than on the Bristol/South Wales-Swindon-Paddington corridor journey times are relatively slow, whilst direct rail connectivity is unavailable to Oxford, the Oxford-Cambridge Arc, Birmingham and the West Midlands, the East Midlands or North West or North East England.

Internal county rail connectivity is also limited, although recent development of Trans-Wilts Westbury-Swindon services illustrates the scale of potential suppressed local demand.

Access to National Rail services is, in turn, restricted by the county having only 14 stations, with only two of these on the GWML, access to key town centre stations such as Swindon, Chippenham and Salisbury challenged by population growth and highway congestion, and limited bus-rail connectivity.

Major national rail developments will offer benefits to the county's rail connectivity, including completion of GWML electrification, Heathrow Western Access, CrossRail, future HS2 connectivity at Old Oak Common to the Midlands, North-East and North-West England, and East West Rail between Cambridge and Oxford.

At the same time these schemes will enhance the connectivity of other UK towns and cities; to maintain the competitive position of the county, and particularly GWML fast connections to London

locally-driven ambition will be essential to ensure rail services meet Swindon and Wiltshire's economic, community and environmental requirements.

A Vision for Rail in Swindon & Wiltshire

The outcomes of this study provide the component parts to deliver a vision for the development of the rail network in Swindon and Wiltshire over the period to 2036 that achieves the following:

- A rail network that supports the economy and improves quality of life for residents and businesses within Swindon & Wiltshire
- A rail network with enhanced connectivity to other key regional centres
- Improved access to the rail network for residents and businesses through new stations and better integration
- Maintaining and improving existing links to key regional and national centres

Key recommendations

The study has 4 principal recommendations by line of route (tph = trains per hour), with additional GVA benefit generated by these noted per annum:-

Great Western Main Line – London – Bristol/South Wales/Cheltenham

- | | |
|--|-----------|
| ○ 1 tph Bristol-Swindon-Oxford-Cambridge | GVA £27m |
| ○ 1 tph Southampton-Swindon-Oxford-(Birmingham) | GVA £9.5m |
| ○ Corsham new station | GVA £2.3m |
| ○ Swindon West (Royal Wootton Bassett) new station | GVA £18m |
| ○ Swindon East (Swindon SUE) new station | GVA £14m |

Berks and Hants – Paddington-Westbury-West of England

- | | |
|---|------------|
| ○ 1tph London – Bedwyn – Westbury (Trowbridge in peaks) | GVA £5.85m |
| ○ 1 tph Westbury-Exeter-Plymouth | GVA £5.17m |
| ○ Devizes Parkway new station | GVA £6.56m |

West of England Line – Waterloo-Salisbury-Exeter

- | | |
|--|------------|
| ○ Salisbury-Waterloo journey time improvements | GVA £5.93m |
| ○ Porton new station | GVA £5.37m |
| ○ Wilton new station (subject to results of study on Porton) | GVA £3.56m |

TransWilts – South Coast-Westbury-Bristol/Swindon

- | | |
|---|------------|
| ○ Restructured Trans Wilts Corridor Service | GVA £2.99m |
| ○ Ashton Park Station | GVA £2.37m |

If all these initiatives were delivered the total incremental GVA offered would be over **£119m per annum**. In order of magnitude these are: -

- | | |
|---|------------|
| ○ Great Western Main Line + long-distance TransWilts | GVA £81.9m |
| ○ Berks and Hants | GVA £17.6m |

- **West of England**
- **TransWilts local**

GVA £14.9m
GVA £5.36m

Whilst the study has taken account of indicative scheme deliverability, it should be made clear that major investment would be required to enable any of them to happen. The purpose of the study is to enable Swindon and Wiltshire stakeholders to appropriately determine both the strategic schemes in which to invest development funds, and thence priorities for development.

On the basis of the assessment and evidencing process the top 5 priorities for **SWLEP** stakeholders to consider developing may thus be: -

- **ONE:** Bristol – Oxford and extension to East-West Rail when commissioned
- **TWO:** Southampton – TransWilts – Oxford, Birmingham and restructured TransWilts Corridor
- **THREE:** New GWML stations – Corsham, Swindon West, Swindon East
- **FOUR:** Paddington-Westbury-Trowbridge-Bristol services plus Devizes Parkway
- **FIVE:** New West of England stations and Salisbury-Waterloo journey time reductions

ONE, TWO and **THREE** have been identified in this Study as the provisionally-titled '**Great Western Connect**' initiative.

In addition stakeholders may wish to actively support delivery of national initiatives such as HS2, Crossrail Heathrow Western Access, East West Rail, together with other ambitions relevant to Swindon and Wiltshire being promoted by neighbouring external local authorities, LEPs and Sub-National Transport Bodies (e.g. West of England Combined Authority, England's Economic Heartland, Midlands Connect, West Midlands Rail Executive).

The study has also identified a range of customer facility, access, service and quality initiatives which county stakeholders may wish to develop in partnership with the rail industry, including continuously improving Station Travel Plans, car-share schemes, multi-modal ticketing and Plus Bus extension, 'Mobility as a Service' initiatives and enhanced bus-rail links.

Development and Delivery

The study recommends that Swindon and Wiltshire stakeholders seek to build their own '**Third Party**' capability to determine, promote, develop, fund and deliver rail investment. In the contemporary rail investment climate neither Network Rail nor Train Operating Companies are likely to take the lead in developing the priorities identified for the county. Instead government is actively encouraging such Third Party approaches, in particular via the '**Rail Network Enhancements Pipeline**' process published by the Department for Transport in March 2018.

Stakeholders may wish to draw upon experience of local authorities and LEPs that have developed and delivered similar schemes (e.g. Warwickshire, Coventry, Worcestershire), and consider multi-partner Task Forces for line of route enhancements that cannot be promoted by individual local authorities alone (e.g. Peninsula Task Force, North Cotswold Line Task Force, East West Rail Consortium as well as TransWilts Community Rail Partnership), potentially including: -

- Great Western Connect Task Force – Oxford-Swindon-Bristol-Cambridge
- Solent-Wiltshire-West Midlands Task Force – Southampton-TransWilts-Oxford-West Midlands

This report provides a vision and strategic framework against which future investment in the rail network in the Swindon and Wiltshire area will be prioritised. This vision is purposefully bold, ambitious and long term. The approach to developing the vision and strategy has been to focus on the rail services that are required to support economic growth within the area and to improve links to other key national economic centres. Investment schemes have subsequently been identified to support delivery of those services and access to them. However, it should be noted that the strategy is not a finalised investment plan. Before they can be implemented, the schemes that are proposed in the strategy will require significant further work in terms of business case development, determination of costs, calculation of benefit to cost ratio figures and planning applications. As such, while the schemes identified do form the priority for investment going forward, this is subject to the various areas of further work, and may require some flexibility depending on the results. Key, though, is delivering schemes that enable the implementation of the various improved services identified in the strategy in order that the associated economic benefit can be realised.

1. INTRODUCTION

- 1.1.1 SYSTRA and SLC Rail have been commissioned by the Swindon and Wiltshire Local Enterprise Partnership (SWLEP) to develop a rail strategy for Swindon & Wiltshire that identifies how the rail network in the area should be developed over the next 20 years to support the growth of the economy and provide access to opportunities, making Swindon and Wiltshire a well-connected, economically-thriving, attractive place to live and work. The work will also support the development of the Local Industrial Strategy and the development of the Local Plans of both Wiltshire and Swindon Borough Councils.
- 1.1.2 The approach we have taken in developing this report is to focus on the objectives of the LEP and what outputs in terms of train service connectivity should be delivered to meet these objectives and from that identifying what interventions are required to deliver that service. The recommendations included in the strategy are designed to be both realistic and deliverable over the life of the strategy. Chapter 8 presents the outcomes of the strategy, including transformational changes in local and regional connectivity on both the Great Western Mainline and Trans Wilts Corridor, improvements in service levels on the Berks & Hants route and journey time reductions on the West of England Line. In addition we present recommendations for the development of up to seven new stations across the region in the longer term.
- 1.1.3 The aims and objectives of this study are to:
- Understand the strengths and weaknesses of the current and committed rail provision in the area
 - Understand the gaps in provision and identify how these might be addressed
 - Identify and evidence short, medium and long term opportunities for investment
 - Understand the impact of changes to the network beyond the local area
 - Examine how rail can support the growth of the SWLEP economy and its connectivity to other economies across the UK
 - Ensure rail is part of the place-shaping agenda for Swindon and Wiltshire, and examine its role in supporting access to opportunities
 - Identify a symbiotic relationship between rail and the growth of the SWLEP area
- 1.1.4 At the end of this report we set out our recommendations for the development of the rail network; presenting a range of interventions from transformational changes to local and regional connectivity on the Great Western Mainline through a range of more incremental but none-the-less significant changes to the Berks & Hants, West of England and Trans Wilts corridors including opening new stations, through to interventions to improve access to the network such as Station Travel Plans and improved integration of ticketing.
- 1.1.5 The remainder of this report sets out a summary of our approach and findings. More detail around specific components of our work can be found in Annexes A to G.

Within this study we have used the term “**Trans Wilts Corridor**” to refer to the group of services running from Bristol/Swindon to Salisbury, the Solent and Weymouth. Historically the term has been limited to services linking Westbury and Swindon via Melksham

2. SWINDON AND WILTSHIRE RAIL NETWORK

2.1.1 The Swindon & Wiltshire LEP area enjoys a strong position on the rail network, supporting both long distance and regional connectivity. The area is primarily served by three east-west routes, all providing access to London and the West of England / South Wales; these routes are dominated by long distance high speed services, albeit at varying speeds and frequency. These three routes are linked by the Trans Wilts corridor, which has a very different character, supporting local and regional connectivity, linking the principal towns of the area and providing wider access to key regional centres such as Bristol, Swindon, Bath and Southampton.

2.1.2 Within this chapter we provide a summary of each of the four main routes in Swindon and Wiltshire. More details on each route can be found in Annex A.

2.2 The Wiltshire Rail Network

2.2.1 The rail network in Wiltshire is characterised by three east-west mainlines, joined by a single north-south route. These four routes comprise:

- **Great Western Main Line (GWML):** London Paddington – Bristol/South Wales via Reading and Swindon and London Paddington – Cheltenham Spa via Swindon and Gloucester
- **Berks & Hants Line (B&H):** London Paddington – Exeter/Paignton/Plymouth/Penzance via Reading and Westbury
- **West of England Line (WoE):** London Waterloo – Exeter St. David's via Salisbury
- **Trans Wilts Corridor:** Bristol/Swindon – Southampton/Portsmouth/ Weymouth via Trowbridge, Westbury and Salisbury.

2.2.2 The GWML and the B&H routes are both major main line routes characterised by high speed services linking major centres. This is both a strength and weakness for Swindon and Wiltshire; for Chippenham and Swindon, it is very clearly a strength as it provides both centres with high speed and frequent links to London and Bristol (and South Wales in the case of Swindon), but represents a weakness on the B&H Line, where the focus has historically been on providing high speed links from London and Reading to Exeter, Plymouth and the South West. The result of this is a poor service frequency at the Wiltshire stations of Westbury and Pewsey, and little connectivity with Bedwyn, where except for a handful of early morning and evening departures, services are almost exclusively to Newbury, Reading and London.

2.2.3 This dominance of long distance high speed services on the GWML and B&H has been a historic frustration to attempts to improve local accessibility to the rail network through the (re-)opening of additional stations on these routes.

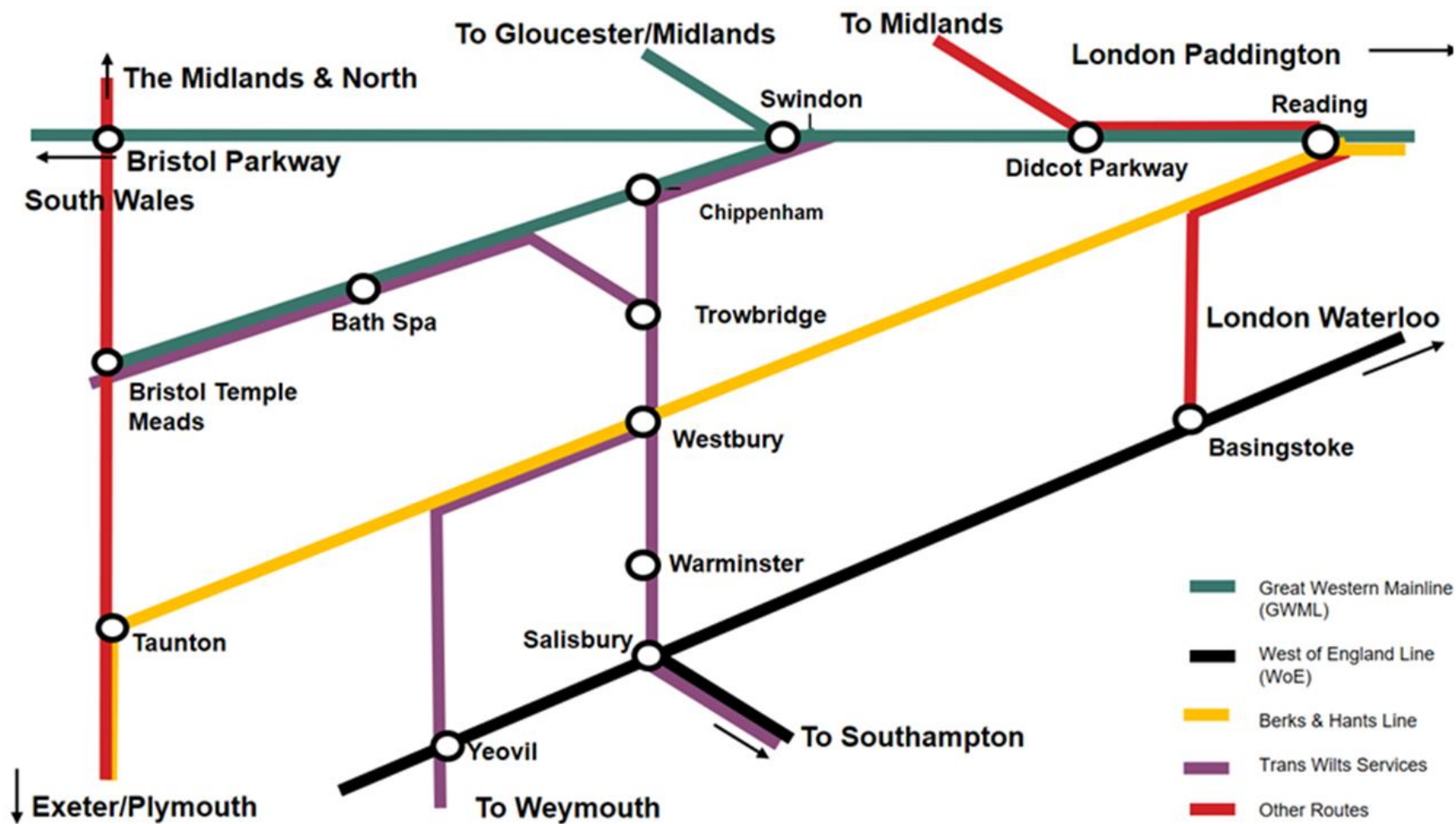
2.2.4 The West of England line historically competed with the B&H route to provide links between London and the South West, but since the 1960s the route has focussed on linking Dorset and South Wiltshire / Salisbury to Woking and London. Services on this route are characterised by lower average speeds than on the GWML and B&H routes compensated somewhat by the consistent service frequency provided at intermediate stations.

2.2.5 The Trans Wilts Corridor is very different in character from the other routes. As well as being the only north-south route, it is also characterised by a focus on regional and local services,

with a higher density of stations and a diverse mixture of services forming a network focussed on Westbury and Trowbridge. The route has seen significant growth in recent years, but further development of both services and connectivity has been limited by its interactions with the east-west routes described above.

- 2.2.6 The railway geography described above means that passengers from most of the smaller stations in Wiltshire have to rely on connecting journeys for travel outside the county, with the notable exceptions of Bristol and London to which all stations have access to one or another station with the exception of Melksham. These connections are made from the Trans Wilts to the GWML, B&H and WoE at the key hubs of Swindon, Westbury and Salisbury and Bristol.
- 2.2.7 Figure 1 below shows the geography of the SWLEP rail network and the four main routes; in the following sections we describe their services and connectivity in more detail.

Figure 1. Wiltshire Rail Network (showing key stations only)



2.3 Great Western Mainline

- 2.3.1 The main function of the passenger service on the GWML is to provide high speed long distance services linking London with Bristol and South Wales. The core service operating on the route through Wiltshire is formed of up to five trains per hour in each direction, operated by Great Western Railway (GWR) as follows:
- 1 train per hour London Paddington – Swansea
 - 1 train per hour London Paddington – Cardiff
 - 2 trains per hour London Paddington – Bristol Temple Meads
 - 0.5 trains per hour London Paddington – Cheltenham Spa
- 2.3.2 All these services call at Swindon, providing up to five trains per hour between Swindon, Reading and London plus links to Cheltenham, Cardiff and Swansea. Both Bristol – London services also call at Chippenham, providing two trains per hour to London, Bristol and Bath Spa.
- 2.3.3 Although the service from London to Cheltenham only operates every two hours, it is supplemented by a Swindon – Cheltenham service to provide an hourly service on the South Cotswolds Line linking Swindon with Kemble, Stroud, Stonehouse, Gloucester and Cheltenham. These trains provide Swindon's only direct northbound service, giving access to the Midlands via same-platform interchange at Cheltenham Spa.
- 2.3.4 From December 2019 the route will benefit from the completion of the Great Western Electrification Programme with the operation of two new fast services between Bristol and London every hour, calling only at Bristol Parkway. This train will not serve SWLEP area stations but will provide additional capacity on existing trains for passengers from Chippenham and Swindon. At the same time the London – Cheltenham service will be enhanced to hourly and all services will benefit from reduced journey times as the full benefits of partial electrification and the improved acceleration of Intercity Express Trains (IET) are incorporated into the timetable.
- 2.3.5 Whilst these represent positive developments for the core long distance markets, they do mean that the route will have little, if any, capacity for service enhancements on the section of line between Didcot, Swindon and Bristol Parkway; this represents a challenge for the development of new stations and services for Swindon and Wiltshire.

2.4 Berks & Hants Route

- 2.4.1 The B&H route has a different character and service pattern to the GWML running to the north. In particular, the line has lower line speeds, determined by the curvature of the route, so to maintain journey times for long distance services between London and the West Country the number of intermediate calls is reduced, impacting significantly on the service provided to stations in Wiltshire. At the time of writing the route is served by the following core service:
- 1 train per hour London Paddington – Bedwyn calling at all stations between Reading and Bedwyn.
 - 1 train per hour London Paddington – Plymouth (with alternate services extending to Penzance).
 - 6 additional services per day operating to Paignton, Exeter, Taunton or Frome that supplement the above services.

- 2.4.2 The service provided to stations in Wiltshire is relatively limited. Bedwyn enjoys an hourly service to Reading and London but only has a small number of peak services to Westbury. Pewsey and Westbury both enjoy direct services to both London / Reading and the West Country, but with very mixed service frequencies; Pewsey has a gap of 3.5 hours between services to London in the morning. From December 2019 this pattern will change with the operation approximately every two hours between London and Exeter serving both stations; this will provide a more consistent service pattern on the route and will be supported by journey time reductions on both London – Bedwyn and London – Exeter services as a result of the introduction of IET trains.
- 2.4.3 As well as passenger services the route is also used by a large number of freight trains carrying aggregates from quarries in Somerset to the London area. These trains absorb capacity as they have a maximum speed of 60mph against the 100mph maximum for passenger trains on the route; in the long term this may be a constraint on the development of additional services on the route.

2.5 West of England Line

- 2.5.1 The WoE line links London Waterloo to Exeter via Salisbury, with service operated by South Western Railway. Within Wiltshire the service is composed of:
- One train per hour London Waterloo – Exeter via Salisbury
 - One train per hour London Waterloo – Salisbury with some services extending to Yeovil or Westbury / Bristol
- 2.5.2 The service to Exeter provides a faster service to/from London as it calls only at Andover between Basingstoke and Salisbury. The service that terminates at Salisbury serves all intermediate stations between Basingstoke and Salisbury, extending journey times.
- 2.5.3 Within the current South Western Railway franchise, which runs until 2024, no significant changes to West of England Line services are planned although there are a number of incremental changes being introduced such as the extension of services to Yeovil Pen Mill via either Gillingham or Westbury in off-peak periods.
- 2.5.4 The development of services on the route is constrained by the infrastructure and service levels at opposite ends of the route. West of Salisbury the route has many sections of single line which complicate the planning of timetables and prevent a consistent two train per hour service operating in both directions. At the east end of the route services join the heavily congested South West Mainline at Basingstoke. This route operates at or close to capacity throughout the day, with little scope for increasing service frequencies or reducing journey times without a major timetable recast. The maximum line speed of 80mph - 90mph on the route is also a constraint in terms of reducing journey times, although this is not a major constraint in the short term as the maximum speed of the Class 159 trains used on the route is also 90mph.

2.6 Trans Wilts Corridor

- 2.6.1 The Trans Wilts corridor is served by a range of services linking a diverse range of destinations. As well as the core hourly Cardiff – Portsmouth and Bristol - Westbury / Weymouth services,

there are a number of additional services that do not have a consistent service pattern. The following services operate on the route:

- 1 train per hour Cardiff Central – Portsmouth Harbour
- 0.5 train per hour Gloucester – Weymouth
- 0.5 trains per hour Great Malvern – Westbury (two service per day extend to Southampton and one service per day to Brighton).
- 9 services per day between Swindon and Westbury via Melksham of which two services extend Southampton and one to Frome.
- 7 services per day between Westbury and Salisbury operated by South Western Railway of which four start at Bristol and one at Yeovil, and four couple to Exeter – London Waterloo services at Salisbury.
- 7 additional services from Westbury to Warminster of which one service operates to Salisbury and one to Southampton whilst one originates at Frome and one at Bristol Parkway.

2.6.2 No significant changes to services are currently planned for this route, although the route has received cascaded Class 165 “Turbo” rolling stock from elsewhere in the Great Western Railway franchise. Whilst this represents a significant improvement over older Class 150 “Sprinter” trains, and provide an uplift in capacity it does not represent an improvement in quality on longer distance services previously operated by Class 158 “Express” units.

2.6.3 The infrastructure of the Trans Wilts Corridor is mainly double track with the exception of the line from Trowbridge to Chippenham via Melksham , along with sections of the line from Castle Cary to Weymouth and the loop that serves Frome. Service planning on the route is constrained by the number of routes that the corridor crosses with the north -south route cutting across the grain of three east-west lines; for example, the Cardiff – Portsmouth services have to traverse six key junctions between Bristol and Southampton, all of which constrain the flexibility to alter or increase the number of services.

2.1 Developing the network for the future

2.1.1 Over the last 20 years rail use across the UK has grown by a remarkable 139% and stations in Swindon and Wiltshire have been part of this pattern. However within the last two years the rate of growth has dropped and in some areas demand has fallen slightly. There are many reasons for this, including the impact of engineering work, industrial action and changes in working patterns, but long term projections still show that demand will rise in the future. Delivering capacity for new demand and providing access to the railway to fully deliver on demand projections presents the opportunity to develop new services that in addition to providing new capacity may also provide new direct links between locations that have historically been poorly served. There is also the opportunity for the rail industry to become more responsive to passengers requirements in turn providing more attractive services that are better integrated with other modes. Within Swindon & Wiltshire there are a range of opportunities where future demand growth may help to support the development of new services or access opportunities.

2.1.2

3. THE ECONOMY AND ACCESSIBILITY

3.1.1 In developing this strategy we have examined the shape of the economy in Swindon and Wiltshire and how this relates to the railway and have also conducted an accessibility analysis to understand how rail serves the area and where its strengths and weaknesses lie. Within this chapter we provide a summary of this work, but more detail can be found in Annexes B & C.

3.2 The Economy of Swindon & Wiltshire

3.2.1 The central southern location of Swindon and Wiltshire provides a strong strategic position, well placed for access to London and the Greater South East, Wales and the Midlands. The area also has strong linkages to key airports including Heathrow and Bristol and coastal ports of Bristol, Southampton and Portsmouth.

3.2.2 The area has a growing population, including a high level of growth in the working age population while the number of over-65s is set to further increase. For example between 2001 and 2011 the adult population of Swindon increased by 17% and in Wiltshire by 7%. The greatest levels of growth came from people aged 55 and over. All age categories saw an increase except for the 25-34 age group declined, including a steep decline of 17% in Wiltshire, suggesting that younger people may be moving away from the area. The table below presents these percentage changes.

Table 1. Percentage change in adult age groups 2001-2011 Swindon & Wiltshire Area

AGE GROUP	SWINDON	WILTSHIRE	TOTAL
All Groups	17%	7%	10%
16-24	23%	7%	12%
25-34	3%	-17%	-10%
35-54	20%	6%	10%
55-64	32%	26%	27%
65-74	11%	21%	18%
75+	15%	10%	11%

3.2.3 In order to accommodate this growing population, Swindon and Wiltshire are planning for significant growth in housing and employment by 2036. A joint spatial framework is being developed to sit alongside the individual Swindon and Wiltshire Local Plan documents and set out the overall scale and distribution of housing and employment identifying strategic employment locations and infrastructure requirements.

3.2.4 Swindon and Wiltshire has a prosperous economy with a mix of modern industries attracting considerable inward investment from national and international businesses. In terms of small and medium sized businesses the area also has a good record of business survival rates, consistently performing above the national average, however growth in Gross Value Added has been lower than the national average in both Swindon and Wiltshire. The absolute level

of GVA differs between the two areas with Swindon have a higher level of GVA per head than the national average and Wiltshire a lower level.

- 3.2.5 Three Growth Zones have been identified within the Strategic Economic Plan; these have the potential to have the greatest impact in terms of growth of Swindon and Wiltshire. The zones are as follows;
- Swindon – M4 Growth Zone
 - A350 Growth Zone
 - Salisbury A303 Growth Zone
- 3.2.6 Transport has a key role to play in the effective delivery of the Growth Zones, giving the ability to increase the effective density of a location by increasing the number of people who can access the area quickly.
- 3.2.7 The SEP has identified key sectors which have good prospects for growth. These are identified as priority sectors for Swindon and Wiltshire and include;
- Advanced engineering and high value manufacturing
 - Health and life sciences
 - Financial and professional services
 - Digital and information and communications technology
 - Land-based industries
- 3.2.8 Innovation is central to the Strategic Economic Plan; this is typified by the number of global investors who have invested and continue to prosper in the area and the high presence of innovation sectors including health and life sciences, pharmaceuticals, mobile telecommunications, digital and high-value manufacturing.
- 3.2.9 The natural geography of the area has over centuries determined the economic geography with areas emerging covering the north, central and southern areas. The contrasting character of the area results in a range and variety of complex connections and plays an important role in shaping the future plans for growth, investment and infrastructure.
- 3.2.10 It is clear that the transport system will play a significant role in supporting planned housing and economic growth in the SWLEP area. Substantial upgrades and improvements are, however, needed to accommodate the increase in demand across all modes.
- 3.2.11 The rail network across SWLEP has a strong foundation which already actively supports the economy; there is, however, scope for further improvement in both access to the network and the services provided to fully realise the role of the rail in the economy and community of Swindon and Wiltshire.
- 3.2.12 A particular issue that impacts access to Growth Zones is the ability to access the rail network and the current distribution of stations across the area. Whilst the A350 Growth Zone has a high density of stations, both the M4 Growth Zone and the A303 Growth Zones have very limited access to the rail network; the M4 Growth Zone only has stations at Chippenham and Swindon, whilst the A303 Growth Zone only has a station at Salisbury. In all three locations an increasing urban population and existing wider catchment are served by town centre stations. As the population of these towns increases access to these stations will become harder

unless sustainable access is improved and for the local catchment, whilst increasing levels of traffic in these settlements will make the stations less attractive to the wider catchment area.

- 3.2.13 In both cases these urban area's large populations are being served by town centre stations with relatively poor access to their wider catchment, constraining the attractiveness of the rail network.

3.3 Accessibility

- 3.3.1 Within this section we summarise issues relating to the level of accessibility and connectivity provided by the rail network in Swindon and Wiltshire.
- 3.3.2 The table below presents an assessment of average speeds on a range of strategic links from stations in Swindon and Wiltshire. The locations represent what we consider to be key national linkages. The average speeds have been derived from National Rail journey planner journey times and rail network distances.

Figure 2. Average Speeds to Strategic Locations (mph)

	CHIPPENHAM	SALISBURY	SWINDON	WESTBURY	TROWBRIDGE
LONDON	75	56	77	71	54
BIRMINGHAM	36	47	40	48	49
READING	75	45	81	80	47
PLYMOUTH	48	42	47	56	47
MANCHESTER	58	50	44	52	52
LEEDS	50	51	49	45	46
NOTTINGHAM	41	41	40	37	42
NEWCASTLE	62	62	58	56	54
CAMBRIDGE	48	48	51	45	43

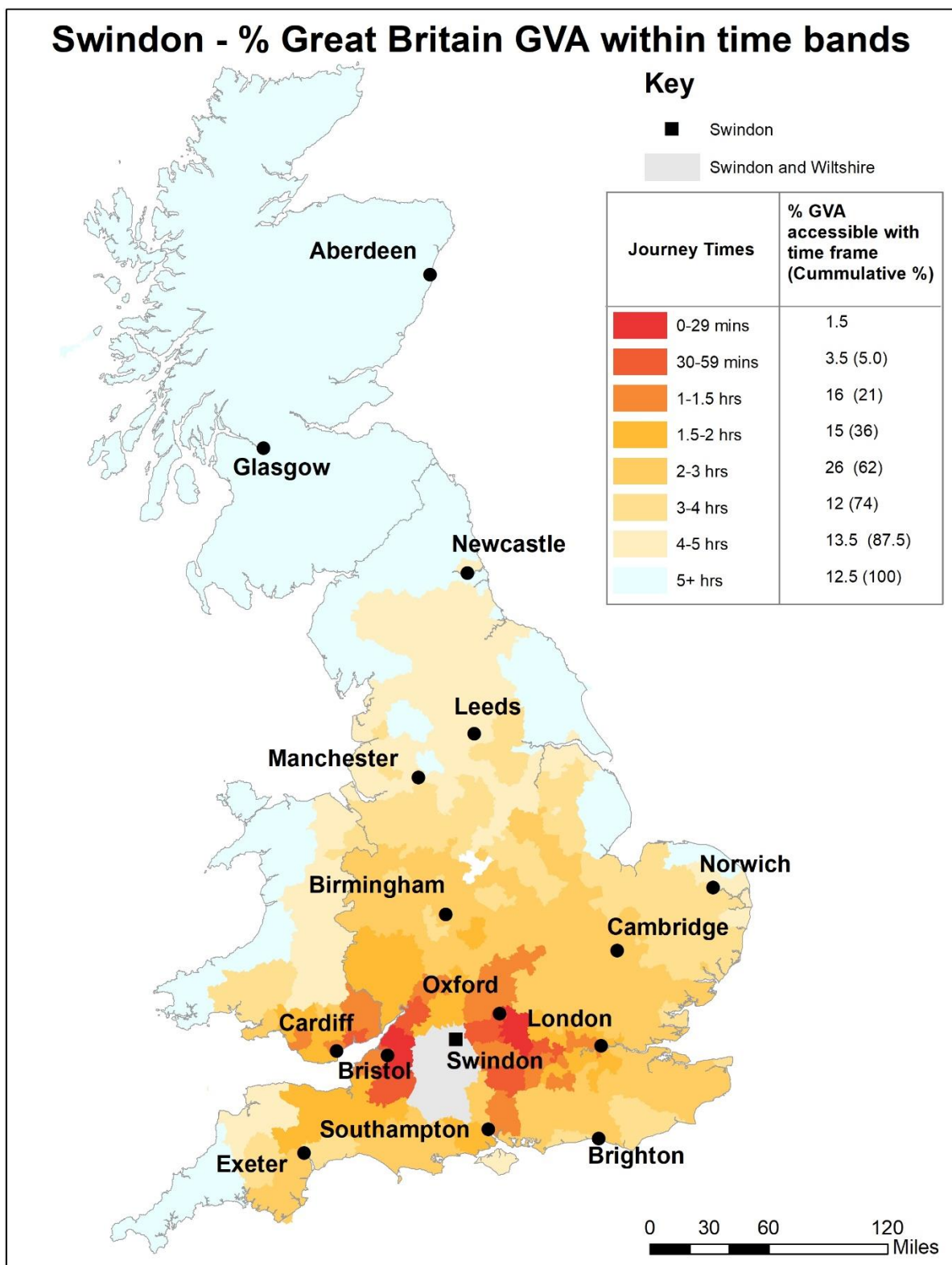
- 3.3.3 The table shows that average speeds to London and Reading are typically quite high (in excess of 60mph), but the only other links where average speeds are in excess of 60mph are from Chippenham and Salisbury to Newcastle; this is largely attributable to very high average speeds on the East Coast Mainline rather than high average speeds on routes from Swindon and Wiltshire.
- 3.3.4 The majority of strategic links have much poorer average speeds. Of particular concern are links to Birmingham, which is relatively close to North Wiltshire but where average speeds are below 50mph. Improving access to Birmingham and the West Midlands would enhance access to Britain's second largest economy. These low average speeds for strategic journeys are largely driven by the lack of direct services, particularly for north-south journeys, with interchange at either Didcot, Reading, London or Bristol often being necessary.
- 3.3.5 Average speeds for regional and local links are often worse than this with most being below 40mph. Although poor, this is not untypical for local and regional services where there are a lot of stations calls which limits the performance of services. The table below presents a summary of regional links, a more comprehensive table is presented in Annex C covering all stations in Swindon & Wiltshire.

Table 2. Regional Links - Average Speeds

	BRISTOL	CARDIFF	GLOUCESTER	OXFORD	SALISBURY	SOUTHAMPTON
AVONCLIFF	32	32	36	40	27	33
BEDWYN	26	31	33	42	27	26
B'FORD-ON-AVON	39	41	36	35	41	44
CHIPPENHAM	50	37	34	43	27	34
DEAN	32	32	29	36	42	37
MELKSHAM	24	29	28	39	26	32
PEWSEY	34	40	29	48	35	34
SALISBURY	45	43	30	42		42
SWINDON	56	47	42	45	34	53
TISBURY	35	36	29	38	52	35
TROWBRIDGE	39	40	36	34	44	43
WARMINSTER	39	30	28	33	55	50
WESTBURY	38	42	36	40	48	47

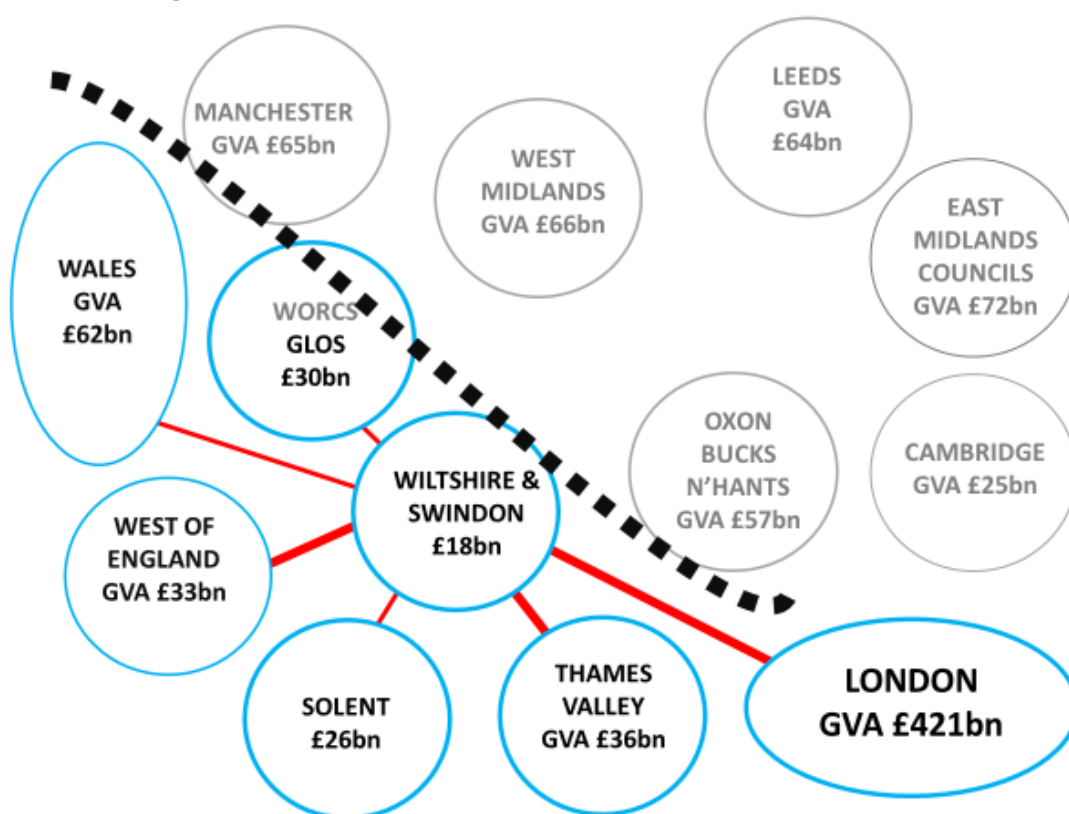
- 3.3.6 The table very clearly shows how poor regional average speeds are even to quite major cities such as Bristol from which most stations have a direct service. The pattern of services across the county does mean that average speeds can be stratified, for example speeds from Tisbury, Warminster and Westbury to Salisbury are quite high, but speeds from stations in the north of the county where there are no direct services are very poor, with some below 30mph.
- 3.3.7 To understand the relationship between the quality of rail services and access to the economy we have prepared a number of maps showing travel time bands across the UK from key Swindon & Wiltshire stations and the proportion of the economy that sits within them. Below we present the results for Swindon as an example. Other examples are presented in Annex C.

Figure 3. % GVA within rail travel time bands of Swindon



- 3.3.8 The darker shading on the map, showing good connectivity, emphasises the strong local and east-west strategic connectivity but show how broader strategic links are lacking, especially to the north; this is especially the case in the centre and south of the county. In all cases, the difference in the proportion of the economy that is within two hours and that which is available within three hours is very large. Two hours travel time is often seen as being a psychological boundary for making business trips, as it comfortably allows a return journey within a working day; there are therefore clear agglomeration benefits in increasing the proportion of the economy within the two hour band.
- 3.3.9 In summary the diagram below indicates in blue the places where Swindon and Wiltshire currently have good links alongside the respective size of their economy represented by GVA. Conversely the areas in grey are not well connected by rail to Swindon and Wiltshire and the size of their respective economies is also highlighted. It can therefore be seen that while links to London are good and deliver a significant benefit to Swindon and Wiltshire, there are significant economies such as Birmingham, Oxford and Cambridge with which improved rail connections with Swindon and Wiltshire could deliver significant wider economic benefits.

Figure 4. Economies and their connections with Swindon and Wiltshire



3.4 Trip Rates from Swindon and Wiltshire Stations

- 3.4.1 As well as looking at the quality of service provided, we have also examined usage at stations in Swindon & Wiltshire, relative to their catchment population. A simple method of achieving this, enabling comparability between stations, is to take the number of trips being made and divide by the catchment population. Information contained within the Network Rail Regional Urban Market Study allows us to examine this issue. This contains estimated populations of

the 1km, 3km and 5km catchments for stations based on the 2011 census, and provides each station's usage and volume of trips to a principal destination. This covers all stations with the exception of Tisbury, Dean and Bedwyn; these are included in the London and South East Urban Market Study.

In the tables below we present trip rates by station including resident population up to 3km distant from the stations. As well as the original data for 2011 we have also updated it using current (2017-18) Office of Road and Rail (ORR) Station Usage data and 2017 population estimates. These latter estimates are only available at local authority levels, so a flat rate has been applied for all stations in each local authority area; this means that any non-marginal growth in population around a station will not be included, but this only has a marginal effect on the results.

Table 3. Trip Rate per resident estimates (3km Catchment) for 2011 and 2017 in rank order for SWLEP and comparator stations

AREA	STATION	2011 TRIP RATE	2017 TRIP RATE	% CHANGE
SWLEP	Chippenham	68	70.1	3%
	Salisbury	57.1	58.8	3%
	Bradford-upon-Avon	45.1	49.8	10%
	Swindon	43.9	46.8	7%
	Westbury	36	43.2	20%
	Trowbridge	27.1	30.9	14%
	Warminster	28.4	28.2	-1%
	Melksham	0.8	4.7	527%
	Avoncliff	1.9	2	7%
	Dilton Marsh	1.3	1.5	16%
COMPARATOR	Yate	11.1	13.67	23%
	Filton Abbey Wood	14.2	18.19	28%

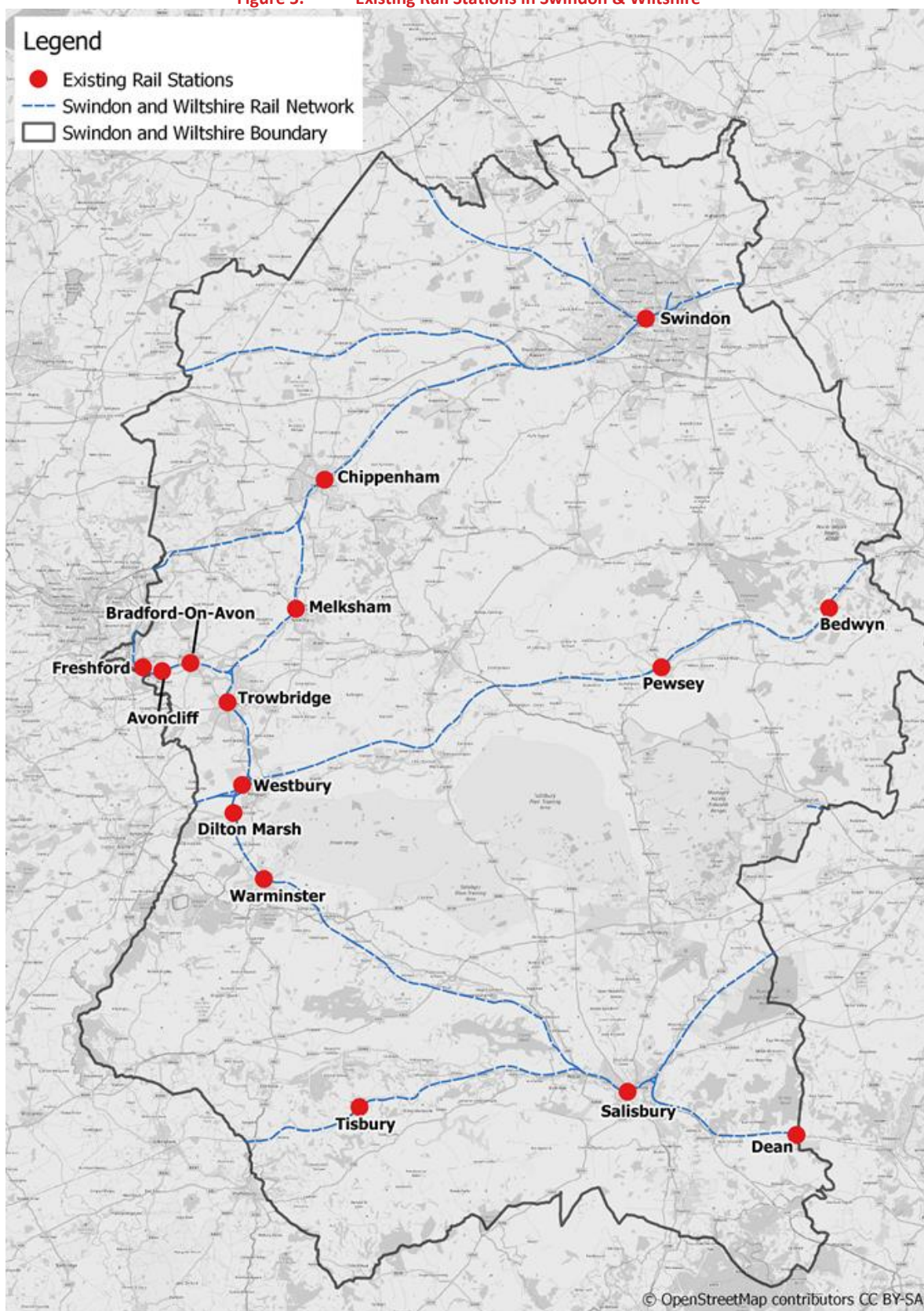
3.4.2 The table shows that stations across Swindon and Wiltshire typically have a relatively high trip rate for an area away from a major urban centre with a high frequency commuter network.

3.5 Limited Access to the Rail Network

3.5.1 At the current time the Swindon and Wiltshire area is served only by 14 stations, mainly focussed on the Trans Wilts Corridor. Coverage is therefore relatively sparse in the north, east and south of the area, with the M4 Growth Zone only being served by two stations at Swindon and Chippenham and the A303 Growth Zone only being served by a station at Salisbury. With no stations between Westbury and Pewsey, the rural centre of the county is particularly poorly served, whilst the east is served only by Pewsey (which has a relatively poor service) and Bedwyn, which whilst enjoying good access to London lacks effective connectivity to the rest of Wiltshire or the South West.

3.5.2 The map below illustrates the current position.

Figure 5. Existing Rail Stations in Swindon & Wiltshire



- 3.5.3** The pattern of stations across the area in part reflects the rural nature of much of the county, where historically there have been relatively few traffic centres for the railway to serve, which has led to rationalisation of stations especially on mainlines. This is reflected in the table below which shows that lower than average proportion of the population live within 1km of a station than in the rest of England and Wales.

Table 4. Proportion of Population within distance bands from a rail station

	UPTO 1KM	UPTO 3KM	UPTO 5KM
Wiltshire	18%	47%	53%
Swindon	7%	46%	96%
Swindon & Wiltshire	15%	47%	66%
South West	20%	54%	68%
England & Wales	30%	72%	85%

- 3.5.4** Inevitably the national average is higher than Swindon, Wiltshire or the South West as a whole as the national average will be skewed by the density of station in London and other major conurbations. In Swindon the town centre with higher densities of office and retail development means that only a low proportion of the population are within 1km of the town's only station, the limited size of the Swindon Borough does however mean that almost all of the Borough is within 5km of the station. In Wiltshire the proportion of the population within 1km of a station is close to the South West average, a reflection that the larger population centres do have a station. However the low density of stations becomes more apparent in the higher distance bands compounded by the number of small to medium sized towns such as Malmesbury or Devizes that lack a rail station.

3.6 Access to the rail network from non-rail served towns

- 3.6.1** There are a number of settlements around Wiltshire that are not served by rail and which can only be accessed by car or bus services. It is useful to understand if there is scope for further improving access from these locations by bus to provide a more sustainable alternative to cars as a means of accessing the rail network.
- 3.6.2** The table below compares existing bus and car journey times from a range of settlements to their nearest rail station.
- 3.6.3** The table indicates that there are a number of settlements where bus journey times to rail stations are relatively competitive with car journey times, good examples include Marlborough to Pewsey, or Calne to Chippenham the latter enjoying a bus every 20 minutes as well as a good journey time. The attraction of the link from Marlborough to Pewsey might be improved further by an improvement in the quality of the rail service at Pewsey rather than improvements in the quality of the bus service. There are however a number of location where bus services currently take more than 50% longer than the equivalent car journey, making access by bus unattractive. The most notable locations are Amesbury, Devizes and Malmesbury. Notably Malmesbury also has the highest level of car ownership of all locations assessed, suggesting that very substantial improvements in bus services would be required to improve rail services.

Table 5. Bus & Car Access Times to Stations

SETTLEMENT	RAIL STATION	BUS JT (MINS)	CAR JT (MINS)	DIFFERENCE (MINS)	BUS JT/CAR JT (%)
Calne	Chippenham	21	19	2	11%
Marlborough	Swindon	38	32	6	19%
Marlborough	Pewsey	19	16	3	19%
Durrington	Salisbury	36	30	6	20%
Downton	Salisbury	25	20	5	25%
RWB	Swindon	24	19	5	26%
Ludgershall	Andover	17	13	4	31%
Tidworth	Andover	26	18	8	44%
Bulford	Salisbury	44	28	16	57%
Devizes	Swindon	68	43	25	58%
Amesbury	Salisbury	34	21	13	62%
Mere	Gillingham	20	12	8	67%
Market Lavington	Swindon	92	50	42	84%
Devizes	Chippenham	56	30	26	87%
Malmesbury	Swindon	62	33	29	88%
Malmesbury	Chippenham	49	23	26	113%

3.7 The Railway & the Economy

- 3.7.1 As described above the railway has a number of strengths in the way in which it serves Swindon & Wiltshire, although there is room to develop this further. Within its diverse economy there are a number of sectors, such as health and life sciences, financial and professional services and digital information and communications, where good quality rail links are important for supporting the economy, with the potential to achieve agglomeration economies. Agglomeration economies occur where businesses benefit from being close to each other allowing them to interact more effectively. This might be at a micro level with companies being located adjacent to each other but there is also the potential for agglomeration over greater distances. Rail is of most relevance to agglomeration for medium and long distance trips as car or sustainable modes are (outside of urban areas) more relevant for shorter trips.
- 3.7.2 In the Swindon and Wiltshire context linking health and life science companies with research establishments in Bristol, Oxford, Cambridge, London, Exeter or Plymouth would promote collaboration an innovation helping companies in both areas develop. Other sectors may benefit more generally from a growth in the size of their accessible markets helping them to expand more effectively and providing greater security by having a more diverse range of customers. Within our study we have estimated the impact on Gross Value Added of potential interventions.

4. ENGAGING WITH STAKEHOLDERS

4.1.1 To provide a more detailed understanding of gaps in provision and to identify any aspirations for the development of the network a two phase stakeholder engagement process was conducted as follows:

- A questionnaire issued in July 2018 was sent via Community Engagement Managers asking for onward distribution to Parish and Town Councils across Wiltshire. Separately questionnaires were distributed to Rail User Groups.
- A Stakeholder Engagement Workshop was held in Swindon in January 2019, drawing-together a range of stakeholders with an interest in the development of the rail network in Swindon and Wiltshire.

4.1.2 Annex D presents the detailed outcomes of the stakeholder engagement process, however the sections below present a number of the summary themes that emerged, which along with other themes emerging from the evidence base are addressed in the strategy.

- Access to the network via new stations across the LEP area.
- Service frequency including frequency of evening services.
- Considering journeys as door to door rather than station to station.
- Development of new services for example extending Trans Wilts services.
- Regional connectivity .

4.1.3 A theme that did emerge from the Stakeholder event was a general level of satisfaction with the quality of services to London and a view that the development of non-London links was of greater importance to the development of the area. This acknowledgment that much of the area (especially in the north) already has a good quality of service to London is a mature response that confirms that there are only relatively marginal gains to be exploited from the further development of services to London.

4.1.4 The theme around improving access to the network is a reflection of the gaps in the provision of stations across the LEP which is reflected in the number of stations schemes that have been promoted by interested parties over recent years.

4.1.5 The theme that emerged around integration with other modes to consider trips as door to door rather than purely as rail journeys is important, as it is an acknowledgement that improving access to the rail network for example by improving access by sustainable modes is as important as improving the quality of the rail service itself.

4.1.6 With other components of the evidence base the results of the stakeholder engagement exercise have been fed into the gap analysis below.

5. OPTION DEVELOPMENT

5.1.1 Within the previous chapters we have examined the strengths and weaknesses of the rail network and the role that it plays in supporting the economy and community of Swindon and Wiltshire. As part of this process, a number of challenges have been identified for the area, namely:

- Growing population
- Employment growth
- Housing growth
- Pockets of deprivation
- Maintaining strong economic performance
- Negative perceptions of Swindon
- Supporting Health and Life science sector
- Support tourism
- Skills and access to education
- Rebalancing the economy away from London
- Rural nature of Wiltshire

5.1.2 Transport has an important role to play in addressing these challenges, in terms of providing the right kind of connections to the right places.

5.1.3 The stakeholder engagement activities associated with this strategy identified that there are a number of opportunities for the rail network to be improved to better-address the key challenges for the area including those encapsulated within the objectives of the SWLEP, Wiltshire Council, Swindon Borough Council. These opportunities have been grouped together into three key themes, as set out below:

- **Connectivity Gaps** – Movements where it has been identified that new services might be developed.
- **Maintaining & Improving Links** – Enhancing existing services for example through frequency enhancements or journey time reductions.
- **Access & Integration** – Improving access to the rail network either through improvements access to existing stations for example through improved integration with other modes, or alternatively through the construction of new stations.

5.1.4 Below we set out the identified gaps; Annex E links these gaps to a range of mitigations. The mitigations that have been included have been drawn together from the stakeholder engagement exercises, schemes suggested by Wiltshire and Swindon Councils and some options identified by SYSTRA and SLC Rail. In some cases mitigations have been amalgamated where there were multiple similar proposals, or where there were clear synergies.

5.2 Connectivity Gaps

- C1 Connectivity from Swindon to the Midlands & North
- C2 Connectivity from Wiltshire to the Midlands & North
- C3 Connectivity from Swindon to Oxford
- C4 Connectivity from Wiltshire to Oxford
- C5 Connectivity from Swindon to the Oxford – Cambridge Arc

- C6 Connectivity from Wiltshire to the Oxford – Cambridge Arc
- C7 Connectivity from Swindon and the M4 Growth Zone to the Solent
- C8 International access via Heathrow and Gatwick International Airports
- C9 Connectivity from Trans Wilts stations towards London
- C10 Connectivity from Salisbury to the Thames Valley

5.3 Maintaining & Improving Links

- MI1 Improved service between Salisbury & London
- MI2 Service frequencies on the B&H Line towards both London and the South West
- MI3 Retaining and improving average services towards London on the GWML and B&H
- MI4 Service frequencies to Frome
- MI5 Optimisation of services on Trans Wilts corridor
- MI6 Service Frequency Swindon – Westbury
- MI7 Quality of interchange at node stations of Swindon, Westbury and Salisbury
- MI8 Service frequency between Westbury and Weymouth
- MI9 Service frequency between Swindon and Gloucester/Cheltenham
- MI10 West of England Line service frequency

5.4 Access & Integration

- AI1 Poor access to the rail network in North Wiltshire especially in the M4 Growth Zone
- AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone
- AI3 Limited access to the rail network in East Wiltshire
- AI4 Limited access to the rail network for new developments
- AI5 Access to the rail network from Swindon
- AI6 Integration of sustainable and public transport access to the rail network

5.4.1 The logic map below demonstrates how the wider area challenges align with the role of rail and the specific gaps identified through the stakeholder engagement.

SWLEP Rail Strategy Logic Map

CHALLENGE	RAIL'S ROLE	SPECIFYING GAP
Maintaining strong economic performance <ul style="list-style-type: none"> Investing in the right infrastructure and ensuring the area attracts businesses which create value and encourages other businesses to grow. 	Access to the network/Station location <ul style="list-style-type: none"> M4 Growth Zone only contains two rail stations and access to either station from the wider growth area is relatively poor There is only one station within the A303 Growth Zone, at Salisbury 	AI1 Poor access to the rail network in North Wiltshire especially in the M4 Growth Zone AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone AI5 Access to the rail network from Swindon AI6 Integration of sustainable and public transport access to the rail network
	Wider connectivity	C1 Connectivity from Swindon to the Midlands & North C2 Connectivity from Wiltshire to the Midlands & North C8 International access via Heathrow and Gatwick International Airports C9 Connectivity from Trans Wilts stations towards London MI1 Improved service between Salisbury & London MI2 Service frequencies on the B&H Line towards both London and the South West MI3 Retaining and improving average services towards London on the GWML and B&H MI9 Service frequency between Swindon and Gloucester/Cheltenham MI10 West of England Line service frequency
Support Health and Life science hub <ul style="list-style-type: none"> The Witty Review shows that the SWLEP is one of four LEPs, along with neighbouring Oxfordshire, with the highest proportions of Life Sciences employment in the country. The life science (drug discovery and development) sector has particular clusters around academic centres which are strong in health life sciences especially the Cambridge/Oxford/London triangle, and also around Manchester and Edinburgh/Glasgow. Life science (medical device and diagnostics) is widely dispersed but strong in Midlands, both west and east 	Wider connectivity to other centres of excellence for Life science	C1 Connectivity from Swindon to the Midlands & North C2 Connectivity from Wiltshire to the Midlands & North C3 Connectivity from Swindon to Oxford C4 Connectivity from Wiltshire to Oxford C5 Connectivity from Swindon to the Oxford – Cambridge Arc C6 Connectivity from Wiltshire to the Oxford – Cambridge Arc C7 Connectivity from Swindon and the M4 Growth Zone to the Solent
	Access to the network/Station location <ul style="list-style-type: none"> There is only one station within the A303 Growth Zone, at Salisbury 	AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone
Support tourism <ul style="list-style-type: none"> the historic city of Salisbury and nearby Stonehenge together acting as strong attractors of tourist revenue. 	Integration with other modes to enable access to key sites remote from the rail network	AI6 Integration of sustainable and public transport access to the rail network
	Access to the network/Station location <ul style="list-style-type: none"> There is only one station within the A303 Growth Zone, at Salisbury 	AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone
Negative perceptions of Swindon <ul style="list-style-type: none"> the town centre in Swindon does not project the image of Swindon's thriving knowledge intensive economy 	Connectivity <ul style="list-style-type: none"> The transportation of tourists is particularly challenging for the rail network; with poor connectivity to key sites, limited capacity, poor rolling stock and infrequent services to key destinations making some routes unattractive and / or impractical for visitors. 	C2 Connectivity from Wiltshire to the Midlands & North C8 International access via Heathrow and Gatwick International Airports C9 Connectivity from Trans Wilts stations towards London MI1 Improved service between Salisbury & London MI2 Service frequencies on the B&H Line towards both London and the South West MI3 Retaining and improving average services towards London on the GWML and B&H
	Integration with other modes	AI6 Integration of sustainable and public transport access to the rail network MI7 Quality of interchange at node stations of Swindon, Westbury and Salisbury
Sustainable housing growth <ul style="list-style-type: none"> The Swindon – M4 Growth Zone includes two of the largest planned urban extensions in the country. 	Access to the station	AI5 Access to the rail network from Swindon
	Access to stations <ul style="list-style-type: none"> Locating development so that it can be accessed by rail and sustainable modes reduces the impact of development on other parts of the transport network 	AI4 Limited access to the rail network for new developments AI6 Integration of sustainable and public transport access to the rail network

CHALLENGE	RAIL'S ROLE	SPECIFYING GAP
	<p>especially roads. It also provides residents of the new development with access to opportunities with greater flexibility over choices of work, education and leisure activities, thus bringing benefits to both new and existing residents</p>	
	<p>Wider connectivity</p>	<p>MI2 Service frequencies on the B&H Line towards both London and the South West MI3 Retaining and improving average services towards London on the GWML and B&H MI4 Service frequencies to Frome MI5 Optimisation of services on Trans Wilts corridor MI6 Service Frequency Swindon – Westbury MI8 Service frequency between Westbury and Weymouth MI9 Service frequency between Swindon and Gloucester/Cheltenham</p>
<p>Employment growth</p> <ul style="list-style-type: none"> Employment growth is predicted to grow at twice the expected national rate. With the occupational profile of the area predicted to continue to shift towards higher level occupations. 	<p>Maintain and improve linkages from travel to work area</p> <ul style="list-style-type: none"> The latest available travel-to-work data suggests three functional zones centred on Swindon, the west Wiltshire towns and Salisbury and Amesbury, There are also some key connections to areas outside of the administrative areas of Swindon and Wiltshire, notably Cirencester (Cotswold), Frome (Mendip) and Andover (Test Valley). There is also a noticeable out-flow relationship to Bath 	<p>C9 Connectivity from Trans Wilts stations towards London C10 Connectivity from Salisbury to the Thames Valley MI1 Improved service between Salisbury & London MI2 Service frequencies on the B&H Line towards both London and the South West MI3 Retaining and improving average speeds towards London on the GWML and B&H MI4 Service frequencies to Frome MI5 Optimisation of services on Trans Wilts corridor MI6 Service Frequency Swindon – Westbury MI8 Service frequency between Westbury and Weymouth MI9 Service frequency between Swindon and Gloucester/Cheltenham MI10 West of England Line service frequency</p>
	<p>Integration with other modes</p>	<p>AI5 Access to the rail network from Swindon AI6 Integration of sustainable and public transport access to the rail network</p>
<p>Pockets of deprivation</p> <ul style="list-style-type: none"> In urban areas, four wards in Swindon experience very high levels of deprivation and there are two areas in the Wiltshire Local Authority that are in the 5% most deprived, Trowbridge Adcroft and Salisbury Bemerton 	<p>Support commuting trips and access to education</p>	<p>AI6 Integration of sustainable and public transport access to the rail network C9 Connectivity from Trans Wilts stations towards London C10 Connectivity from Salisbury to the Thames Valley MI1 Improved service between Salisbury & London MI2 Service frequencies on the B&H Line towards both London and the South West MI3 Retaining and improving average speeds towards London on the GWML and B&H MI4 Service frequencies to Frome MI5 Optimisation of services on Trans Wilts corridor MI6 Service Frequency Swindon – Westbury MI8 Service frequency between Westbury and Weymouth MI9 Service frequency between Swindon and Gloucester/Cheltenham MI10 West of England Line service frequency</p>
<p>Skills and access to education</p> <p>Lack of university within the LEP area Important that local people area able to develop skills to support the local economy and take advantage of the opportunities available locally.</p>	<p>Connectivity to key education institutions beyond Swindon and Wiltshire</p>	<p>MI8 Service frequency between Westbury and Weymouth C3 Connectivity from Swindon to Oxford C4 Connectivity from Wiltshire to Oxford C5 Connectivity from Swindon to the Oxford – Cambridge Arc C6 Connectivity from Wiltshire to the Oxford – Cambridge Arc MI2 Service frequencies on the B&H Line towards both London and the South West MI8 Service frequency between Westbury and Weymouth</p>

CHALLENGE	RAIL'S ROLE	SPECIFYING GAP
		MI10 West of England Line service frequency
	Connectivity to key education institutions within Swindon and Wiltshire <ul style="list-style-type: none"> Higher and further education within Swindon and Wiltshire is currently provided by Wiltshire College which has a number of sites across the county focussed around the Trans Wilts rail corridor, with the site at Chippenham being adjacent to the station 	MI5 Optimisation of services on Trans Wilts corridor AI6 Integration of sustainable and public transport access to the rail network
Rebalance the economy from London	Orbital rather than radial routes	C1 Connectivity from Swindon to the Midlands & North C2 Connectivity from Wiltshire to the Midlands & North C3 Connectivity from Swindon to Oxford C4 Connectivity from Wiltshire to Oxford C5 Connectivity from Swindon to the Oxford – Cambridge Arc C6 Connectivity from Wiltshire to the Oxford – Cambridge Arc C7 Connectivity from Swindon and the M4 Growth Zone to the Solent
	Local and regional connectivity	AI1 Poor access to the rail network in North Wiltshire especially in the M4 Growth Zone AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone AI3 Limited access to the rail network in East Wiltshire AI4 Limited access to the rail network for new developments AI5 Access to the rail network from Swindon
Rural nature of Wiltshire <ul style="list-style-type: none"> The cost of living in rural areas is significantly higher than in urban areas. Housing is less affordable and services are harder to access. The distance to the nearest shop is often much further and the cost of basic services often higher 	Access to stations <ul style="list-style-type: none"> Transport networks don't work for those without private transport. In rural Wiltshire, 10,900 people do not have access to a car or van. Journeys can take over two hours by bus to reach amenities in some areas. 	AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone AI3 Limited access to the rail network in East Wiltshire
	Integration with other modes	AI6 Integration of sustainable and public transport access to the rail network

6. ASSESSING SCHEMES

- 6.1.1 We have used the evidence base to build a framework around which we can assess schemes and have assessed over 40 different schemes to understand how they would contribute to addressing the issues we have identified with the SWLEP rail network. These assessment criteria form the basis of the selection of interventions that are included in the strategy.
- 6.1.2 We have assessed interventions against a range of criteria as follows:
- Policy Fit against LEP and Local Authority objectives
 - Modelled GVA generated to understand the impact on the economy
 - Proportional change in generalised journey time¹ and estimated demand for new stations
 - Deliverability
 - Relationship to gap analysis
- 6.1.3 More detail on the assessment criteria is provided in Annex F. Interventions are presented in a number of groups:
- Great Western Mainline
 - Berks & Hants Line
 - West of England Line
 - Trans Wilts Corridor
 - Access to the rail network
 - Regional & National Interventions
- 6.1.4 The first four groups are geographical areas, whilst the fifth looks at interventions that cover the whole network across Swindon and Wiltshire and are focussed on improving access to the railway and promoting integration. Whilst the direct impact on the economy of these interventions are harder to assess, they are actually of considerable importance for realising the full benefits of route specific interventions as they will make the network more attractive to use and consider the end to end rather than station to station journeys.
- 6.1.5 The final group are a series of regional and national interventions which do not lie within the gift of the Swindon and Wiltshire area but will have an impact upon it. For example the completion of HS2 to the north of England will address gaps in connectivity to the north by improved interchange without requiring the development of new services from Swindon and Wiltshire. These interventions are useful for addressing gap in the Swindon and Wiltshire network where a specific Swindon and Wiltshire solution is either undeliverable or likely to be unviable. In terms of delivering economic growth they also represent “free gifts” to the area.

¹ Generalised Journey Time is a concept used in rail demand forecasting and is a measure of journey time that incorporates a weighting for factors such as interchange and service frequency. This an increase in service frequency will reduce generalised journey time.

6.2 GREAT WESTERN MAINLINE OPTIONS

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
Bristol – Swindon – Oxford – Cambridge Introduction of a new service of either 1 or 2 trains per hour between Bristol and Oxford via Bath, Swindon and Didcot. The service would then link into East-West Rail services to Cambridge. At the present time these services are only committed as far as Bedford. The service would act as a catalyst for up to three new stations in the SWLEP area (assessed separately). Delivery of the service would be complex with a need for significant capacity enhancements between Swindon and Didcot. However addressing the capacity restraint between Oxford and Didcot ties into the priorities of England's Economic Heartland sub national transport body.	High scoring service addressing a variety of issues.	£27m	-36%	C3, C4, C5, C6, AI1, AI5	1
Southampton – Swindon – Oxford Operation of a 1tph service between Southampton and Oxford via Salisbury, Westbury and Swindon. The service could operate in parallel with the Bristol – Oxford service described above. The service would provide transformational changes in connectivity but would require infrastructure enhancements between Swindon and Didcot. However addressing the capacity restraint between Oxford and Didcot ties into the priorities of England's Economic Heartland sub national transport body. The service brings benefits to the Trans Wilts corridor as well as the GWML.	High scoring option addressing a wide variety of issues	£9.49m	-28%	C3, C4, C7, AI1, AI5, MI5, MI6	1
Southampton – Swindon – Oxford – Birmingham Operation of a 1tph service between Southampton and Birmingham via Salisbury, Westbury, Swindon and Oxford. The service could operate in parallel with the Bristol – Oxford service described above. The service would provide transformational changes in connectivity but would require infrastructure enhancements between Swindon and Didcot. The service brings benefits to the Trans Wilts corridor as well as the GWML. The service has a synergy with West Midlands Rail Executive aspirations to improve frequency between Oxford and Birmingham	High scoring option addressing a wide variety of issues	£20.59m	-28%	C1, C2, C3, C4, C7, AI1, AI5, MI5, MI6	1
Extend London – Cheltenham Service to Birmingham Within this intervention the London – Birmingham – Cheltenham service (which will operate each hour from Dec 2019) would be extended to Birmingham calling Worcestershire Parkway, Bromsgrove, University and Birmingham New St. Operation of such a service would improve links from Swindon (only) to the Midlands but would deliver little additional benefit to Wiltshire. The service would also be very complex to operate due to a lack of train paths between Bromsgrove and Birmingham.	The service has a mixture of average and low scores.	£6.09m	-22%	C1	1.5
2TPH Swindon – Gloucester – Cheltenham From Dec 2019 1 train per hour will operate from London to Cheltenham via Swindon. In this option it is proposed to overlay an additional stopping service between Swindon and Cheltenham to increase service frequency to 2tph	The intervention has a relatively poor policy fit.	£1.46m	-13%	MI9	3
1TPH Swindon – Cheltenham – Birmingham This intervention develops the option above by projecting the service forward to Birmingham, thus providing both a frequency uplift between Swindon and Cheltenham but also providing new connectivity to Birmingham. Operation of such a service would improve links from Swindon (only) to the Midlands but would deliver little additional benefit to Wiltshire. The service would also be very complex to operate due to a lack of train paths between Bromsgrove and Birmingham.	The service has a mixture of average and low scores.	£7.55m	-19%	C1, MI9	1.5
1TPH Swindon – Cheltenham – Birmingham – Manchester or Nottingham Extension of the service above to serve either Nottingham or Manchester. Such an extension would provide direct links from Swindon to the East Midlands or North West. The operation of the service would be extremely complex and may not be feasible until after HS2 Phase 2B is complete although the latter may diminish the case for this service.	The service has a mixture of scores, with access to Growth Zones and supporting economic development being the highest scorers.	£12.51/£14.18m	-22%	C1, MI9	1

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
Extension of Paddington – Didcot Peak Semi Fast services to Swindon With the Network Rail Western Route Study an opportunity to extend Paddington – Didcot peak services was identified. This would increase peak capacity between London and Swindon providing relief to long distance services. Delivering such a service would require interventions between Swindon and Didcot, which has synergies with the services discussed above. The delivery of this infrastructure presents the opportunity for an off peak semi-fast service to London serving new stations.	Low policy score if considered as a peak only service. If considered as an all-day service with new stations the service would be of more value.	£0	N/A	-	1
Corsham Station Construction of a new station between Bath and Chippenham at Corsham. Such a station would provide a sustainable alternative to car travel for access to Bristol, Bath, Swindon and Chippenham. Corsham is also home to a large number of skilled jobs through both the MoD and associated industries. Delivery of a station is complicated by the lack of an obvious service to call at the station. Development of new “Great Western Connect” services provide an opportunity for this but there may be other ways to deliver this station.	The station has a high policy fit score.	£2.3m	>300k	C4, AI1, AI5	3
Hullavington Parkway Station A station at Hullavington would be located where the A429 crosses under the Bristol Parkway – London railway. Such a station would act as a Parkway for the Malmesbury area and would be close to the Dyson site at Malmesbury. Whilst the development of a station at this location may be technically feasible there is an issue around identifying a service that could viably call at the station as only Long Distance High Speed services from South Wales to London and from Bristol to London may call at the station.	The station has a medium policy score with only one policy having a high score.	£4.72m	~400k	AI1	1
Moredon Bridge Station This intervention considers the development of a station at Moredon Bridge to the north of Swindon on the South Cotswold Line located close to where the B4534 Purton Road crosses the railway. The station would serve the surrounding largely residential catchment and be served by Cheltenham – London Paddington services.	The station has received a medium policy score overall	N/A	~270k	AI1, AI5	5
Royal Wootton Bassett Station Two options have been considered for new stations within the Royal Wootton Bassett (RWB) area. The first of these involves the development of a station close to the A3102 where it crosses the GWML close to Wootton Bassett Junction. Such a station would act as a local rail station for RWB without a specific objective to act as a wider Parkway station, although it would be likely to fulfil such a role for the area to the immediate south of the site around Lyneham. Services at the station would be provided by Trans Wilts Westbury – Swindon services and their successor “Great Western Connect” services.	The station is close to achieving a high score and average or better scores in 5 out of 6 policy areas	£3.72m	150k	AI1	3
Swindon West/RWB Station Two options have been considered for new stations within the Royal Wootton Bassett (RWB) area. The second option is located to the east side of the town with locations between the B4005 overbridge and the Interface Business Park. Such a station would have dual role in serving both the South and West side of Swindon as a Parkway station as well as serving RWB. A site closer to RWB would favour sustainable access from the town, allowing it to operate as a local rail station as well as a Parkway. Services at the station would be provided by Trans Wilts Westbury – Swindon services and their successor “Great Western Connect” services.	The station has achieved high scores due to the large catchment and proximity of new development.	£18m	380k	AI1, AI5	3
Swindon East Station A location for a station at Swindon East has been identified on the A420 to the east of where the A419 crosses the railway. Such a station is designed to serve the existing local catchment and the New Eastern Villages which are to be developed to the south of the GWML in the area. The station would also act as railhead for the east, north and part of the south side of the town.	The station has achieved a high score. Although the total score is the same as Swindon West the level of development in the immediate surroundings is likely to be greater.	£14m	929k	AI1, AI5	2

6.3 Berks & Hants Options

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPPS ADDRESSED	DELIVERABILITY
Committed 0.5TPH London Paddington – Exeter St. David’s As part of the December 2019 timetable change there will be a recast of the timetable on the Berks & Hants route. This will involve the introduction of a more consistent service pattern with one train per hour operating from London to Plymouth and Penzance and one train every two hours operating between London and Exeter serving intermediate stations. This service will provide Pewsey and Westbury with a consistent service of one train every two hours to Reading, London and Exeter. This will replace the rather more ad hoc service pattern that exists at the current time	This option generates a low medium level score overall.	£1.88m	-11%	MI2, MI7	5
1TPH London Paddington – Exeter St. David’s This option is a development of the service above with 0.5tph service from London to Exeter enhanced to one train every hour. This would provide enhanced connectivity to both London and Exeter. However operation of such a service would be resource intensive with the need to provide three additional trains of up to nine coaches in length.	The service achieves a medium policy score	£3.29	-15%	MI2, MI7	3
1TPH London Paddington – Frome This option is a development of the option above with one train every two hours operating to Exeter and a second train operating to Frome. The Exeter service would also be routed via Frome. This would provide Frome, Westbury and Pewsey with an hourly service to London. Delivering this service would be less resource intensive than operating the service to Frome requiring only two trains of up to nine coaches in length.	The option has generated a medium policy score.	£2.76m	-13%	MI2, MI7	3
Extend Paddington – Bedwyn services to Westbury (inc. peak Bristol services) This option represents an alternative way of enhancing the service to London from Berks & Hants (B&H) stations in Wiltshire. The option would extend existing Paddington – Bedwyn services to Westbury calling at Pewsey, and a new station at Devizes. The service would allow Westbury to operate as a hub station for the Trans Wilts network in cooperation with other service developments. It is proposed that the service is resourced in the morning and evening from Bristol to allow peak Bristol – Trowbridge – Westbury – London services to operate providing Bradford and Trowbridge with London services.	This option has achieved a medium policy score and brings benefits not just to passengers from B&H stations, but also impacts Trans Wilts stations.	£2.55m	-12%	C9, MI2, MI7	4
Devizes Parkway Station This option considers the delivery of a new station to service Devizes, this would be located adjacent to the A342 at the point where the now closed railway line to Devizes diverged from the Berks & Hants route. The station would serve a wide catchment across East Wiltshire where access to the rail network is currently poor. The location of the station at the site of the junction with the disused railway line may facilitate sustainable access to the station along the former rail line via a cycle track, as much of the route remains undeveloped. The station would be served by a revised Berks & Hants service with the aim of providing an hourly service at the new station.	The station generates a high medium score. The main gap in its coverage of policy criteria is the coverage of access to Growth Zones.	£6.56	~400k	AI3	3
Lavington Parkway Station The option of a station at Lavington represents an alternative site to the Devizes Parkway station discussed above. The station would be located on the A360 to the south west of Devizes. As with the Devizes Parkway site the station would serve a wide catchment, however its location is not as favourable for the development of sustainable access from Devizes itself. The station would be served by a revised Berks & Hants service with the aim of providing an hourly service at the new station.	The station generates a high medium score. The main gap in its coverage of policy criteria is the coverage of access to Growth Zones.	£6.56m	~400k	AI3	3
Marlborough Parkway Station This option considers the development of a Parkway station to serve the Marlborough area. The station would be located on the A346 around 4 miles from Marlborough. The station would cover a large catchment across East Wiltshire. The station would be served by a revised Berks & Hants service with the aim of providing a train every hour.	The station generates a medium policy score but is constrained by the distance of the station from Marlborough itself, with the proposed site providing little advantage over the existing Pewsey station to which there is a bus service that might be improved further.	£2.5m	~150k	AI3	3

6.4 West of England Options

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
2TPH London Waterloo – Exeter St. David’s. Within this option we examine the case for increasing the frequency of services between London Waterloo and Exeter from one to two trains per hour. This would be achieved by extending the existing service that terminates at Salisbury through to Exeter. Delivering the service is likely to be complex due the single line sections of track on the route which makes timetabling complex	This option has generated only a very low score from a Wiltshire perspective.	£0.16m	-12%	AI2, MI10	1
Salisbury – London Waterloo Journey Time Reductions This option aims to improve journey times between Salisbury and London. Within the evidence base it was identified that Salisbury was an outlier both within the SWLEP area and across the UK in terms of journey times to London. The aspirational journey time reduction for services is around 10 minutes. As is described below achieving this option is relatively complex and it may not be possible to achieve even with a mixture of approaches.	The scheme overall has a medium policy score. The impact on GVA has assumed that existing connectivity to and from intermediate stations is maintained.	£5.93m	-19%	MI1, AI2	1
1TPH Yeovil – Reading This option considers the case for operating one train per hour between Yeovil and Reading via Salisbury and Basingstoke. Such a service would provide direct links between Salisbury and the Thames Valley and may have a role in reducing journey times to London if it were assumed that intermediate stations between Salisbury and Basingstoke (excluding Andover) were served by this service rather than London trains.	This option has generated a low medium score from a Wiltshire perspective.	£0.16m	-17%	C10, MI10	1
2TPH Waterloo – Yeovil This option is an iteration of the option above to provide two trains per hour between London Waterloo and Exeter. The option would improve local connectivity between Yeovil and Salisbury.	This option has generated only a very low score from a Wiltshire perspective.	£0.16m	-12%	MI10	1
Barford St. Martin Station A station at Barford St. Martin would be located at a suitable location close to the A30. The station would serve a relatively large rural catchment although the catchment may overlap with the catchment for the station proposed at Wilton. The station would be served by the existing 1 train per hour Exeter – Waterloo service. However stopping services at this station maybe complicated by the impact the additional journey time would have on the timing of trains on the single line sections of the West of England Line.	The station has generated only a low policy score	£1.7m	140k	AI2	1
Wilton Parkway Station A station at Wilton Parkway would be located close to Wilton Junction where the West of England and Trans Wilts corridor routes diverge. It would be located close to the existing Salisbury Park & Ride site at Wilton. A station at this site could be served by either Trans Wilts or West of England Line services.	The station has achieved a medium policy score, although the station only achieves a high score in connectivity.	£3.56m	228k	AI2	2
Alderbury Station A station at Alderbury would be located on the Salisbury – Southampton line adjacent to the A36 and Clarendon Road. The station would serve a catchment covering an area south of Salisbury. The station would be served by the 1 train per hour Salisbury -Southampton service.	The station achieves only a low policy score and does not provide a strong score in any particular area.	£0.62m	131k	AI2	5
Porton Parkway Station A station at Porton would be located on the West of England Line between Salisbury and Grateley stations. The site considered within this study is where Winterslow Road crosses the railway line. However as part of the case for the wider development of the	The station has achieved a medium policy score, however it has achieved high scores in three categories.	£5.37M	387k	AI2	3

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
area other sites maybe more appropriate. The station would have a wider Parkway function encompassing areas such as Amesbury. The station would be served by existing Salisbury to London services at a frequency of one / two tph.					
Ludgershall Station and branch line Within this option consideration is given to the opening of station at Ludgershall. To open this station would require the existing freight only railway between Andover and MOD Ludgershall to be upgraded for passenger traffic and a suitable service introduced to serve the station. As a minimum this would be a Ludgershall to Andover shuttle service designed to connect into and out of existing Salisbury – London services.	The development of a rail service at Ludgershall has achieved only a low policy score.	£0.23m	108k	AI2	1

6.5 Trans Wilts Options

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
1TPH Westbury – Swindon This option considers enhancing the existing Westbury – Swindon service from the existing service which operates approximately once every two hours to a service that operates every hour on a clock face pattern. This would represent a useful increase in connectivity between Swindon, Trowbridge and Westbury and a doubling of service frequency at Melksham.	The service generates a medium policy score.	£1.27m	-32%	MI5, MI6, MI7	3
1TPH Southampton - Swindon This option develops the existing Trans Wilts service and integrates it with the existing Test Valley South Western Railway service linking Salisbury with Romsey via Southampton. The operation of such a service would improve connectivity across Wiltshire, giving direct links between Swindon and Salisbury as well as improving connectivity towards Southampton and the Solent.	The service generates a medium policy score	£5.34m	-30%	C7, MI5, MI6, MI7	
1TPH Southampton – Swindon – Oxford – Birmingham Operation of a 1tph service between Southampton and Birmingham via Salisbury, Westbury, Swindon and Oxford. The service could operate in parallel with the Bristol – Oxford service described above. The service would provide transformational changes in connectivity but would require infrastructure enhancements between Swindon and Didcot. However addressing the capacity restraint between Oxford and Didcot ties into the priorities of England's Economic Heartland sub national transport body. The service brings benefits to the Trans Wilts corridor as well as the GWML. The service has a synergy with West Midlands Rail Executive aspirations to improve frequency between Oxford and Birmingham	High scoring option addressing a wide variety of issues.	£20.59m	-28%	C1, C2, C3, C4, C7, AI1, AI5, MI5, MI6	1
1TPH Bristol - Weymouth This option examines the case for improving service frequencies between Bristol and Weymouth. The existing service operates at a broadly two hourly frequency. Within this proposal the service frequency would be increased to 1tph providing enhanced links from Wiltshire stations to Frome, Yeovil and Weymouth.	The service achieves only a low policy score and does not provide a strong score in any particular area.	£0.1m	-17%	MI4, MI5, MI8	3
2TPH on all Trans Wilts Corridor Routes This option considers the impact of operating two trains per hour on all parts of the Trans Wilts network radiating from Westbury. This would provide 2tph from Westbury to each of Bristol, Frome, Swindon and Salisbury. Delivery of this could be provided through a combination of enhancements described above.	The option generates a medium score with a mixture of low medium and high scores.	£2.99m	-17%	MI4, MI5, MI6, MI7	2

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
Trowbridge to London Connectivity from Trowbridge to London has been identified as a gap in service provision within Wiltshire. Currently the town has one very early morning service to London and three off peak services to London Waterloo via Salisbury, representing a somewhat circuitous route. Delivering services to London could be achieved either via operation of a service via Chippenham and Swindon (coupling to Cheltenham – London services at Swindon) or by operating services from Bristol to London via Trowbridge and Westbury.	This option has a medium score composed of a mixture of low-medium scores.	£3.3m	-33%	C9	3
Staverton Station The option of developing a station at Staverton has been considered. Such a station would be located on the Trowbridge – Melksham – Chippenham line at location to the north east of Bradford Junction. The station would be located close to where the B3105 crosses the railway. The station would be served by Westbury – Swindon or their successor services.	The station only just achieves medium score on policy fit.	£0.31m	32k	A14	2
Ashton Park Station This option considers the case for the development of a station at Ashton Park between Trowbridge and Westbury. The station would be designed to fulfil three roles. These would be to service the Ashton Park residential development, the White Horse Business Park and to absorb the outer catchment of Trowbridge station. The rationale for this latter role is that access to Trowbridge station from outside the town centre is relatively poor. The station would be served by both Westbury – Swindon trains and the around half of current services to Bristol, but not Cardiff – Portsmouth services. The station would be located close to the A363 Hawkeridge Road.	The station generates a medium policy score.	£2.37	54K	A14	5
Wylfe Station Within this option we consider the development of a station in the Wylfe Valley between Warminster and Salisbury stations. Such a station would be located close to the point where the A303 crosses the railway. Locating the station at this point would be designed to draw in as broad a catchment as possible. The location of the station is such that under the current timetable the station would have to be served by Cardiff – Portsmouth trains to provide a regular service, although other services maybe possible.	The station has achieved a low policy score and does not excel in any one criterion.	£0.2m	82k	A12	4

6.6 Access to the Rail Network Options

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
Integrated Local & Regional Ticketing Within this option we examine the case for integrated ticketing between bus and rail services across Swindon and Wiltshire. The most obvious way of addressing this would be through the extension of the Freedom Travel Pass system which covers Bristol, Bath & North East Somerset and South Gloucestershire. This provides zonal rail and bus passes for one day, 7 days and 1 month of travel. The geography of the current system would as a minimum favour extension into North Wiltshire, however it maybe possible to provide coverage across the whole county.	The scheme has generated a high medium policy score.	N/A	N/A	A16, A15	3
Integrated Strategic Ticketing A further issue relating to ticketing is the variable access to through ticketing between modes for longer journeys. Provision of through ticketing is currently very patchy with only Swindon and Salisbury bus networks being included in the Plus Bus network. Towns such as Calne and Devizes exist in the railway ticketing systems but have no fares assigned to them. To address this it is proposed that (in cooperation with bus operators) the Plus Bus scheme is extended across Swindon and Wiltshire, with suitable publicity being provided. Passengers would be able to purchase such tickets on line or at rail stations. To further extend the benefits of the approach to all users including those without access or inclination to use online facilities it is suggested that rail Ticket Vending Machines (TVMs)	The option has achieved a very high medium policy score.	N/A	N/A	A16, A15	2

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
be installed at key locations across the county. These would be operated by the TOC. It is suggested that as an experiment it should be conducted at a suitable locations such as Calne.					
Improved Rail Link Bus Services There are a number of areas of Wiltshire where there is no direct access to rail services and connecting bus services are uncompetitive with journeys by car. Working with bus operators there may be opportunities to improve connectivity. The most suitable locations are likely to be Malmesbury, Amesbury and Devizes.	The option has achieved a medium policy score	N/A	N/A	AI6	2
Improved Access by Sustainable Modes As part of a wider opportunity to enhance sustainable access across the area it is important to enhance the opportunities for accessing rail station by walking and cycling. At some locations, such as Chippenham there are very clear opportunities to improve access, for example by linking the former Calne rail line which is now a cycle route to Chippenham station (this latter example is currently being delivered). It is suggested that a detailed review of each station is conducted through a Station Travel Plan to understand each stations requirements. Where station travel plans exist these should be reviewed and updated where appropriate.	This option has achieved a high medium policy score.	N/A	N/A	AI6	5
Development of Car Sharing Schemes Wiltshire already has a well-developed car share scheme known as “Car Share Wiltshire”, with specific groups covering Dyson staff and Wiltshire Council staff. It is suggested that this be extended to develop a new rail group allowing rail passengers to form their own car share community either for regular commute trips or for adhoc trips. As well as reducing car use this may also help to release parking spaces at stations allowing other users to occupy that space, helping increase capacity.	This option has achieved a medium policy score	N/A	N/A	AI6	5
Stations as Community Hubs For both new and existing stations there is the opportunity to incorporate community facilities into rail stations. This would have two main benefits, firstly it would increase footfall around stations and improve the quality of the built environment and secondly it would provide a location of community or retail facilities.	This option has achieved a low medium policy score	N/A	N/A	AI6	5
Mobility as a Service Mobility as a Service (MaaS) is an emerging concept which aims to use digital technology to seamlessly integrate and enhance public and private transport modes and services through improved journey information, real-time and open data, and integrated ticketing and payment systems to meet the complete mobility needs of all travellers. It allows travellers to be presented with all modal options for each leg of their trip, and purchase tickets and services – with the capacity to provide capped daily and weekly fares, like contactless payment in London – using credit loaded onto a single online MaaS account. With the development of a mobile phone app, residents would be able to plan their transport, be it by rail, taxi, bus, carshare or bikeshare. The efficiency of private car use could also be improved through integrating car park availability and payment. Anyone with the app would be able to enter a destination and select a preferred mode or modes for each journey leg. Payment could be arranged via a pay-as-you-go arrangement or through a regular mobility subscription. The ultimate aim would be to make travel by any mode as seamless as possible and allow users to choose the most suitable choice	This option has achieved a low medium policy score	N/A	N/A	AI6	2

6.7 Regional and National Interventions

DESCRIPTION	POLICY ASSESSMENT	GVA IMPACT	GJT CHANGE/TRIPS	GAPS ADDRESSED	DELIVERABILITY
GWEP Journey Time Reductions On completion of the Great Western Mainline Electrification Programme a new timetable will be introduced taking advantage of the capability of the new Class 800 & 802 IET trains which have been introduced by GWR. These new trains whilst retaining a maximum speed of 125mph benefit from improved acceleration which will reduce journey times from Swindon, Chippenham, Westbury and Pewsey to Didcot, Reading and London. Although the details of the new timetable are not yet available it has been assumed that the IETs will bring a journey time reduction of five minutes to London.	The intervention achieves a medium policy score driven with very high scores in two categories and very low scores in other categories	£9.61m	-4%	MI3	5
Metro West The West of England Combined Authority has aspirations to develop a suburban rail network centred on Bristol. Part of this includes the development of a two train per hour stopping service linking Bristol and Bath. It is understood that this will be formed of one additional service above the existing hourly stopping service that operates to Westbury and beyond. The operation of the second service would require either a new turnback siding at Bathampton Junction OR the service will need to be extended to either Swindon or Westbury. It is likely to be operationally easier to operate the additional service at least far as Westbury, which also present the opportunity to operate services further for example to Warminster or Frome.	The scheme generates a low policy score from a SWLEP perspective	£1.28m	-14%	MI5	2
Western/Southern Rail Access to Heathrow There are currently two schemes being developed to improve access to Heathrow Airport. The first of these known as Western Rail Access to Heathrow (Wrath) will provide a west facing access from the Great Western Mainline allowing a shuttle service to operate from Reading. This would represent an improvement in connectivity from stations on the GWML and B&H lines in Swindon and Wiltshire over the existing options of a Rail-Air coach from Reading or routing via London to access Heathrow Express. A separate Southern Access to Heathrow scheme is being developed which will provide access from the South Western Railway network to Heathrow. By interchange this would represent an improvement to passengers from the West of England Line to Heathrow who currently route either via London, Reading or connecting coach services.	Access to Heathrow produces medium score overall.	£9.6m	-22%	C8	3
Crossrail The Crossrail project will see the opening of a new line across central London joining the Great Western and Great Eastern lines. The route will provide direct services from Reading and Heathrow to the east side of London via a number of key destinations in central London including Bond Street, Tottenham Court Road, Farringdon, Liverpool St and Canary Wharf. These services will provide interchange at Paddington station with Great Western Railway services. This will represent an improvement in onwards connections over the current London Underground connections which are relatively indirect especially for access to either the City of London or Canary Wharf.	The intervention achieves a medium policy score driven with very high scores in two categories and very low scores in other categories.	£12m	-5%	MI3	5
High Speed 2 HS2 is a scheme of national importance that is currently being developed. It is proposed that ultimately a high speed railway will operate from London to Birmingham, the East Midlands the north of England and Scotland. The service will start and terminate at London Euston station however an interchange station is planned at Old Oak Common on the Great Western Mainline allowing connections with GWR services. The development of this route will not be beneficial to Swindon and Wiltshire in its first phase for accessing Birmingham, as other routes will be more direct. However the journey time savings are such that in Phase 1 the scheme will improve access to the North West and Scotland and Phase 2 which will provide links to the East Midlands, Yorkshire and the North East and further improve access to the North West Scotland. This is likely to represent the most effective way of improving access to these area from Swindon and Wiltshire where the development of alternative direct services will be very complex.	HS2 achieves a high medium policy score through its impact on the economy and connectivity.	£10.59m	-11%	C1, C2	3

7. THE STRATEGY

7.1.1 Using the evidence base, gap analysis and assessment of schemes we have derived a series of recommendations for the improvement of the rail network to support the development of the Swindon and Wiltshire economy over the period to 2036.

7.1.2 The scale of these recommendations varies by route but in combination have the potential to transform the quality of services across the Swindon and Wiltshire rail network. Our recommendations address issues around access to the network, the location of stations and the development of regional and inter urban services. These are in addition to a range of benefits that will be derived from committed schemes such as Crossrail that will bring benefits to the SWLEP area.

7.2 Great Western Connect

7.2.1 The most transformational recommendations relate to the Great Western mainline but also support change on the Trans Wilts Corridor. These recommendations will both improve connectivity addressing a number of identified gaps but will also improve access to the rail network where this is currently poor, within the M4 Growth Zone in particular.

7.2.2 Our central recommendations involve the development of the following services:

- 1 Train per Hour: Southampton – Salisbury – Westbury – Swindon – Oxford
- 1 Train per hour Bristol – Chippenham – Swindon – Oxford

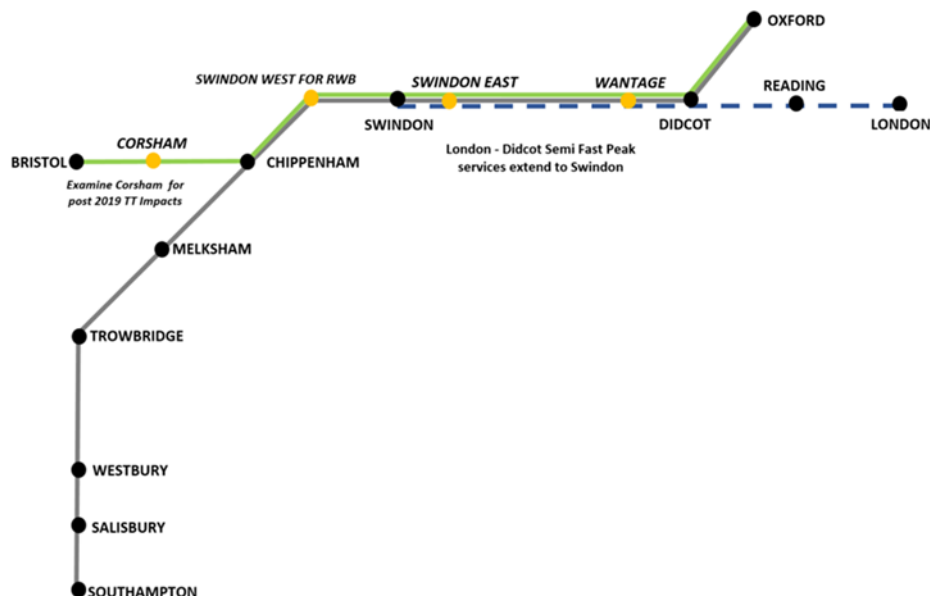
7.2.3 Developing these two services would provide new inter urban links between the Solent and Swindon, Wiltshire, Swindon and Oxford, Bristol and Oxford and also support the opening of new stations at **Corsham**, **Swindon West for Royal Wootton Bassett**, and **Swindon East** along with a station at Wantage in Oxfordshire. These recommendations also tie into the priorities of England's Economic Heartland sub national transport body. As part of the Great Western Connect proposal, we also recommend the following:

- Ultimate extension of the Southampton service to Birmingham and the Bristol service to Cambridge via East West Rail.
- Extension of the proposed London – Swindon peak semi-fast services, to all-day operation, serving the new stations at Swindon East and Wantage. Whilst this option performs poorly in isolation it performs an important role with additional intermediate station in place.

7.2.4 Delivering these recommendations will require a partnership/Task Force approach to delivery of infrastructure enhancements to support the operation of up to three new rail services. Infrastructure improvements needed are likely to include an increase in capacity on the route between Wootton Bassett Junction and Didcot with, in particular, additional sections of four-track railway east of Swindon and west of Didcot. The service would also utilise capacity between Oxford and Didcot where plans are already developing for capacity improvements which tie into the priorities of England's Economic Heartland sub-national transport body).

7.2.5 The figure below present the proposed structure of Great Western Connect services.

Figure 6. Great Western Connect Proposed Service Pattern



- 7.2.6 It may be possible to fast-track the delivery of a station at Corsham, but this would be subject to review of the changes in demand on the Bristol – Bath – London service following the introduction of the new Bristol – Bristol Parkway – London service as the transfer of passengers to the new service would reduce the negative impact of the journey time penalty of a stop at Corsham which has historically been one of the reasons this scheme has not been developed.
- 7.2.7 Great Western Connect is a project that should, at least in its initial stages, be led by third parties with an interest in the scheme. These would include SWLEP, Swindon Borough Council and Wiltshire Council along with Oxfordshire County Council, Bath & North East Somerset Council, the West of England Combined Authority, England's Economic Heartland and engagement with East-West Rail and the East West Rail Consortium. Midlands Connect and the West Midlands Rail Executive are also considering much enhanced connectivity from the West Midlands towards Oxford indicating the value of engagement with them on the shared value of any future extension of direct Wiltshire-West Midlands services
- 7.2.8 The steps required to deliver this scheme, with indicative timescales, are:
- **Phase 0** – Operation of 1tph Swindon – Westbury service – Deliver as part of GWR direct award between 2020 and 2022.
 - **Phase 1** – Linking of Romsey – Salisbury – Southampton service to Westbury – Swindon service during next full GWR franchise after 2022.
 - **Phase 2** – Delivery of Bristol/Southampton – Swindon – Oxford, plus London – Swindon semi fast service, including infrastructure enhancements. Delivery by 2027 but indicative work should begin now
 - **Phase 3** – Extension of services to Cambridge and Birmingham. Delivery is dependent on completion of East West Rail to Cambridge and addressing of capacity issues around Birmingham.

- Work to develop the case for stations at Corsham, Swindon West for Royal Wootton Bassett, and Swindon East should be conducted in parallel and as part of the development of proposals for this service.

7.2.9 Phase 0 has been included as a potential early win, however this would be subject to work with Network Rail to ensure that an hourly service can be planned using the single line Melksham Chord. This is in principle deliverable but is sensitive to exact timing of trains especially on the Great Western Mainline.

7.2.10 The first step towards developing the project would be to develop an alliance to develop a Strategic Outline Business Case to examine the detail of the scheme and begin to work with Network Rail through the Continuous Modular Strategic Planning process.

7.3 Berks & Hants Line

7.3.1 On the Berks & Hants route we propose a package of four recommendations that together enhance access to the rail network and also improve the quality of services in Wiltshire. Our specific recommendations are:

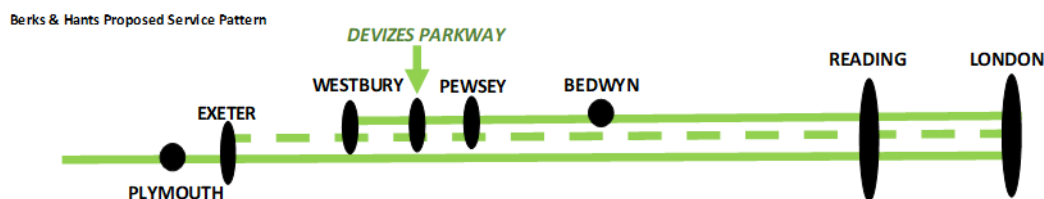
- Extension of London Paddington – Bedwyn services to Westbury, providing Westbury and Pewsey with a consistent hourly service to London in addition to the planned Exeter – London service.
- Opening of a station at Devizes Parkway.
- Extension of peak Westbury – London services to and from Bristol.
- Lobby for the proposed two-hourly London – Exeter stopping services to be enhanced to hourly in the long term.

7.3.2 The four recommendations would provide a more frequent service from Westbury and Pewsey towards London and also deliver a new station to serve Devizes, filling a gap in accessibility to the rail network in East Wiltshire, and build on the once every two hours service from Exeter to London planned to run from December 2019.

7.3.3 Extension of London – Bedwyn services to Westbury would provide an hourly service to London from Westbury at relatively limited additional cost. We have also identified that extension of this service to start from Bristol in the morning peak and terminate at Bristol in the evening peak period may be both operationally convenient (to provide trains from a depot in Bristol to resource the Westbury – London service), whilst also providing Bradford-on-Avon and Trowbridge with a number of direct peak services to and from London.

The figure below presents the proposed service pattern.

Figure 7. Berks & Hants Line Proposed Service Pattern



- 7.3.4 Lobbying for the enhancement of the London – Exeter service to hourly is recommended as it would enhance links to Taunton and the South West; however it would be sensible to let demand build on the existing service before making the next step towards improving services, especially as enhancing the London - Exeter service will be very resource intensive.
- 7.3.5 It is recommended that the service could be delivered as part of the next full GWR franchise from 2022 with a station at Devizes being delivered from around 2024. A station at Devizes and an improved Westbury – London service will have strong synergies with Devizes generating new demand whilst the new service will provide an appropriately attractive service for the new station. The former branch line to Devizes from the Parkway site may have the potential to support a cycle track providing access by active modes, or even the opportunity for experimentation with autonomous vehicles.
- 7.3.6 A Strategic Outline Business Case should be developed for the combinations of the new service and a new station, as the two will be closely linked with Devizes Parkway providing passengers to support the new service, whilst an hourly service would be required to make Devizes Parkway more attractive.

7.4 West of England Line

- 7.4.1 On the West of England Line we have identified three recommendations around the development of new services and stations. These are as follows:
- Development of the case for Salisbury – London journey time reductions.
 - Opening of a parkway station at Porton.
 - Consideration of the opening of a station at Wilton.
- 7.4.2 These three recommendations are designed to contribute to addressing issues around access to the rail network in the A303 Growth Zone and also to improve connectivity from Salisbury to London which of the larger stations in Swindon and Wiltshire has the lowest average speeds.
- 7.4.3 Delivering reduced journey times, whilst retaining existing station calls, on the Salisbury – London route will be a challenging process and is likely to require a combination of line speed increases, rolling stock renewals (to provide faster and better accelerating rolling stock), and re-timetabling. To obtain average speeds of 70mph between Salisbury and London, which would begin to make the route comparable with journeys from Swindon or Westbury, would require a journey time reduction of 10 to 12 minutes. However a six minute journey time reduction is likely to be more realistic. We propose that SWLEP works with other bodies including Dorset and Devon Councils, again on a partnership/Task Force basis, to advocate

and evidence the case for these improvements. It may also be worth considering working with the authorities in the Solent area to advocate the case for improvement between Basingstoke and London as the average speeds from Southampton to London are nearly as poor as those from Salisbury.

- 7.4.4 The need to replace the existing rolling stock on the route, which is not a commitment within the existing South Western Railway franchise, dictates that significant changes are unlikely before 2024 when the existing franchise concludes. This does present the opportunity to examine and advocate the case for infrastructure enhancements over the period to 2024, which will allow infrastructure and rolling stock enhancements to be delivered together.

Porton & Wilton

- 7.4.5 The opening of a station at Porton would address the gaps identified around access to the rail network in the A303 Growth Zone. There was a station previously located at Porton which closed in 1968; however a new station at Porton would serve both planned housing and employment development in the Porton area and improve access to the existing high value employment sites in the area. A station located to the east of Salisbury would also be likely to support a wide catchment area providing a more attractive option than Salisbury for access to London. Unlike other station schemes in Wiltshire almost no work has been conducted to investigate the detail of a station at Porton and it is therefore recommended that early stage work be conducted to understand in more detail both the potential demand for the station and the feasibility of delivering it. Previous initial work at this location indicated the station may not be economically viable and would affect timetables into London and other locations; however significant development has taken place and is planned in the area since this work was undertaken so it is likely the case will have changed and strengthened.
- 7.4.6 We have also recommended that the case for a station at Wilton be considered. Some development work has already been undertaken on this scheme, with a positive business case being demonstrated in certain circumstances. However the case for the station may be impacted by the development of a station at Porton. The two station sites would be likely to share catchments to the north of Salisbury, but Porton may well be more attractive than Wilton for high revenue London traffic and the development of Porton may therefore have an influence on the case for a station at Wilton. We therefore recommend that the case for station at Wilton be reviewed when more is understood about the case for a station at Porton.
- 7.4.7 Assuming initial feasibility work were conducted during 2019-2020 the earliest that a new station at Porton could be delivered would be during 2025, which would align with proposed journey time improvements and new rolling stock.

Other Recommendations

- 7.4.8 In assessing the West of England Line we have considered a number of further options including improving services to Exeter and the reopening of the Andover – Ludgershall branch to passenger traffic.
- 7.4.9 In the case of the Salisbury – Exeter Line we have concluded that SWLEP should support but not lead the case for investment in service improvements west of Salisbury, as the level of benefit that would accrue to Swindon and Wiltshire does not merit the area leading the case for investment. SWLEP should, however, continue to work with stakeholders west of Salisbury

as the all parties will have an interest in journey time reductions between Salisbury and London.

- 7.4.10 In the case of the Andover – Ludgershall branch, the overall level of benefit achieved relative to the capital cost of improving the branch to passenger standards and the ongoing operating costs associated with a service means that a service may not be viable without operating subsidy. We therefore recommend that the SWLEP position on this route should be to support but not actively pursue the reopening of the line. It may be that third party organisations may be interested in the development of the route.

7.5 Trans Wilts Corridor

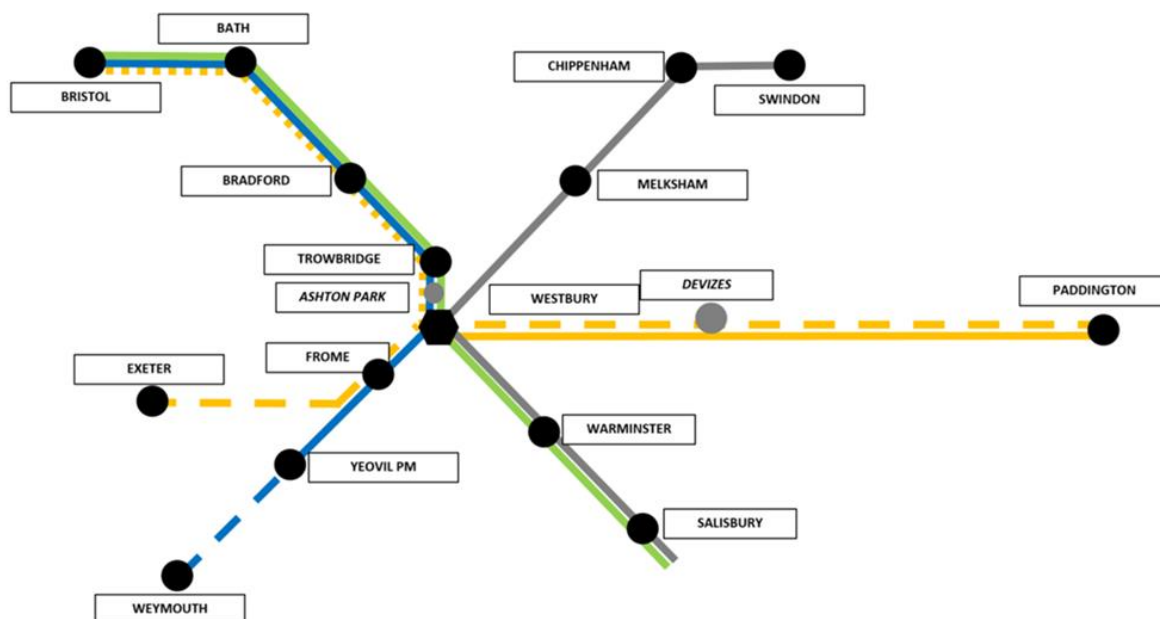
- 7.5.1 It will have been seen above that two of our recommendation for other routes have a significant impact on the Trans Wilts corridor, with the operation of a Southampton – Swindon service and the operation of peak Bristol – Westbury – London services.

- 7.5.2 There are however a number of specific recommendations for the route. These are as follows:

- Operation of a consistent service pattern centred on Westbury giving half hourly services to Bristol and Southampton and hourly services to Yeovil and Swindon.
- Minimise the number of services terminating at Westbury (apart from proposed London – Westbury service) to maximise utilisation of available capacity and avoid the need for a fourth platform at Westbury.
- Consideration to be given to opening a new station at Ashton Park.

- 7.5.3 The diagram below presents the proposed service pattern to be adopted.

Figure 8. Westbury Hub Service Pattern



- 7.5.4 The operation of a simplified but consistent service pattern will present users with an attractive and easy-to-understand service, which with improved services via Melksham will provide good connectivity along the length of the corridor.
- 7.5.5 The only significant loss from this approach will be the removal of certain Bristol – Westbury services that extend to Warminster, Salisbury and Southampton, although this will be partially offset by improved frequencies between Westbury and Southampton and direct services to Swindon. This could be mitigated further by the extension of proposed Metro West services to operate as far as Warminster.
- 7.5.6 The extension of Metro West services to Westbury, as proposed by West of England Combined Authority, may have an impact on capacity at Westbury; extending these services to Warminster may mitigate this, although a more detailed study would be needed to understand if this were the case.
- 7.5.7 We recommend that the case for a station at Ashton Park be explored in more detail. Such a station would have two roles; it would serve new development at West Ashton and employment land around the White Horse Business Park, and provide an alternative to the existing station at Trowbridge, access to which by car is relatively poor. It is recommended that early stage development work is undertaken for Ashton Park to understand in more detail the viability of a station at this location. This work will need to be completed in advance of work to plan other changes, to understand if time needs to be incorporated into the timetable for this station.
- 7.5.8 Delivery of service changes should be planned to be delivered as part of the next GWR franchise from 2022, and there will be a need to integrate changes to Southampton – Salisbury, Swindon – Westbury and London – Westbury services into the timetable.

7.6 Network-Wide Changes

7.6.1 As well as the route-specific interventions we also have a number of recommendations for improvements in accessibility to the rail network. These cover a range of interventions that seek to integrate ticketing and improve sustainable access to stations to make rail travel as seamless as possible. Our recommendations are as follows:

- Updating of Station Travel Plans for all stations in Swindon & Wiltshire to provide a detailed understanding of the opportunities for interventions to improve access to stations, and completion of a prioritisation process for their delivery.
- Deliver improved access by sustainable modes to all stations – using the Station Travel Plans as a guide to understanding what can be achieved, with funding derived from local authorities, LEP's and potentially third parties.
- Development of a rail focussed car share scheme building on the existing car share scheme in operation in Wiltshire.
- Work to include Swindon and Wiltshire in the **Freedom Travel Pass** multi modal ticketing scheme to improve connectivity towards the Bristol area but also to provide an integrated ticketing system for movements within Swindon & Wiltshire.
- Work with Plus Bus and train operators to extend the range of Plus Bus destinations in Swindon and Wiltshire, superseding existing unused through ticketing arrangements that exist. Thus would be complementary to the above.
- Work towards a **Mobility as a Service** application for Swindon and Wiltshire. This is likely to be a medium to long-term ambition; it may, however, provide the opportunity for the LEP to lead others in the region.
- Examine options for improving bus/rail integration from Malmesbury, Amesbury, and Bulford.

7.6.2 Delivery of these initiatives lies to a greater extent with the LEP, Swindon Borough Council and Wiltshire Council than the specific rail interventions described above. The first step would be to update Station Travel Plans for all stations within Swindon and Wiltshire from which a range of station specific initiatives can be identified, linked to an understanding of proposed future development in the station catchment to understand in detail what interventions are needed.

7.6.3 Work on integrated ticketing should also begin as soon as possible as the process for introducing this may be complex, and Mobility as a Service should follow on from the integration of ticketing.

7.6.4 There are also a number of regional and national interventions which are planned and underway which will bring benefits to Swindon and Wiltshire including GWEP journey time reductions, Western and Southern Rail access to Heathrow, Crossrail and High Speed 2.

8. DELIVERING THE STRATEGY

- 8.1.1 Within this chapter we set out how the recommendations set out above might be delivered, and how they fit into rail industry processes.
- 8.1.2 The basis for the proposed developments is the delivery of major strategic national developments which will directly and indirectly support Swindon and Wiltshire's economy, including Great Western Main Line electrification and the new GWR IET fleet, East West Rail between Oxford and Cambridge, High Speed 2, Crossrail and Western Rail Access to Heathrow. In addition to the direct benefits, these schemes generate significant opportunities for complementary regional and local developments if Local Authorities and LEPs can define, develop, establish funding mechanisms and deliver such schemes themselves.
- 8.1.3 Neither government nor the rail industry itself can be assumed to develop, fund and deliver the ambitions for rail that Swindon and Wiltshire aspire to; this presents both a challenge and opportunity to bodies such as SWLEP in promoting local and sub-national rail developments in their area.
- 8.1.4 Whilst such Third Party delivery of projects is challenging within a highly complex setting such as the rail industry, several local authorities and consortia of local authorities have strong track records of successful scheme implementation, many working in close partnership with LEPs. Government has not only encouraged such approaches but, following the 2017 Hansford Review² into the best means of facilitating these, has set out a new structure for doing so, known as the Rail Network Enhancements Pipeline³.

8.2 Third Party Delivery – Contemporary Developments

- 8.2.1 As noted, government, through the Department for Transport (DfT), are actively encouraging Third Party investment in rail services and infrastructure, and are seeking to make delivery easier on the UK rail network through support for a variety of initiatives, including: -
- The Rail Network Enhancements Pipeline (RNEP), published by the DfT in March 2018 seeks to simplify government-funded, share-funded and Third Party scheme investment and delivery, with 5 key stages as shown at Figure 6, streamlining Network Rail's 8-stage 'Governance of Railway Investment Projects' (GRIP) process, multi-stakeholder Project Boards upon which the DfT is willing to be represented and clear 'decision points' between the key work stages.
 - Network Rail's 'Open for Business'⁴ initiative, which followed the Hansford Review and the announcement of the DfT's RNEP process, and is specifically intended to make Third Party investment, projects and engagement with Network Rail easier.
 - Route-based 'Task Forces', bringing together local authorities and LEPs with the DfT, Network Rail and train operators in setting a vision for routes' train service developments. Examples

² <https://thehansfordreview.co.uk/> "An Independent Review of contestability in the UK rail market to consider third party investment and infrastructure delivery, on the national railway." (2017)

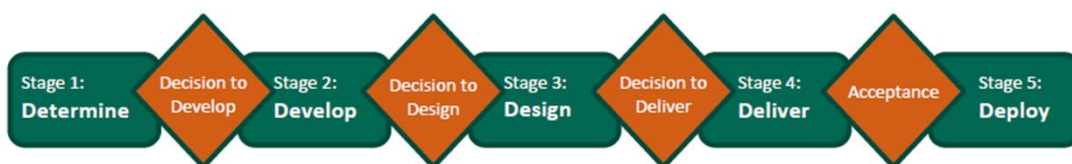
³ <https://www.gov.uk/government/publications/rail-network-enhancements-pipeline> (2018)

⁴ <https://www.networkrail.co.uk/industry-commercial-partners/third-party-investors/network-rail-open-business/>

with which Network Rail Western and the Great Western Railway are already familiar include the Peninsular Task Force covering Cornwall and Devon, and the North Cotswold Line Task Force on the Oxford-Worcester-Hereford route. The successful East West Rail Consortium is a further relevant example. Within Wiltshire the impact of the Trans Wilts Community Rail Partnership is also notable. These may form relevant templates for development of a shared approach, for example, between stakeholders on the Bristol-Swindon-Oxford route.

- Combined authorities which are able to develop rail schemes that are wider in impact than for single authorities. Examples include the West of England Combined Authority's development of Metro West, West Midlands Rail Executive's co-management of the West Midlands Rail Franchise with the DfT.

Figure 9. 5-stage 'Rail Network Enhancements Pipeline' process



8.3 Approaches SWLEP and partners may wish to consider

8.3.1 This Rail Investment Strategy document recommends an evidence-based set of rail investment priorities for SWLEP, Wiltshire Council and Swindon Borough Council to consider adopting. Based on the recognition that neither government nor the rail industry itself can be assumed to be promoters, funders or deliverers of these priorities for Swindon and Wiltshire, it is further recommended that the three parties consider the following delivery approaches:

- Adoption of shared or individual roles as Third Party promoters, prospective investors and deliverers of rail schemes.
- Strategic budget setting and bidding for structural funding both for the development and capital-delivery costs of rail schemes.
- Establishment of one or more cross-authority/LEP 'Task Forces' or alliances to develop cases for new services e.g. Bristol-Swindon-Oxford-East West Rail.
- Commencement of promotion and development of specific individual schemes, both for their intrinsic benefit and their potential to support the generation of growing skill, confidence and a rail-delivery track-record for SWLEP, Wiltshire Council and Swindon Borough Council.
- Examining other local authorities' and LEPs' case studies to further build Swindon and Wiltshire-specific Third Party capability and confidence.

9. CONCLUSIONS

- 9.1.1 This report has set out the findings of a review of the rail network in Swindon and Wiltshire to understand the strengths and weaknesses of the network before moving onto assess options for the development of the rail network and identify recommendations for the development of rail services to support the growth of the economy.
- 9.1.2 Our review of the rail network has identified that the network has a number of key strengths including strong east – west connectivity notably on the Great Western Mainline which has very strong links to London, Reading and Bristol from Chippenham and Swindon. Similarly the area enjoys strong local and regional connectivity on the Westbury – Bristol section of the Trans Wilts corridor. Service frequency is also good on most routes, with a few notable exceptions such as Westbury – Swindon.
- 9.1.3 There are however a number of weaknesses. The focus on long distance high speed services on the Great Western Mainline and Berks & Hants routes has left these routes lacking in regional and inter-urban links. On the Great Western Mainline this manifests itself in poor accessibility to the network and gaps in connectivity to Oxford. On the Berks & Hants service frequency from Westbury and Pewsey has historically been poor.
- 9.1.4 Another key weakness relates to the relatively poor access to the network. The area has relatively few stations, as evidenced by the proportion of the population living within 3km of a station being lower than both the regional and national average. Particular gaps in provision are found in the M4 Growth Zone, served by only two stations, the A303 Growth Zone served only by Salisbury stations and East Wiltshire where an extensive, if relatively sparsely-populated, catchment is served only by stations at Pewsey and Bedwyn.
- 9.1.5 Whilst long distance links to London are generally good, the service from Salisbury suffers from relatively low average speeds. A further notable gap in the provision of strategic links is the lack of north-south links; rail (and road) connectivity from the area to the Midlands, north of England and the Solent is poor.
- 9.1.6 Our strategy has identified a number of “free gifts” such as HS2, western access to Heathrow International Airport and Crossrail that will be delivered irrespective of the activities of Swindon and Wiltshire Councils and SWLEP, but will deliver significant benefits to the area.
- 9.1.7 At the centre of our strategy we have identified a series of recommendations for the proactive development of the rail network. In addition to a series of network-wide interventions designed to improve the door to door journey experience, including integrating ticketing, the development of Station Travel Plans and ultimately improved integration through Mobility as a Service, we have identified a package of interventions designed to address gaps in provision, as summarised below;
- Great Western Connect: Development of an inter urban network of services ultimately linking Southampton to Swindon, Oxford and Birmingham and Bristol to Oxford and Cambridge (supporting the East West rail proposals as promoted through the England’s Economic Heartland sub national transport body). This would also support stations at Corsham, Swindon West and Swindon East.

- Berks & Hants: Extension of Paddington – Bedwyn services to Westbury to provide an hourly service from Westbury to London, operating to/from Bristol at peak times providing a direct London service for Trowbridge and Bradford-upon-Avon and also supporting a new station at Devizes.
- West of England Line: Reduction in journey times to London through a combination of measures, the opening of a new station at Porton and consideration of the opening of a station at Wilton.
- Trans Wilts Corridor: Phased introduction of a Southampton – Swindon – Oxford service and the operation of peak Bristol – Westbury – London services, plus introduction of a more consistent service pattern, with Westbury acting as a hub station, and an hourly service operating between Yeovil and Bristol. It is also proposed that a detailed assessment of the case for a station at Ashton Park be considered.

9.1.8 As a result of the Hansford Review and Network Rail's focus on third party investment there will be an emphasis on bodies such as SWLEP and local authorities working with partners as appropriate, to advocate and evidence individual schemes and packages and this strategy forms a basis for this.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham – Newhall Street

5th Floor, Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 393 4841

Birmingham – Edmund Gardens

1 Edmund Gardens, 121 Edmund Street,
Birmingham B3 2HJ
T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 460 1847

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 468 4205

Glasgow – West George Street

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 360 4842

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)20 3855 0079

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1
1LE
United Kingdom
T: +44 (0)191 249 3816

Perth

13 Rose Terrace, Perth PH1 5HA
T: +44 (0)131 460 1847

Reading

Soane Point, 6-8 Market Place, Reading,
Berkshire, RG1 2EG
T: +44 (0)118 206 0220

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington

The SYSTRA logo is displayed in a large, bold, red, sans-serif font. The letters are closely spaced, and the overall design is clean and modern.