

ANNEX F – ASSESSING INTERVENTIONS



SWINDON AND WILTSHIRE RAIL STUDY

ANNEX F – ASSESSING INTERVENTIONS

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1. ASSESSING INTERVENTIONS

1.1.1 Within Annex E gaps in the rail service across Swindon & Wiltshire were identified and a range of interventions were listed that might address these. Within this Annex we assess the options to understand how they perform against a number of criteria. This forms the basis of a prioritisation exercise which will be used to select the interventions recommended for inclusion in the final strategy document.

1.1.2 We have assessed interventions against a range of criteria as follows:

- Policy Fit against LEP and Local Authority objectives
- Modelled GVA generated
- Proportional change in generalised journey time and estimated demand for new stations
- Deliverability
- Relationship to gap analysis

1.1.3 Inevitably not all interventions will address all criteria, and in some cases it is not practical to assess them against all criteria. The aim, however, is to provide a broad and consistent understanding of the impact of different interventions and approaches to developing the network.

1.1.4 The remainder of the Annex is structured as follows:

- Chapter 2 describes the approach to policy fit and deliverability assessment
- Chapter 3 describes the approach to GVA modelling
- Chapter 4 describes our approach to station demand modelling and generalised cost change
- Chapters 5 to 8 presents our assessment of interventions at route level
- Chapter 9 & 10 presents our assessment of non-route based interventions and regional and national interventions

2. POLICY FIT ASSESSMENT

2.1.1 To provide an understanding of how the interventions fit with the policy objectives of the main stakeholders of the study we have developed an assessment of policy fit. This has been based around a review of the following documents:

- Swindon and Wiltshire Strategic Economic Plan
- Swindon and Wiltshire Joint Spatial Framework
- Wiltshire Core Strategy
- Wiltshire Local Transport Plan 2011-2026
- Swindon Borough Local Plan 2026

2.1.2 The following sections describe our approach to developing and implementing the policy criteria assessment.

2.2 Policy Criteria

2.2.1 Six strategic policy criteria have been produced against which we assessed the strategic fit of each proposed station and service. The objectives are listed below:

- Improve access to SEP Growth Zones
- Support economic development
- Support housing development
- Opportunity, resilience, quality of life (people and communities)
- Impact on air quality and climate change
- Supporting regional and strategic connectivity

2.3 General Scoring Principles

2.3.1 The criteria were scored on a 0 to 5 scale representing different scales of positive and negative impact. The individual scoring criteria for each of the policy objectives are presented below.

Improve access to SEP Growth Zones

2.3.2 The scoring for this criterion was based upon station/service location in relation to the 3 Growth Zones, which have been identified by the Swindon and Wiltshire LEP. Therefore the following criteria were generated

- A station/service would score 1 if it improves rail accessibility outside the Growth Zones but within the Swindon and Wiltshire area.
- It would score a 2 if it provides limited improvement in rail accessibility for one Growth Zone.
- It would score 3 if it provides significant improvement in rail accessibility to one Growth Zone.
- It would score 4 if it improved rail accessibility to two Growth Zone.
- It would score 5 if it improved rail accessibility to all three Growth Zones

2.3.3 If the impact was felt to be negligible, it was given a score of 0. It was felt unlikely that any station/service would have a negative score given that each scheme will not actively impede access to the Growth Zones.

Support new economic development

- 2.3.4 An assessment has been undertaken to determine the additional gross value added (GVA) generated per annum as a result of the new or improved services or the impact of new stations. This is composed of agglomeration impacts which are the benefits of businesses being located more closely together. A more detailed explanation of how this calculation has been undertaken can be found in Section 3.
- 2.3.5 The scoring for the services for this objective is therefore:
- A score of 1 if the GVA is £0-£2.5m per annum
 - A score of 2 if the GVA is £2.5m-£5m per annum
 - A score of 3 if the GVA is £5m-£7.5m per annum
 - A score of 4 if the GVA is £7.5m-£10m per annum
 - A score of 5 if the GVA is over £10m per annum
- 2.3.6 A negative score was given to the same scale if a service was forecast to generate a negative GVA.
- 2.3.7 For new stations, a different scale was used to reflect the more limited opportunity for GVA growth presented by individual stations relative to new services serving multiple stations. The scale is presented below:
- A score of 1 if the station generates £0-0.5M GVA per annum
 - A score of 2 if the station generates £0.5-2M GVA per annum
 - A score of 3 if the station generates £2-5M GVA per annum
 - A score of 4 if the station generates £5-10M GVA per annum
 - A score of 5 if the station generates £10M+ GVA per annum

Support new housing development

- 2.3.8 Housing allocation data was provided by Wiltshire Council and has been used to define the scoring criteria for stations. Reviewing the data allowed a decision to be made in terms of the scales of 'low', 'moderate' and 'high' impacts for this criterion.
- A score of 0 was given if less than 200 dwellings were proposed and/or less than 5% of new housing was located within the stations catchment.
 - A score of 1 if a station has 200-499 dwellings proposed within its catchment or 5-9% of a Housing Market Area's (HMA) allocation
 - A score of 2 if a station has 500-999 dwellings proposed within its catchment or 10-14% of a HMA's allocation
 - A score of 3 if a station has 1000-1499 dwellings proposed within its catchment or 15-19% of a HMA's allocation
 - A score of 4 if a station has 1500-1999 dwellings proposed within its catchment or 20-24% of a HMA's allocation
 - A score of 5 if a station has over 2000 dwellings proposed within its catchment or over 25% of a HMA's allocation

2.3.9 Given the difficulty in allocating a proportion of housing which may be supported by the delivery of a new or improved rail service, a professional judgement was made around how services and to what scale they may help unlock the housing sites proposed in the vicinity of existing stations on the rail lines. Typically low scores of 1 or 2 would be given where only a frequency enhancement was provided with higher scores being given where there was a change in connectivity that would increase the number of locations that a station was directly connected to which in turn would make an area a more attractive place to locate business.

Resilience, opportunity and quality of life (people and communities)

2.3.10 To assess each station’s impact on opportunity and quality of life, information was obtained and analysed on the location of education and health facilities across Swindon and Wiltshire, such as hospitals, schools and general practices (GPs) and also deprivation within the study area. Data for deprivation was obtained from the English Indices of Deprivation 2015 at the LSOA level and was mapped to show the Indices of Multiple Deprivation (IMD) decile for each Swindon and Wiltshire LSOA compared to England and Wales as a whole along with a comparison within the study area itself.

2.3.11 The scoring criteria for this objective are shown below:

- A score of 1 if a station and majority of catchment are not in the 20% most deprived areas of Wiltshire and does not serve a locally important education/health facility.
- A score of 2 is a station and majority of catchment is located in 20% most deprived areas of Wiltshire and/or serves a locally important education/health facility.
- A score of 3 if a station and majority of catchment is located in the 10% most deprived areas of Wiltshire and/or serves a Swindon & Wiltshire wide important education/health facility.
- A score of 4 if a station is adjacent to a key access point to a health or education facility.
- A score of 5 if a station and majority of a catchment are located in the 5% most deprived areas of Wiltshire.

2.3.12 To assess the impact of services on this objective, professional judgement was used to consider how the new or improved services would affect access these facilities within Swindon and Wiltshire.

Impact on air quality and climate change

2.3.13 Air quality is a local impact whereas the impact on climate change will be largely determined by potential usage of the new stations and services. To assess the potential air quality and climate change impact of new services, professional judgement has been used as the impacts may be variable, for example new services may attract additional car trips to a station and new services will abstract from a diverse range of car trips. For the station assessments, 2011 Census journey to work data was mapped for car use to understand the potential scale/impact of mode shift to rail. Air Quality Management Areas (AQMAs) within Swindon and Wiltshire were also mapped to highlight the current poor air quality hotspots in the study area which could be impacted by new rail stations.

2.3.14 The scoring criteria for this objective is below:

- A score of 1 if a station has a slight positive impact on mode shift with no impact on AQMAs. Current journey to work by car below 50%.
- A score of 2 if a station has a moderate positive impact on mode shift with no impact on AQMAs. Current journey to work by car predominantly between 50% and 80%.
- A score of 3 if a station has a moderate positive impact on mode shift with a direct impact on an AQMA. Current journey to work by car predominantly between 50% and 80%.
- A score of 4 if a station has a large positive impact on mode shift with no impact on AQMAs. Current journey to work by car above 80%.
- A score of 5 if a station has a direct impact on an AQMA and has very high potential trip generation.

2.3.15 If a station was felt to adversely impact on an AQMA then negative scores were applied, larger scores reflecting a larger number of road vehicles within the AQMA.

Supporting Accessibility & Connectivity

2.3.16 Service and station interventions are all designed to improve accessibility and connectivity between settlements. Different interventions will have different impacts, for example, a marginal frequency enhancement on an existing corridor will have a relatively limited impact compared to an entirely new long distance service. We have assessed interventions based around both the type of connectivity provided (local, medium and long distance) and the relative impact of that connectivity, for example, if it represents a modest increase in frequency or is transformational.

2.3.17 The scoring criteria for new services is as below:

- A score of 1 if a new service delivers an incremental improvement in frequency but no new links
- A score of 2 if a new service provides improved local/regional **or** long distance connectivity
- A score of 3 if a new service provides a transformational impact on frequency
- A score of 4 if a new service provides improved local/regional **and** long distance connectivity
- A score of 5 if a new service provides a transformational change in connectivity and frequency

2.3.18 For new stations a similar approach has been applied:

- A score of 1 if a new station is provided with a low frequency service providing access to a limited number of destinations
- A score of 2 if a new station is provided with 1 tph and either local/regional or strategic connectivity
- A score of 3 if a new station is provided with a service with 2 tph or more
- A score of 4 if a new station is provided with a service giving local/regional and long distance connectivity
- A score of 5 if a new station is provided with a transformational level of service

2.4 Policy Scoring Summary

- 2.4.1 Whilst we have presented individual results in the assessments that follow we have also summed the results to provide an overall sense of the broad impact of each scheme. However a high or low overall score is used as a guide in the prioritisation of schemes as it may be desirable to prioritise a scheme that has policy strengths within a particular area.

2.5 Deliverability Assessment

- 2.5.1 To understand the deliverability of a scheme two different scoring systems have been used, depending on whether a scheme is a service change or a new station. For other types of schemes, such as those looking at improved integration professional judgment has been used based on a 1 to 5 scale.

- 2.5.2 For new services the deliverability criteria are as follows:

- 1 – Delivery requires multiple substantial infrastructure interventions
- 2 – Requires substantial infrastructure interventions or significant additional operational resources
- 3 – Operational resources are required but no substantial infrastructure interventions
- 4 – Limited operational or infrastructure interventions are required
- 5- The service is committed or about to be delivered.

- 2.5.3 For new stations the scoring approach is as follows:

- 1- Extremely complex station with multiple deliverability issues and dependencies with other schemes
- 2 – Requires station service and infrastructure interventions
- 3 – Requires new service to call at the station
- 4 – Large station requiring significant capital investment
- 5 – Conventional two platform station

3. GROSS VALUE ADDED METHODOLOGY

3.1.1 For each service options or new station we have assessed the impact on the wider economy in terms of the impact on Gross Value Added.

3.1.2 We have carried out this work using a model based on an approach developed by Network Rail as part of their series of Market Studies in 2013. The model produces an estimated change in the GDP as a result of changes to rail services. These results are based largely on the impacts of agglomeration between economies. For example, if Leamington Spa and Reading are brought closer together then there will be an increase in the level of interaction between the two economies.

3.2 Agglomeration Economies

3.2.1 At their broadest level, agglomeration economies occur when individuals benefit from being “near” to other individuals, and exist when the spatial concentration of economic activity gives rise to increasing returns in production. Transport and communications play a crucial role because, in most contexts, speed and low costs in transportation and communication provide a direct substitute for physical proximity¹.

3.2.2 Research² has identified where improved rail connectivity between places of different size may provide economic benefits. The obvious example in UK terms is the difference between London and provincial cities where better connectivity will enable the smaller centre to become “a more attractive location; it starts off with lower wages and rents, and improved connectivity means that it will get better access to London’s large economic market and large base of suppliers”.

3.3 The Modelling Work

3.3.1 SYSTRA has modelled the potential wider economic benefits of a number of service options from Swindon & Wiltshire. This work was based on a model specified by Network Rail within its series of Market Studies in 2013, and which has been adapted by SYSTRA to include the impact of different sectors of the economy on the scale of benefits. The importance of this segmentation by economic sector has been highlighted in research on agglomeration and the ‘connectedness’ of locations; “there is some evidence that suggests that the strength of these relationships changes by economic sector, with some sectors likely to benefit more from concentration of activity than others”³.

3.3.2 The data incorporated into the modelling to define economic sectors was taken from Department for Transport WebTAG guidance on wider impacts (WebTAG Unit A2-1 & A2-4). The four sectors of the economy defined within the modelling are:

¹ Daniel Graham & Patricia Melo, *Advice on the Assessment of Wider Economic Impacts: a report for HS2*, March 2010

² Bridget Rosewell (Volterra Partners) and Tony Venables (University of Oxford) *High Speed Rail, Transport Investment and Economic Impact*, 2013

³ Daniel Graham & Patricia Melo, March 2010, op cit

- Construction;
- Manufacturing;
- Consumer services;
- Producer Services

3.3.3 While the first two sectors are relatively self-explanatory, the components of the last two perhaps requires further definition, as provided in the table below:

Table 1. Definition of Consumer & Producer Services Segments

CONSUMER SERVICES	PRODUCER SERVICES
Motor Trade	Financial
Wholesale	Insurance
Retail	Auxiliary/Financial
Hotels/Restaurants	Machinery Renting
Land Transport	Computer Services
Water Transport	Research & Development
Travel Support	Other business services
Post Telecom	

3.3.4 As well as economic inputs the model also utilises information on in-vehicle journey times, frequency, the need for interchange and access time to and from stations, as well as fares. The approach taken to estimating the frequency and interchange penalties follows the ATOC Passenger Demand Forecasting Handbook guidance.

3.4 Interpreting Outputs

3.4.1 The outputs of the work are presented for a future year of 2036, however the results, are presented in 2010 values (in line with the DfT WebTAG approach). It should also be noted that values are presented for a single year (i.e. £ per annum) rather than being cumulative over a number of years.

3.4.2 The values are presented as two way flows, meaning that the aggregate value includes both the impact on the origin and the destination. It is possible to divide the results into origins and destinations, however it must be noted that in practice the distribution of the impacts will be depend on individual circumstances and linkages within the economy. Even with the best quality of data this is a representation of how the economy might respond and in practice individual companies will respond to reduced transport costs in different ways.

4. STATION & SERVICE MARKET IMPACTS

4.1.1 In assessing interventions we have taken two different approaches to assessing the new services and new services. For new stations we have given consideration to the level of demand that may exist for new station sites. For new services (where we do not have access to flow level data) we have considered how generalised journey times will change. These are described in more detail below.

4.2 Station Demand Forecasts

4.2.1 To understand the impact of new station sites we have developed a trip rate assessment. Whilst potentially simplistic this has the advantage of providing a consistent method for assessing multiple sites. To achieve this we used data from the National Rail Travel Survey (NRTS) to understand the catchment of each station in Swindon and Wiltshire plus a number of stations in the surrounding area. As the NRTS data was relatively old (circa 2004) the total number of trips was inflated to 2011 levels to provide consistency with Census population data. It was then possible to establish a trip rate for 2011 for each postcode area around each station. From this data we then inflated to the most recently available levels of station demand based on ORR Station Usage Data. The data also allowed us to differentiate between inbound and outbound trips from a station allowing separate assessment to be made, where necessary, of whether a station was likely to be a producer or attractor station.

4.2.2 Having obtained trips rates for the catchments around each station in Wiltshire we then grouped the stations into four separate categories. These were:

- Small-Medium Urban Centres (E.g. Bradford-on-Avon)
- Rural Stations (E.g. Avoncliff)
- Parkway stations (E.g. Chippenham)
- Edge of Town (E.g. Bedwyn or Castle Cary)

4.2.3 Using these grouping it was then possible to estimate the demand for new stations based on catchment bands of 0-800m, 800m-2km, or 2km-5km. For each new station we applied a suitable trip rate based on their likely characteristics, and using population data it was possible to estimate the demand for stations.

4.2.4 Clearly these trip rates are relatively crude and only take into account a limited number of inputs, however their consistency of approach assists in scheme prioritisation.

4.3 Generalised Journey Time Change

4.3.1 For interventions involving new or amended services we have considered the proportional change (reduction) in generalised journey time (GJT) that each scheme achieves. This is a useful proxy for the attractiveness of a service. As described in more detail in Annex C GJT is a measure that incorporates journey time and weightings for the impact of frequency and the number of interchanges. When assessing the impact of new services this allows an assessment to be made of the overall impact of a service as perceived by passengers relative to the existing service.

4.3.2 The data in the sections below are based on the presentation of an average change for all flows with an origin or destination in Swindon & Wiltshire impacted directly by a specific service.

5. GREAT WESTERN MAINLINE OPTIONS

5.1.1 Within this chapter we present an assessment of each intervention, to understand what it delivers and how it performs against the criteria defined above.

5.2 Bristol – Swindon – Oxford – Cambridge

Table 2. Bristol – Swindon – Oxford - Cambridge

SCHEME	
Description	Introduction of a new service of either one or two trains per hour (tph) 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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	4 Improves access to and from M4 and A350 Growth Zones.
Support economic development	5 Facilitates growth on the M4 corridor. Total GVA impact of £27M.
Support housing development	5 Supports housing growth around new stations.
Opportunity, resilience, quality of life	4 Provides improved access to opportunities in Oxford area from Swindon and Chippenham and facilitates new stations.
Impact on air quality and climate change	3 Likely to stimulate mode shift from car especially on the Swindon – Oxford axis.
Regional and strategic connectivity	5 Transformational change in connectivity especially when stations are included.
Policy Score TOTAL	26/30 High scoring service, addressing a variety of issues.
GVA Impact (£M per annum)	£27M High GVA impact due to quality of new links (excludes impact of new stations).
GJT Change/Trips	-36% Average of 36% reduction in GJT from SWLEP stations
Gaps Addressed	C3 Connectivity from Swindon to Oxford C4 Connectivity from Wiltshire to Oxford C5 Connectivity from Swindon to the Knowledge Corridor C6 Connectivity from Wiltshire to the Knowledge Corridor A11 Poor access in north Wiltshire especially around the M4 Growth Zone A15 Access to the rail network from Swindon
Deliverability	1 This is a complex service to deliver additional rolling stock and requiring significant infrastructure interventions between Swindon and Didcot likely to cost several hundred million pounds.

5.3 Southampton – Swindon – Oxford

Table 3. Southampton – Swindon – Oxford

SCHEME		
Description	Operation of a 1 tph 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. The service brings benefits to the Trans Wilts corridor as well as the GWML.	
ASSESSMENT	SCORE	NOTES
Access to growth zones	4	Improves access to and from M4 and A350 Growth Zones
Support economic development	4	Facilitates growth on the M4 and A350 corridor and supports growth around new stations
Support housing development	5	Supports housing growth around new stations
Opportunity, resilience, quality of life	5	Provides improved access to opportunities in Oxford area from Swindon, Chippenham and the A350 corridor and facilitates new stations. It also provides a significant uplift in frequency and connectivity from Melksham and also from Trowbridge, Westbury and Salisbury.
Impact on air quality and climate change	3	Likely to promote mode shift across the M4 and A350 corridors with the new stations assisting with this
Regional and strategic connectivity	4	Provides improved access to opportunities in Oxford area from Swindon and Chippenham and improves access to opportunities within Wiltshire as well as facilitating new stations around Swindon.
Policy Score TOTAL	25/30	High scoring option addressing a wide variety of issues
GVA Impact (£M per annum)	£9.49M	More limited impact than Bristol – Cambridge option but scope for service extensions described below.
GJT Change/Trips	-28%	28% reduction in GJT from SWLEP stations.
Gaps Addressed	C3 Connectivity from Swindon to Oxford C4 Connectivity from Wiltshire to Oxford C7 Connectivity from Swindon and the M4 Growth Zone to the Solent AI1 Poor access in north Wiltshire especially around the M4 Growth Zone AI5 Access to the rail network from Swindon MI5 Optimisation of services on Trans Wilts corridor MI6 Service frequency Swindon – Westbury	
Deliverability	1	This is a complex service to deliver additional rolling stock and requiring significant infrastructure interventions between Swindon and Didcot likely to cost several hundred million pounds.

5.4 Southampton – Swindon – Oxford – Birmingham

Table 4. Southampton – Swindon – Oxford – Birmingham

SCHEME		
Description	Operation of a 1 tph 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	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	5	Improves access to and from M4 and A350 and A303 Growth Zones
Support economic development	5	Facilitates growth on the M4 and A350 corridor and supports growth around new stations
Support housing development	5	Supports housing growth around new stations
Opportunity, resilience, quality of life	5	Provides improved access to opportunities in Oxford and Birmingham area from Swindon, Chippenham and the A350 corridor and facilitates new stations. It also provides a significant uplift in frequency and connectivity from Melksham and also from Trowbridge, Westbury and Salisbury.
Impact on air quality and climate change	3	Likely to promote mode shift across the M4 and A350 corridors with the new stations assisting with this, would also abstract from existing car movements on the difficult journey from Birmingham to Wiltshire
Regional and strategic connectivity	4	Provides improved access to opportunities in Oxford and Birmingham area from Swindon and Chippenham and improves access to opportunities within Wiltshire
Policy Score TOTAL	27/30	High scoring option addressing a wide variety of issues
GVA Impact (£M per annum)	£20.59M	More limited impact than Bristol – Cambridge option but still significant
GJT Change/Trips	-28%	28% reduction in GJT across all O-Ds.
Gaps Addressed	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 C7 Connectivity from Swindon and the M4 Growth Zone to the Solent AI1 Poor access in north Wiltshire especially around the M4 Growth Zone AI5 Access to the rail network from Swindon MI5 Optimisation of services on Trans Wilts corridor MI6 Service frequency Swindon – Westbury	
Deliverability	1	This is a complex service to deliver additional rolling stock and requiring significant infrastructure interventions between Swindon and Didcot likely to cost several hundred million pounds.

5.5 Extend London – Cheltenham Service to Birmingham

Table 5. London – Cheltenham – Birmingham

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	3	The service would improve access to the M4 Growth Zone from Birmingham, and Gloucestershire.
Support economic development	3	The service would generate additional GVA of £6.09M per annum.
Support housing development	2	There would be a very limited impact on housing development within SWLEP from this scheme.
Opportunity, resilience, quality of life	3	This service would improve access to opportunities for residents of Swindon and for some residents of North Wiltshire who use Kemble station (located in Gloucestershire)
Impact on air quality and climate change	2	The service would generate some mode shift reducing carbon impacts.
Regional and strategic connectivity	2	The service would improve strategic connectivity to Birmingham from Swindon only.
Policy Score TOTAL	15/30	The service has a mixture of average and low scores.
GVA Impact (£M per annum)	£6.09M	
GJT Change/Trips	-22%	The service would generate a 22% reduction in GJT but only from Swindon in the Wiltshire area.
Gaps Addressed	C1 Connectivity from Swindon to the Midlands & North	
Deliverability	1.5	Delivery of this service within the constraints of the existing network on the approach to Birmingham is unlikely. This is due to route capacity between Bromsgrove and Birmingham. The completion of the Midlands Hub may provide capacity for this service to operate into ether New St or Moor St stations.

5.6 2 tph Swindon – Gloucester – Cheltenham

Table 6. 2 tph Swindon – Gloucester – Cheltenham

SCHEME		
Description	From Dec 2019 1 tph 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 2 tph.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	3	Improves access to the M4 Growth Zone from Gloucestershire.
Support economic development	1	Low value of additional GVA of this service due to incremental impact.
Support housing development	2	There would be a very limited impact on housing development within SWLEP from this scheme based on existing development patterns
Opportunity, resilience, quality of life	3	This service would improve access to opportunities for residents of Swindon and for some residents of North Wiltshire who use Kemble station (located in Gloucestershire).
Impact on air quality and climate change	1	The service would have a small positive impact on air quality and climate change.
Regional and strategic connectivity	1	The service would have an incremental impact on service frequencies but would introduce no new links.
Policy Score TOTAL	11/30	The intervention has a low medium policy fit.
GVA Impact (£M per annum)	£1.46m	Low GVA impact due to incremental change in service.
GJT Change/Trips	-13%	13% reduction in GJT values form South Cotswold Line stations to Swindon.
Gaps Addressed	MI9 Service frequency between Swindon and Gloucester/Cheltenham	
Deliverability	3	Operating costs for this service would be high, as the service would require three additional trains to operate to Cheltenham or two additional trains to reach Gloucester.

5.7 1 tph Swindon – Cheltenham – Birmingham

Table 7. Swindon – Cheltenham – Birmingham

SCHEME	
Description	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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	3 The service would improve access to the M4 Growth Zone from Birmingham, and Gloucestershire.
Support economic development	3 The service would generate additional GVA of £7.55M per annum.
Support housing development	2 There would be a very limited impact on housing development within SWLEP from this scheme.
Opportunity, resilience, quality of life	3 This service would improve access to opportunities for residents of Swindon and for some residents of North Wiltshire who use Kemble station (located in Gloucestershire)
Impact on air quality and climate change	2 The service would generate some mode shift reducing carbon impacts.
Regional and strategic connectivity	2 The service would improve strategic connectivity to Birmingham from Swindon only.
Policy Score TOTAL	15/30 The service has a mixture of average and low scores.
GVA Impact (£M per annum)	£7.55M
GJT Change/Trips	-19% The service would generate a 19% reduction in GJT but only from Swindon in the Wiltshire area.
Gaps Addressed	C1 Connectivity from Swindon to the Midlands & North MI9 Service frequency between Swindon and Gloucester/Cheltenham
Deliverability	1.5 Delivery of this service within the constraints of the existing network on the approach to Birmingham is unlikely. This is due to route capacity between Bromsgrove and Birmingham. The completion of the Midlands Hub may provide capacity for this service to operate into ether New St or Moor St stations.

5.8 1 tph Swindon – Cheltenham – Birmingham – Manchester or Nottingham

Table 8. 1 tph Swindon – Birmingham – Manchester/Nottingham

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	3	The service would improve access to the M4 Growth Zone from Birmingham, Gloucestershire and the north.
Support economic development	5	The service would generate additional GVA of £12.51M per annum to Nottingham or £14.18M to Manchester
Support housing development	2	There would be a very limited impact on housing development within SWLEP from this scheme.
Opportunity, resilience, quality of life	3	This service would improve access to opportunities for residents of Swindon and for some residents of North Wiltshire who use Kemble station (located in Gloucestershire)
Impact on air quality and climate change	2	The service would generate some mode shift reducing carbon impacts.
Regional and strategic connectivity	3	The service would improve strategic connectivity to Birmingham and the East Midlands or Manchester from Swindon only
Policy Score TOTAL	18/30	The service has a mixture of scores, with access to Growth Zones and supporting economic development being the highest scorers.
GVA Impact (£M per annum)	£12.51M/£14.18M	GVA impacts are similar to both Manchester and Nottingham.
GJT Change/Trips	-22%	The service would generate a 22% reduction in GJT but only from Swindon in the Wiltshire area.
Gaps Addressed	C1 Connectivity from Swindon to the Midlands & North MI9 Service frequency between Swindon and Gloucester/Cheltenham	
Deliverability	1	Delivery of this service within the constraints of the existing network on the approach to Birmingham is unlikely. This is due to route capacity between Bromsgrove and Birmingham. The completion of the Midlands Hub MAY provide capacity for this service to operate into ether New St or Moor St stations. Operation beyond Birmingham is dependent on future service structures and may be dependent on the completion of HS2 to release capacity but HS2 may also undermine the rationale for the service.

5.9 Extension of Paddington – Didcot Peak Semi Fast services to Swindon

Table 9. 1 tph Swindon – Birmingham – Manchester/Nottingham

SCHEME		
Description	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.	
ASSESSMENT		
Access to Growth Zones	1	Limited impact if considered as peak only service.
Support economic development	1	Limited impact when considered as peak only service
Support housing development	1	Limited impact if considered as a peak only service
Opportunity, resilience, quality of life	3	Limited impact if considered as peak only service
Impact on air quality and climate change	1	Limited if considered as a peak only capacity boosting service
Regional and strategic connectivity	1	Incremental impact without new stations
Policy Score TOTAL	8/30	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 and provide synergies with other service options.
GVA Impact (£M per annum)	£0	No impact as incremental to existing services
GJT Change/Trips	N/A	No impact in peak only form
Gaps Addressed	No specific gaps addressed	
Deliverability	1	Delivering this service would require a major infrastructure scheme between Didcot and Swindon costing several hundred million pounds.

5.10 Corsham Station

Table 10. Corsham Station

SCHEME		
Description	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.	
ASSESSMENT		
Access to Growth Zones	4	Station is located close to the boundary of both the M4 and A350 Growth Zones
Support economic development	3	The station generates around £2.3M of GVA per annum. The station would improve access to a number of companies within Corsham
Support housing development	3	1,261 new home planned within 2km of the station
Opportunity, resilience, quality of life	3	The station would provide access to opportunities and a secondary school, GP Surgery and Corsham Institute.
Impact on air quality and climate change	3	No AQMA located within the area, however car use for commuting lies in the 50-80% bracket.
Regional and strategic connectivity	5	The station could be served by "Great Western Connect" services giving links to Bristol, Bath, Swindon and Oxford.
Policy Score TOTAL	21/30	The station has a high policy fit score.
GVA Impact (£M per annum)	£2.3M	
GJT Change/Trips	>300k	It is estimated that the station would generate over 300,000 trips per annum, based on being served by a Bristol – Oxford service
Gaps Addressed	C4 Connectivity from Wiltshire to Oxford A11 Poor access in north Wiltshire especially around the M4 Growth Zone A15 Limited access to the rail network for new developments	
Deliverability	3	Delivery of the station would require both a station structure and the identification and delivery of a suitable service. This may be a long term proposition linked to new Bristol – Oxford services described above. However an opportunity to utilise the Bristol – London service after the delivery of new Bristol – London fast services via Bristol Parkway should be examined to understand if the diversion of passenger to new services is sufficient to facilitate a stop in one Bristol – London service each hour.

5.11 Hullavington Parkway Station

Table 11. Hullavington Station

SCHEME		
Description		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.
ASSESSMENT		
Access to Growth Zones	4	Station is located close to the boundary of both the M4 and A350 Growth Zones
Support economic development	3	The station is forecast to generate up to £4.72M of GVA per annum. The station is located in a largely rural catchment, however Dyson are a major employer in the area to the north of the station.
Support housing development	0	The station would have limited impact on housing as there are no major allocations within 2km. Outside of 2km it is unlikely the railway would have a direct impact on housing development.
Opportunity, resilience, quality of life	1	The station would have a limited impact on access to opportunity. The station would not have any facilities to access in its immediate catchment, and other than Swindon services would not provide local links
Impact on air quality and climate change	2	No AQMA within 2km catchment, station would promote mode shift for local trips but would encourage short car access trips potentially creating local difficulties.
Regional and strategic connectivity	3	Service provided would give long distance connectivity but limited local connectivity (Swindon) and a frequency unlikely to be greater than 2 tph.
Policy Score TOTAL	13/30	The station has a medium policy score with only one policy having a high score.
GVA Impact (£M per annum)	£4.72M	Relatively high GVA impact due to large catchment area with poor rail access currently, proximity of Dysons and assumed access to London as part of service delivery.
GJT Change/Trips	~400k trips	The station appears to have a high demand from its broad catchment area. However the impact on journey times on Long Distance services and the resulting impact on demand and revenue would be such that it would be unlikely to deliver value for money.
Gaps Addressed	A11 Poor access in north Wiltshire especially around the M4 Growth Zone	
Deliverability	1	There are no suitable services to call at the station at the current time. The station would only become viable if a new service were developed to complement the existing Long Distance services.

5.12 Moredon Bridge Station

Table 12. Moredon Bridge Station

SCHEME		
Description	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 although it may have a role as a destination for access to Mouldon Hill Country Park. It would be served by Cheltenham – London Paddington services.	
ASSESSMENT		
Access to Growth Zones	3	The station would be located within the M4 Growth Zone
Support economic development	1	The station would have a limited GVA impact as the area served is largely residential
Support housing development	1	There are only a limited number of dwellings planned in the surrounding area.
Opportunity, resilience, quality of life	3	Station would provide improved local access to Swindon, although the service frequency would have to be sufficient to compete with bus
Impact on air quality and climate change	2	No AQMA within 2km catchment, station would promote mode shift for local trips.
Regional and strategic connectivity	4	Service would provide local connectivity to Swindon and long distance connectivity to Reading, Cheltenham and London.
Policy Score TOTAL	14/30	The station has received a medium policy score overall
GVA Impact (£M per annum)	N/A	GVA not assessed in detail due to low volume of jobs within the catchment.
GJT Change/Trips	~270k	The station is forecast to generate up to 270,000 trips per annum, however the station would be very sensitive to the development of either/or Swindon East or Swindon West stations
Gaps Addressed	A11 Poor access in north Wiltshire especially around the M4 Growth Zone A15 Access to the rail network from Swindon	
Deliverability	5	The station is relatively deliverable and a service is available to call their (subject to detailed timetabling work). However the case for the station would be undermined by either Swindon West or Swindon East.

5.13 Royal Wootton Bassett Station

Table 13. Royal Wootton Bassett Station

SCHEME		
Description	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 potentially successor services described elsewhere in the study.	
ASSESSMENT		
Access to Growth Zones	3	The station would be located within the M4 Growth Zone
Support economic development	3	The station is forecast to generate a GVA of around £3.72M per annum.
Support housing development	3	1,103 houses are proposed for development within the catchment of the station
Opportunity, resilience, quality of life	3	Station would provide improved local access to Swindon, Chippenham, Bath and Bristol.
Impact on air quality and climate change	1	No AQMA within 2km catchment, station would promote mode shift for local and regional trips.
Regional and strategic connectivity	5	If served by a Southampton/Bristol – Oxford service the town would benefit from transformed level of regional connectivity.
Policy Score TOTAL	18/30	The station is close to achieving a high score and average or better scores in 5 out of 6 policy areas
GVA Impact (£M per annum)	£3.72M	
GJT Change/Trips	150k	Demand estimates for this station may underestimate its role as a railhead for the area south of RWB which the station would be well located for and the sensitivity to local trips to Swindon to avoid congestion.
Gaps Addressed	A11 Poor access in north Wiltshire especially around the M4 Growth Zone	
Deliverability	3	The station could physically be constructed, however the station would require an improvement in local rail services to provide a viable service. As a minimum this would require the Westbury – Swindon service to increase to 1 tph. However this would still leave RWB without a service to Bristol. “Great Western Connect” services are likely to be the solution to this issue.

5.14 Swindon West/RWB Station

Table 14. Swindon West/RWB Station

SCHEME		
Description	Two options have been considered for new stations within the Royal Wootton Bassett (RWB) area; this 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.	
ASSESSMENT		
Access to Growth Zones	3	The station would be located within the M4 Growth Zone
Support economic development	5	The station is forecast to generate a GVA of around £18M per annum, as it would have a substantial impact on access to south Swindon.
Support housing development	5	Over 4,000 houses are planned within the catchment including at the site at Wichelstowe.
Opportunity, resilience, quality of life	3	Station would provide improved local access to Swindon, Chippenham, Bath and Bristol.
Impact on air quality and climate change	1	No AQMA within 2km catchment, station would promote mode shift for local and regional trips, although Parkway access may promote local air quality issues
Regional and strategic connectivity	5	If served by a “Great Western Connect” Southampton/Bristol – Oxford service the area would benefit from transformed level of regional connectivity.
Policy Score TOTAL	22/30	The station has achieved high scores due to the large catchment and proximity of new development.
GVA Impact (£M per annum)	£18M	
GJT Change/Trips	380k	The station is estimated to generate around 380k trips per annum reflecting its large catchment area. This would however be dependent on high quality service for example of 2 tph.
Gaps Addressed	A11 Poor access in north Wiltshire especially around the M4 Growth Zone A15 Access to the rail network from Swindon	
Deliverability	3	The station could physically be constructed, however the station would require an improvement in local rail services to provide a viable service. As a minimum this would require the Westbury – Swindon service to increase to 1 tph. However this would still leave RWB without a service to Bristol. “Great Western Connect” services are likely to be the solution to this issue.

5.15 Swindon East Station

Table 15. Swindon East Station

SCHEME		
Description	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 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.	
ASSESSMENT		
Access to Growth Zones	3	Station located within the M4 Growth Zone
Support economic development	5	The station is forecast to generate £14m of GVA per annum and is located close to 40ha of employment land at Swindon Eastern Villages site.
Support housing development	5	Over 7,000 new homes are to be developed close to the station as part of the Swindon Eastern Villages development
Opportunity, resilience, quality of life	3	The station will provide access to opportunities for the growing local population in the area.
Impact on air quality and climate change	1	No AQMA within 2km catchment, station would promote mode shift for local and regional trips, although Parkway access may promote local air quality issues
Regional and strategic connectivity	5	If served by a “Great Western Connect” Southampton/Bristol – Oxford service the area would benefit from transformed level of regional connectivity.
Policy Score TOTAL	22/30	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.
GVA Impact (£M per annum)	£14m	
GJT Change/Trips	929k	This station is forecast to generate a very high level of demand, this is because of the strong local catchment but also its important location on the A419 making it readily accessible. There may however be complex responses to deal with in relation to the impact on Swindon station and this would require further work.
Gaps Addressed	A11 Poor access in north Wiltshire especially around the M4 Growth Zone A15 Access to the rail network from Swindon	
Deliverability	2	The delivery of a station at this location is likely to be complex. The station would require the delivery of the “Great Western Connect” service operating east of Swindon. This in itself will require infrastructure interventions between Didcot and Swindon.

6. BERKS & HANTS OPTIONS

6.1 Committed 0.5tph London Paddington – Exeter St. David’s

Table 16. 0.5 tph London Paddington – Exeter St. David’s

SCHEME	
Description	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 1 tph 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 adhoc service pattern that exists at the current time.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	2 The service will provide a limited improvement in access to the A350 Growth Zone, although the change will be relatively incremental as it will supersede existing stops that are currently provided on an adhoc pattern.
Support economic development	2 The service is forecast to generate around £1.88M of GVA per annum
Support housing development	2 The service may have a limited impact on the attractiveness of Westbury in particular as a location for housing development.
Opportunity, resilience, quality of life	3 By providing trains at regular times the service may provide limited enhancements in access to opportunities in Reading, London, Taunton and Exeter.
Impact on air quality and climate change	1 The service would have an incremental impact on the mode shift, although the impact on short to medium distance journeys would be quite limited.
Regional and strategic connectivity	1 Connectivity towards Exeter and London will be improved although it is understood that existing connections to stations west of Exeter will be broken.
Policy Score TOTAL	11/30 This option generates a low medium level score overall.
GVA Impact (£M per annum)	£1.88m
GJT Change/Trips	-11% The average GJT reduction for affected trips would be 11%
Gaps Addressed	MI2 Service frequencies on the Berks & Hants Line towards both London and the South West MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury
Deliverability	5 This service is committed as part of the December 2019 timetable change

6.2 1 tph London Paddington – Exeter St. David’s

Table 17.1 1 tph London Paddington – Exeter St. David’s

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	The service will provide a limited improvement in access to the A350 Growth Zone.
Support economic development	3	The service is forecast to generate around £3.29M of GVA per annum
Support housing development	3	The service may have an impact on the attractiveness of Westbury in particular as a location for housing development.
Opportunity, resilience, quality of life	4	The service would provide a viable service allowing access to opportunities within commuting distance from Pewsey and Westbury, such as Reading, London and Taunton.
Impact on air quality and climate change	2	The service would have an impact on the mode shift, although the impact on short to medium distance journeys would be quite limited.
Regional and strategic connectivity	2	Connectivity towards Exeter and London will be improved although it is understood that existing connections to stations west of Exeter will be broken.
Policy Score TOTAL	16/30	The service achieves a medium policy score
GVA Impact (£M per annum)	£3.29M	
GJT Change/Trips	-15%	The service achieves a larger average reduction in GJT than the committed service, but differences are relatively incremental.
Gaps Addressed	MI2 Service frequencies on the Berks & Hants Line towards both London and the South West MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury	
Deliverability	3	The delivery of this service would be relatively expensive requiring an additional three trains to operate the service. As a minimum these would be 5 car IET trains but may be 9 car trains which would be even more expensive to operate.

6.3 1 tph London Paddington – Frome

Table 18.1 1 tph London Paddington - Frome

SCHEME	
Description	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 Exeter, requiring only two trains of up to nine coaches in length.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	2 The service will provide an improvement in access to the A350 Growth Zone from the east.
Support economic development	3 The service is forecast to generate around £2.76M of GVA per annum.
Support housing development	3 The service may have an impact on the attractiveness of Westbury in particular as a location for housing development.
Opportunity, resilience, quality of life	3 The service would provide a viable service allowing access to opportunities within commuting distance from Pewsey and Westbury, such as Reading and even London.
Impact on air quality and climate change	2 The service would have an impact on mode shift, although the impact on short to medium distance journeys would be quite limited.
Regional and strategic connectivity	3 Connectivity towards Reading and London will be improved, however this option will not improve links to the west.
Policy Score TOTAL	16/30 The option has generated a medium policy score.
GVA Impact (£M per annum)	£2.76m
GJT Change/Trips	-13% The service would generate a 13% reduction in GJT for affected flows.
Gaps Addressed	MI2 Service frequencies on the Berks & Hants Line towards both London and the South West MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury
Deliverability	3 The service would require additional rolling stock, with a likely minimum of two additional five car IET trains required.

6.4 Extend Paddington – Bedwyn services to Westbury (inc. peak Bristol services)

Table 19. Extend London Paddington – Bedwyn services to Westbury

SCHEME	
Description	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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	2 The service will provide an improvement in access to the A350 Growth Zone from the east.
Support economic development	3 The service is forecast to generate around £2.55M of GVA per annum.
Support housing development	3 The service may have an impact on the attractiveness of Westbury in particular as a location for housing development.
Opportunity, resilience, quality of life	3 The service would provide a viable service allowing access to opportunities within commuting distance from Pewsey and Westbury, such as Reading and even London.
Impact on air quality and climate change	2 The service would have an impact on mode shift, although the impact on short to medium distance journeys would be quite limited.
Regional and strategic connectivity	4 Connectivity towards Reading and London will be improved, along with a marginal impact on local connectivity.
Policy Score TOTAL	17/30 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.
GVA Impact (£M per annum)	£2.55m
GJT Change/Trips	-12% The service would generate a 12% reduction in GJT for affected flows.
Gaps Addressed	C9 Connectivity from Trans Wilts stations towards London MI2 Service frequencies on the Berks & Hants Line towards both London and the South West MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury
Deliverability	4 The delivery of this option would require a maximum of only two additional five car IET trains. Of the options considered for the B&H stations this would be the most cost effective delivering GVA benefits for stations on the B&H route and bringing some additional benefits to Trowbridge and Bradford-upon-Avon.

6.5 Devizes Parkway Station

Table 20. Devizes Parkway Station

SCHEME	
Description	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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	1 The station would not be located in or close to any of the three Growth Zones
Support economic development	3 The station is forecast to generate £6.56m of additional GVA, through improving access to a large part of east Wiltshire.
Support housing development	5 2,406 houses proposed for development within the catchment area of the station.
Opportunity, resilience, quality of life	2 The station catchment does not contain any of the 20% of the most deprived parts of England (or Wiltshire)
Impact on air quality and climate change	3 The catchment of the station does not contain any AQMAs. However the station will have an impact on mode shift, reducing carbon impacts overall.
Regional and strategic connectivity	4 Stations will enhance access to local, regional and strategic destinations from the Devizes area.
Policy Score TOTAL	18/30 The station generates a high medium score. The main gap in its coverage of policy criteria is the coverage of access to Growth Zones.
GVA Impact (£M per annum)	£6.56m
GJT Change/Trips	~400k A very initial assessment of the station suggests that it may generate a maximum of around ~400k trips per annum.
Gaps Addressed	A13 Limited access to the rail network in East Wiltshire
Deliverability	3 As a minimum a new station would be required, however to make the best use of the opportunity an enhanced Berks & Hants Line services would be required providing a service of 1 tph. The location of the station is such that sustainable access could be provided via the development of a cycle track along the former Devizes railway to Devizes town.

6.6 Lavington Parkway Station

Table 21. Lavington Parkway Station

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	1	The station would not be located in or close to any of the three Growth Zones
Support economic development	3	The station is forecast to generate £6.56m of additional GVA, through improving access to a large part of east Wiltshire.
Support housing development	5	2,406 houses proposed for development within the catchment area of the station.
Opportunity, resilience, quality of life	2	The station catchment does not contain any of the 20% of the most deprived parts of England (or Wiltshire)
Impact on air quality and climate change	3	The catchment of the station does not contain any AQMAs. However the station will have an impact on mode shift, reducing carbon impacts overall.
Regional and strategic connectivity	4	Station will enhance access to local, regional and strategic destinations from the Devizes area.
Policy Score TOTAL	18/30	The station generates a high medium score. The main gap in its coverage of policy criteria is the coverage of access to Growth Zones.
GVA Impact (£M per annum)	£6.56m	
GJT Change/Trips	~400k	A very initial assessment of the station suggests that it may generate a maximum of around ~400k trips per annum.
Gaps Addressed	A13 Limited access to the rail network in East Wiltshire	
Deliverability	3	As a minimum a new station would be required, however to make the best use of the opportunity an enhanced Berks & Hants Line services would be required providing a service of 1 tph.

6.7 Marlborough Parkway Station

Table 22. Marlborough Parkway Station

SCHEME		
Description	This option considers the development of a Parkway station to serve the Marlborough area. The station would be located on the A346 around 4.05 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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	1	The station would not be located in or close to any of the three Growth Zones
Support economic development	3	A Marlborough Parkway stations would generate around £2.5m GVA per annum. The number of constrained by the level of abstraction from the Pewsey station catchment
Support housing development	2	Around 500 houses proposed for development within the catchment area of the station. The catchment area for the station is constrained by the proximity of Pewsey and Bedwyn stations
Opportunity, resilience, quality of life	2	The station catchment does not contain any of the 20% of the most deprived parts of England (or Wiltshire)
Impact on air quality and climate change	3	The catchment of the station does not contain any AQMAs. However the station will have an impact on mode shift, reducing carbon impacts overall.
Regional and strategic connectivity	4	Station will enhance access to local, regional and strategic destinations from the Marlborough area.
Policy Score TOTAL	15/30	The stations has achieved a medium policy score.
GVA Impact (£M per annum)	£2.5m	The GVA impact of the station is constrained by the proximity of Pewsey station from which it abstracts significantly.
GJT Change/Trips	150k	Demand for the station is estimated to be only around 150k trips per annum due to the constrained catchment, with much of the area continuing to use either Pewsey or Bedwyn stations
Gaps Addressed	A13 Limited access to the rail network in East Wiltshire	
Deliverability	3	As a minimum a new station would be required, however to make the best use of the opportunity an enhanced Berks & Hants Line service would be required providing a service of 1 tph. The location of the station represents a complex site due to the proximity of the River Avon

7. WEST OF ENGLAND OPTIONS

7.1 2 tph London Waterloo – Exeter St. David’s.

Table 23.2 2 tph London Waterloo – Exeter St David’s

SCHEME	
Description	Within this option we examine the case for increasing the frequency of services between London Waterloo and Exeter from one to 2 tph. 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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	2 The service would improve access to the A303 Growth Zone from Devon and Dorset.
Support economic development	2 The service would generate only around £0.16M of GVA per annum to the SWLEP area.
Support housing development	0 The route has very limited levels of new housing in the Wiltshire area, with only Tisbury station other than Salisbury impacted.
Opportunity, resilience, quality of life	2 The frequency change would provide a limited additional impact on access to opportunities for residents of Salisbury and Tisbury by providing enhanced access to Gillingham, Yeovil, Honiton and Exeter.
Impact on air quality and climate change	2 Limited positive impact on mode shift for medium distance journeys
Regional and strategic connectivity	1 The service would represent an incremental change in frequency and would not provide new links.
Policy Score TOTAL	9/30 This option has generated only a very low score from a Wiltshire perspective.
GVA Impact (£M per annum)	£0.16m
GJT Change/Trips	-12% A 12% reduction in GJT would be achieved, however this would impact only a small number of O-DS pairs in Wiltshire
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone M10 West of England Line service frequency
Deliverability	1 Delivery of 2 tph would be very complex, requiring substantial sections of track doubling and in addition it would require additional rolling stock.

7.2 Salisbury – London Waterloo Journey Time Reductions

Table 24. Salisbury – London Waterloo Journey Time Reductions

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	The option will improve access to the A303 Growth Zone
Support economic development	3	The option of reducing journey times by 10 minutes would generate around £5.93m per annum.
Support housing development	2	The option would provide limited support for additional housing in the area.
Opportunity, resilience, quality of life	3	Reducing journey times towards London would increase opportunities for the residents of Salisbury to access opportunity and jobs in Basingstoke, Woking and London.
Impact on air quality and climate change	2	The service would have an impact on mode shift and would thus reduce carbon emissions.
Regional and strategic connectivity	4	Journey time reductions would improve local connectivity towards Basingstoke, and long distance connectivity towards London.
Policy Score TOTAL	16/30	The scheme overall has a medium policy score
GVA Impact (£M per annum)	£5.93m	
GJT Change/Trips	-19%	The option would produce a GJT change of 19% from Salisbury to London if a 10 minute journey time reduction were achievable.
Gaps Addressed	MI1 Improved service Salisbury and London AI2 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone	
Deliverability	1	Delivery of this scheme is complex with a composite of interventions required including line speed improvements, alterations to train paths, the delivery of new rolling stock and a possible extension of electrification on the route.

7.3 1 tph Yeovil - Reading

Table 25.1 1 tph Yeovil - Reading

SCHEME		
Description	This option considers the case for operating 1 tph 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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	The service would improve access to the A303 Growth Zone from the Thames Valley.
Support economic development	2	The service would generate only around £0.16M of GVA per annum.
Support housing development	0	The route has very limited levels of new housing in the Wiltshire area, with only Tisbury station other than Salisbury impacted.
Opportunity, resilience, quality of life	3	The service would provide access to opportunities in the Thames Valley.
Impact on air quality and climate change	2	The service would have an impact on mode shift and therefore climate change.
Regional and strategic connectivity	2	The service would represent an incremental change in frequency and would not provide new links.
Policy Score TOTAL	11/30	This option has generated a low medium score from a Wiltshire perspective.
GVA Impact (£M per annum)	£0.16m	
GJT Change/Trips	-17%	The option generates a reduction of 17% in GJT for effected journeys
Gaps Addressed	C10 Connectivity from Salisbury to the Thames Valley MI10 West of England Line service frequency	
Deliverability	1	It is understood the South Western Railway intend to introduce a variation of this service on Sundays only from May 2019. However the operation of this service in full and all week would be complex. Operation from Yeovil would require the doubling of the line from Wilton Junction to Tisbury. An alternative maybe to operate services from Salisbury instead of Yeovil, however achieving this would also be complex due to the nature of the track layout between Worting Jn and Basingstoke. To operate the service with the current track layout would require conflicting movements for southbound services which would be very difficult to timetable within the constraints of the South West Mainline timetable.

7.4 2 tph Waterloo – Yeovil

Table 26.2 tph Waterloo - Yeovil

SCHEME		
Description	This option is an iteration of the option above to provide 2 tph between London Waterloo and Exeter. The option would improve local connectivity between Yeovil and Salisbury.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	1	The service would provide a very limited impact on access to the A303 Growth Zone.
Support economic development	2	The service would generate only around £0.038M of GVA per annum.
Support housing development	0	The route has very limited levels of new housing in the Wiltshire area, with only Tisbury station other than Salisbury impacted.
Opportunity, resilience, quality of life	2	The frequency change would provide a limited additional impact on access to opportunities for residents of Salisbury and Tisbury by providing enhanced access to Gillingham and Yeovil, Honiton and Exeter.
Impact on air quality and climate change	1	The service would have limited impact on mode shift and therefore climate change.
Regional and strategic connectivity	1	The service would represent an incremental change in frequency and would not provide new links.
Policy Score TOTAL	7/30	This option has generated only a very low score from a Wiltshire perspective.
GVA Impact (£M per annum)	£0.16m	
GJT Change/Trips	-12%	A 12% reduction in GJT would be achieved, however this would impact only a small number of O-D pairs in Wiltshire.
Gaps Addressed	M10 West of England Line service frequency	
Deliverability	1	Delivering this service would require the doubling of the line between Wilton Junction and Tisbury, this would be a very expensive schemes for limited benefit from a Wiltshire perspective. The service would also require additional rolling stock to operate.

7.5 Barford St. Martin Station

Table 27. Barford St. Martin Station

SCHEME		
Description	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 tph 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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	Station located within the A303 Growth Zone.
Support economic development	2	The station would generate a maximum of £1.7m of GVA per annum.
Support housing development	0	Very little new housing is planned for this area.
Opportunity, resilience, quality of life	1	The station would provide improved access to a range of opportunities in Salisbury and further afield. The area is not located within either the top 20% most deprived parts of England or Wiltshire.
Impact on air quality and climate change	2	There are no AQMAs within the station catchment, however the station would promote mode shift.
Regional and strategic connectivity	2	The station would be served by 1 tph providing local, regional and long distance connectivity to Salisbury, Exeter and London.
Policy Score TOTAL	9/30	The station has generated only a low policy score
GVA Impact (£M per annum)	£1.7m	
GJT Change/Trips	140k	The station has been estimated to generate a maximum of around 140k trips per annum, although this assumes the station has a Parkway function.
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone	
Deliverability	1	Whilst delivery of a station at this location may be physically possible, it would present additional challenges. The West of England Line west of Salisbury is predominately single track and the introduction of additional journey time for a new station would complicate the passing of trains on single line sections. This may in turn require infrastructure interventions such as the doubling of Wilton Junction – Tisbury to deliver the station.

7.6 Wilton Station

Table 28. Wilton Station

SCHEME		
Description	A station at Wilton 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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	1	The station would be located within the A303 Growth Zone.
Support economic development	3	The station is forecast to generate around £3.56m GVA per annum, and is located close to 8ha of employment land.
Support housing development	0	Only around 186 new dwellings are planned close to the site.
Opportunity, resilience, quality of life	1	The station is not located within the 20% most deprived parts of Wiltshire.
Impact on air quality and climate change	2	There are no AQMAs within the stations, catchment however the station would promote mode shift and may relieve air quality issues in Salisbury.
Regional and strategic connectivity	4	The station would provide local, regional and long distance connectivity, with the potential to be served by trains to London, Southampton, Bristol and Exeter.
Policy Score TOTAL	11/30	The station has achieved a medium policy score, although the station only achieves a high score in connectivity.
GVA Impact (£M per annum)	£3.56m	
GJT Change/Trips	228k	Most optimistic forecast from Atkins study of the station.
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone.	
Deliverability	2	Work has been conducted that identifies that it is possible to locate a station at Wilton. For the station to represent value for money, however, a wider mixture of services would be needed, including extending London services from Salisbury to serve the station; this would increase the cost of delivery.

7.7 Alderbury Station

Table 29. Alderbury Station

SCHEME	
Description	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 tph Salisbury - Southampton service.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	2 The station would be located within the A303 Growth Zone.
Support economic development	2 The station would generate around £0.62m of GVA per annum.
Support housing development	1 441 new home are planned in the surrounding area.
Opportunity, resilience, quality of life	1 The catchment does not contain any of the 20% most deprived parts of Wiltshire.
Impact on air quality and climate change	2 There is no AQMA within 2km of the station, but the area does have medium to high levels of car use.
Regional and strategic connectivity	2 Station will improve local and regional connectivity to Southampton and Salisbury.
Policy Score TOTAL	10/30 The station achieves only a low policy score and does not provide a strong score in any particular area.
GVA Impact (£M per annum)	£0.62m
GJT Change/Trips	131k A maximum of 131k passengers has been estimated for this station.
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone.
Deliverability	5 The scheme would only require the development of a new station with no requirement for other infrastructure of service alterations. The existing Romsey – Southampton – Salisbury service appears to have sufficient turnaround time at Salisbury to incorporate the new service.

7.8 Porton Parkway Station

Table 30. Porton Parkway Station

SCHEME		
Description	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 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 either 1 or 2 tph.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	The station is located in the A303 Growth Zone.
Support economic development	4	The station is forecast to generate up to £5.37M GVA per annum. It is also understood that additional development is planned for the area.
Support housing development	5	The station would support over 2,000 homes proposed for the stations catchment.
Opportunity, resilience, quality of life	1	The catchment does not contain any of the 20% most deprived parts of Wiltshire
Impact on air quality and climate change	2	There is no AQMA within 2km of the station, but the area does have medium to high levels of car use.
Regional and strategic connectivity	4	The station would be served by Salisbury – London services and would thus enjoy local, regional and long distance connectivity to London, Woking, Basingstoke, Salisbury and potentially Exeter.
Policy Score TOTAL	18/30	The station has achieved a medium policy score, however it has achieved high scores in three categories.
GVA Impact (£M per annum)	£5.37M	
GJT Change/Trips	387k	The station may generate a maximum of around 387k per annum, although this would require access issues to be addressed.
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone.	
Deliverability	2	In addition to the requirement to construct the station there will also be a need to consider how access from Porton station to its wider catchment is dealt with. In addition careful consideration will have to be given to the timetable, as there is limited scope for incorporating additional journey time in London – Exeter trains where the timetable is constrained by the South West mainline at the London end and the single line sections of the West of England Line west of Salisbury.

7.9 Ludgershall Station and branch line

Table 31. Ludgershall Station

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	The station is located in the A303 Growth Zone.
Support economic development	1	The station would generate only around £0.23m GVA per annum.
Support housing development	1	Only around 250 home are planned for the Ludgershall area.
Opportunity, resilience, quality of life	1	Station and catchment not in one of most deprived areas (20% most deprived) in England or Wiltshire.
Impact on air quality and climate change	2	No AQMA within 2km station catchment. Car use predominantly 50%-80%.
Regional and strategic connectivity	2	The station would provide direct local and regional connectivity with a shuttle service to Andover being the proposed service option.
Policy Score TOTAL	9/30	The development of a rail service at Ludgershall has achieved only a low policy score.
GVA Impact (£M per annum)	£0.23m	
GJT Change/Trips	108k	The station is estimated to generate only around 108k trips per annum. This maybe an underestimate given potential usage for longer distance trips by military personnel. The volume of passengers would however have to support a new service.
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone.	
Deliverability	1	Deliverability of a station at Ludgershall would require not just the construction of a station but also the operation of a new service from Andover incurring additional operating costs. This would also require upgrades to the infrastructure of the railway which is currently only used for freight traffic, and the refurbishment of disused platform at Andover.

8. TRANS WILTS OPTIONS

8.1 1 tph Westbury – Swindon

Table 32.1 1 tph Westbury – Swindon

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	4	Station improves access to M4 and A350 Growth Zones.
Support economic development	1	The service would deliver around £1.27m of GVA per annum.
Support housing development	3	The service would help support the delivery of sustainable housing along the route.
Opportunity, resilience, quality of life	3	The service will make rail a viable means of accessing Chippenham and Swindon for employment from Melksham, Trowbridge and Westbury.
Impact on air quality and climate change	1	The service will deliver some mode shift from car to rail for short and medium distance journeys.
Regional and strategic connectivity	1	The service will deliver a frequency uplift on an existing service.
Policy Score TOTAL	13/30	The service generates a medium policy score.
GVA Impact (£M per annum)	£1.27m	
GJT Change/Trips	-32%	The service will reduce GJT by an average of 32% as frequency is important to passengers for short journeys.
Gaps Addressed	MI5 Optimisation of services on Trans Wilts corridor. MI6 Service frequency Swindon – Westbury. MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury.	
Deliverability	3	Subject to the re-pathing of freight services (and based on the current not the future timetable) it appears possible to path this service within the constraints of existing services and infrastructure. The service would require the operation of one additional train. However this would push the route to the limits of its operational capacity, which may require further consideration.

8.2 1 tph Southampton - Swindon

Table 33.1 1 tph Southampton - Swindon

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	5	Station improves access to and between M4, A303 and A350 Growth Zones
Support economic development	3	The service would deliver around £5.34m of GVA per annum.
Support housing development	3	The service would help support the delivery of sustainable housing along the route.
Opportunity, resilience, quality of life	3	The service would open up opportunities in the south of the county and the Solent for residents of Chippenham and Swindon, and vice versa. It would also significantly improve access to opportunities, both north and south from Melksham.
Impact on air quality and climate change	1	The service will deliver some mode shift from car to rail for short and medium distance journeys.
Regional and strategic connectivity	2	The service will deliver a frequency uplift on an existing service, and provide new local and regional connectivity.
Policy Score TOTAL	17/30	The service generates a medium policy score
GVA Impact (£M per annum)	£5.34m	
GJT Change/Trips	-30%	The service sees GJTs on the route fall by around 30%, but this masks considerable variation with some flows seeing a reduction of up to 45%
Gaps Addressed	C7 Connectivity from Swindon and the M4 Growth Zone to the Solent MI5 Optimisation of services on Trans Wilts corridor MI6 Service frequency Swindon – Westbury MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury	
Deliverability	3	It appears possible to operate this service northbound using existing train paths, however southbound it would be necessary to retime services between Salisbury and Southampton. Assuming this done alongside the 1 tph Westbury – Swindon described in 8.2 above, however, no additional rolling stock is expected to be required for this service linkage above the one additional train required to enhance the Swindon – Westbury service to hourly. However this would push the route to the limits of its operational capacity, which may require further consideration.

8.3 1 tph Southampton – Swindon – Oxford – Birmingham

Table 34. Southampton – Swindon – Oxford – Birmingham

SCHEME		
Description	Operation of a 1 tph service between Southampton and Birmingham via Salisbury, Westbury, Swindon and Oxford, replacing the existing service. 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	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	5	Improves access to and from M4, A303 and A350 Growth Zones.
Support economic development	5	Facilitates growth on the M4 and A350 corridor and supports growth around new stations.
Support housing development	5	Supports housing growth around new stations.
Opportunity, resilience, quality of life	5	Provides improved access to opportunities in Oxford and Birmingham area from Swindon, Chippenham and the A350 corridor and facilitates new stations. It also provides a significant uplift in frequency and connectivity from Melksham and also from Trowbridge, Westbury and Salisbury.
Impact on air quality and climate change	3	Likely to promote mode shift across the M4 and A350 corridors with the new stations assisting with this. This service would also abstract from existing car movements on the difficult journey from Birmingham to Wiltshire.
Regional and strategic connectivity	4	Provides improved access to opportunities in Oxford and Birmingham area from Swindon and Chippenham and improves access to opportunities within Wiltshire.
Policy Score TOTAL	27/30	High scoring option addressing a wide variety of issues.
GVA Impact (£M per annum)	£20.59M	More limited impact than Bristol – Cambridge option but still significant.
GJT Change/Trips	-28%	28% reduction in GJT across all O-Ds.
Gaps Addressed	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. C7 Connectivity from Swindon and the M4 Growth Zone to the Solent. AI1 Poor access in north Wiltshire especially around the M4 Growth Zone. AI5 Access to the rail network from Swindon. MI5 Optimisation of services on Trans Wilts corridor. MI6 Service frequency Swindon – Westbury.	
Deliverability	1	This is a complex service to deliver additional rolling stock and requiring significant infrastructure interventions between Swindon and Didcot likely to cost several hundred million pounds.

8.4 1 tph Bristol - Weymouth

Table 35. 1 tph Bristol - Weymouth

SCHEME		
Description	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 1 tph providing enhanced links from Wiltshire stations to Frome, Yeovil and Weymouth.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	3	The service will improve access to the A350 Growth Zone.
Support economic development	1	The service would generate only around £0.1M of GVA for the Wiltshire area.
Support housing development	1	The service would have a limited impact on housing growth in Wiltshire.
Opportunity, resilience, quality of life	3	The service would provide Frome (which although located in Somerset has quite a large Wiltshire catchment) with a consistent hourly service to Westbury, Bath and Bristol.
Impact on air quality and climate change	1	The service would have limited impact on mode shift, notably from Frome.
Regional and strategic connectivity	1	The service would represent an incremental impact on service frequency.
Policy Score TOTAL	10/30	This option just achieves a medium score and no element provides a high score
GVA Impact (£M per annum)	£0.1m	
GJT Change/Trips	-17%	The service would represent an average reduction in GJT of around 17%.
Gaps Addressed	MI4 Service frequencies to Frome MI5 Optimisation of services on Trans Wilts corridor MI8 Service frequency between Westbury and Weymouth	
Deliverability	3	The service would require one additional train to operate the enhanced service, although this would require turnaround times to be reduced to 10 minutes at Weymouth which may not provide a resilient service.

8.5 2 tph on all Trans Wilts Corridor Routes

Table 36. 2 tph Trans Wilts Corridor Routes

SCHEME		
Description	This option considers the impact of operating 2 tph on all parts of the Trans Wilts network radiating from Westbury. This would provide 2 tph from Westbury to each of Bristol, Frome, Swindon and Salisbury. Delivery of this could be provided through a combination of enhancements described above.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	5	Such a service pattern would improve links between all three Growth Zones.
Support economic development	2	This option would generate £2.99m of additional GVA through a combination of incremental changes in connectivity.
Support housing development	3	This option will provide a series of incremental changes which will support housing development coming forward.
Opportunity, resilience, quality of life	3	The service will provide incremental changes to access to opportunities across the area.
Impact on air quality and climate change	2	The scheme will have a limited impact on air quality, but will facilitate mode shift reducing carbon emissions.
Regional and strategic connectivity	1	A revised and optimised service pattern will impact frequency rather than connectivity.
Policy Score TOTAL	16/30	The option generates a medium score with a mixture of low medium and high scores.
GVA Impact (£M per annum)	£2.99m	
GJT Change/Trips	-17%	This option results in a 17% reduction in GJT across the effected flows. This masks significant variation across the network.
Gaps Addressed	MI4 Service frequencies to Frome. MI5 Optimisation of services on Trans Wilts corridor. MI6 Service frequency Swindon – Westbury. MI7 Quality of interchange options at node stations including Swindon, Westbury and Salisbury.	
Deliverability	2	This option would require additional rolling stock to strengthen service frequencies. In addition, operating a 2 tph service on all arms of the Trans Wilts Corridor would require infrastructure enhancements most notably on the Melksham Chord which would require at the very least partial redoubling.

8.6 Trowbridge to London

Table 37. Trowbridge to London via Chippenham

SCHEME	
Description	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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	3 The service would support access to the A350 Growth Zone
Support economic development	2 Operation of a Trowbridge – London service would generate around £3.3m of additional GVA per annum
Support housing development	2 Such a service may make the Trowbridge area more attractive for developers to construct houses in.
Opportunity, resilience, quality of life	2 The operation of the service would provide limited opportunities for commuting and access to facilities.
Impact on air quality and climate change	1 The service would have a limited impact on air quality and carbon emissions through mode shift. It may abstract trips from Chippenham and Westbury stations, reducing access car trips.
Regional and strategic connectivity	2 The service would improve long distance connectivity.
Policy Score TOTAL	12/20 This option has a medium score composed of a mixture of low-medium scores.
GVA Impact (£M per annum)	£3.3m
GJT Change/Trips	-33% This option would reduce GJT by around 33% for London trips
Gaps Addressed	C9 Connectivity from Trans Wilts stations towards London
Deliverability	3 This option would require additional rolling stock to operate. If a service were to operate via Melksham it would also require the Melksham chord to be doubled, at least in part; it is therefore suggested that the operation of these services via Westbury might be more resource-efficient.

8.7 Staverton Station

Table 38. Staverton Station

SCHEME	
Description	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.
ASSESSMENT	SCORE NOTES
Access to Growth Zones	2 Station located in A350 Growth Zone
Support economic development	1 The station is forecast to generate £0.31m of GVA per annum
Support housing development	2 689 dwelling are proposed in the station catchment area.
Opportunity, resilience, quality of life	1 The station and catchment are not located in the top 20% most deprived areas of England or Wiltshire.
Impact on air quality and climate change	2 The station would contribute to the reduction of air quality issues and would promote mode shift, however the range of destinations available would be limited relative to nearby Trowbridge.
Regional and strategic connectivity	2 The station would provide local and regional connectivity to Chippenham, Swindon, Trowbridge and Westbury
Policy Score TOTAL	10/30 The station only just achieves medium score on policy fit.
GVA Impact (£M per annum)	£0.31m
GJT Change/Trips	32k The station is forecast to generate a very low level of demand only 32k trip per annum
Gaps Addressed	A14 Limited access to the rail network for new developments
Deliverability	2 The delivery of a station at Staverton has the potential to be complex. It is possible that the additional journey time required to accommodate the stop would damage the paths available for Westbury – Swindon services, which would require less effective use of rolling stock, or, if frequency enhancements were also planned, may require doubling works on the Melksham chord.

8.8 Ashton Park Station

Table 39. Ashton Park Station

SCHEME		
Description	<p>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; 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.</p> <p>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.</p>	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	Station located in A350 Growth Zone.
Support economic development	3	The station is forecast to generate £2.37m of GVA and supports the development of 15ha of employment land at Ashton Park and 10ha at South Trowbridge Business Park.
Support housing development	2	The station will be close to 951 new dwellings.
Opportunity, resilience, quality of life	1	Station and catchment not in one of most deprived areas (20% most deprived) in England or Wiltshire.
Impact on air quality and climate change	3	Potential to relieve Trowbridge station improving air quality in Trowbridge and also promote mode shift.
Regional and strategic connectivity	2	The station will provide improved local and regional connectivity.
Policy Score TOTAL	13/30	The station generates a medium policy score.
GVA Impact (£M per annum)	£2.37m	
GJT Change/Trips	54k	The station may generate around 54k trips per annum, however a more detailed assessment of the impact on Trowbridge and the impact of employment and new housing is required along with an assessment of the level of abstraction from Trowbridge and Westbury.
Gaps Addressed	A14 Limited access to the rail network for new developments	
Deliverability	5	Their appear to be no significant issues with providing at least 1 tph service at the station, although more detailed work is required to ensure the timetable is robust.

8.9 Wylve Station

Table 40. Wylve Station

SCHEME		
Description	Within this option we consider the development of a station in the Wylve 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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	1	Station not located within a Growth Zone.
Support economic development	1	The station is estimated to generate up to £0.2m of GVA per annum from quite a large catchment area.
Support housing development	0	No significant number of dwellings are planned for the area.
Opportunity, resilience, quality of life	2	The station would provide access to opportunity in Salisbury, Westbury, Trowbridge and Bristol.
Impact on air quality and climate change	1	The station is not located in a AQMA. Whilst the station would promote mode shift the numbers are unlikely to be high.
Regional and strategic connectivity	2	The station provide local and regional connectivity from the area.
Policy Score Total	7/30	The station has achieved a low policy score and does not excel in any one criterion.
GVA Impact (£M per annum)	£0.2m	
GJT Change/Trips	82k	With a wide, parkway style catchment area assumed the station would only generate around 82k trips per annum.
Gaps Addressed	A12 Poor access to the rail network in South Wiltshire notably in the A303 Growth Zone	
Deliverability	4	In principle there would only be a need to develop the station with no additional infrastructure. However service provision maybe complicated by the need for long distance Portsmouth – Cardiff services to call. This would need to be reviewed in detail to understand the implications more fully.

9. ACCESS TO THE RAIL NETWORK

9.1.1 In addition to the options described above which all represent the development of the services or stations, there are also a number of options that can be delivered and will improve access to the rail network itself, or improve integration between modes. To a greater extent than the options set out above the delivery of access improvement to the rail network lie within the control of the LEP and local authorities, indeed the LEP and local authorities are already active in this area, for example through the development and delivery of the Chippenham station scheme. In the sections below we assess a number of specific schemes as well as more generic interventions.

9.2 Integrated Local & Regional Ticketing

Table 41. Integrated Local and Regional Ticketing

SCHEME		
Description	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 may be possible to provide coverage across the whole county.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	5	The system would integrate travel between Growth Zones and with neighbouring areas.
Support economic development	2	No GVA assessment is possible, however zonal ticketing would make public transport more attractive and promote cross boundary journeys, supporting labour markets.
Support housing development	2	The scheme would make public transport more attractive from new developments.
Opportunity, resilience, quality of life	4	The development of seamless travel opportunities would provide access to a wider range of opportunities for passengers and ease access to hospital and educational opportunities where multi modal trips are necessary.
Impact on air quality and climate change	2	Integrated ticketing would make public transport more attractive promoting mode shift and reducing carbon emissions and improving air quality.
Regional and strategic connectivity	2	Integrated ticketing would improve connectivity across the SWLEP area and towards Bristol.
Policy Score Total	17/30	The scheme has generated a high medium policy score.
GVA Impact	N/A	
GJT Change/Trips	N/A	
Gaps Addressed	A16 Integration of sustainable and public transport access to the rail network. A15 Access to the rail network from Swindon.	
Deliverability	3	The complexity of integrating fare systems between multiple bus and rail operators should not be underestimated. However cooperation with the existing Freedom Travel Pass system would ease this. The two train operators in the SWLEP area (GWR and SWR) are already both subscribed to the system as is Stagecoach South West who are a major bus operator in North Wiltshire.

9.3 Integrated Strategic Ticketing

Table 42. Integrated Strategic Ticketing

SCHEME		
Description	<p>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, Salisbury and Chippenham 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) 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.</p>	
ASSESSMENT		
Access to Growth Zones	5	This option would enhance strategic access to all Growth Zones.
Support economic development	2	No GVA assessment is possible, the approach would make public transport more attractive and promote cross boundary journeys, supporting labour markets.
Support housing development	2	The scheme would make public transport more attractive from new developments.
Opportunity, resilience, quality of life	4	The development of seamless travel opportunities would provide access to a wider range of opportunities for passengers and ease access to hospital and educational opportunities where multi modal trips are necessary.
Impact on air quality and climate change	2	Integrated ticketing would make public transport more attractive promoting mode shift and reducing carbon emissions and improving air quality.
Regional and strategic connectivity	4	Integrated ticketing would improve connectivity for both local regional and long distance journeys.
Policy Score Total	19/30	The option has achieved a very high medium policy score.
GVA Impact (£M per annum)	N/A	
GJT Change/Trips	N/A	
Gaps Addressed	<p>A16 Integration of sustainable and public transport access to the rail network. A15 Access to the rail network from Swindon.</p>	
Deliverability	2	This option maybe complex as to deliver in full and would require the cooperation of Plus Bus, local bus operators and either/or GWR.

9.4 Improved Access by Sustainable Modes

Table 43. Improved Access by Sustainable Modes

SCHEME	
Description	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 better-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 the existing group of Station Travel Plans originally prepared in 2013 but reviewed and updated to develop a detailed understanding of each station's requirements.
ASSESSMENT	
Access to Growth Zones	5 Improving access to stations improves access between all Growth Zones.
Support economic development	2 No GVA assessment is possible, however the approach would make public transport more attractive and enhance access to labour markets.
Support housing development	2 Improved cycling access between stations and their catchments would make the area more attractive for developers to construct homes in.
Opportunity, resilience, quality of life	4 Improved integration with sustainable modes would provide direct access from rail stations to educational or healthcare opportunities.
Impact on air quality and climate change	2 Improving and enhancing sustainable access would reduce the reliance on car as an access mode helping address local air quality issues.
Regional and strategic connectivity	4 Promoting sustainable access would help strengthen local, regional and long distance connectivity.
Policy Score Total	19/20 This option has achieved a high medium policy score.
GVA Impact (£M per annum)	N/A
GJT Change/Trips	N/A
Gaps Addressed	A16 Integration of sustainable and public transport access to the rail network.
Deliverability	5 Delivery of Station Travel Plans to assess the need of each station in the area, coupled to the specific investments that emerge is within the control of the LEP and local authorities.

9.5 Improved Rail Link Bus Services

Table 44. Improvement in connecting bus services

SCHEME		
Description	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.	
ASSESSMENT		
Access to Growth Zones	4	Improvements to bus services will improve to locations within the M4 and A303 Growth Zones
Support economic development	2	No GVA assessment is possible, however the approach would make public transport more attractive overall and enhance access to labour markets.
Support housing development	0	These improvements would be unlikely to generate additional housing development.
Opportunity, resilience, quality of life	4	Improved integration between modes would provide direct access from rail stations to educational or healthcare opportunities.
Impact on air quality and climate change	2	Improved bus services would reduce car use and in turn improve air quality (marginally) and reduce carbon emissions
Regional and strategic connectivity	4	Local, regional and long distance connectivity would be improved by better rail and bus connecting services, if accompanied by suitable integrated ticketing.
Policy Score Total	16/20	This option generates a medium policy score, with some policies scoring a medium-high score.
GVA Impact (£M per annum)	N/A	
GJT Change/Trips	N/A	
Gaps Addressed	A16 Integration of sustainable and public transport access to the rail network.	
Deliverability	3	The technical delivery of new bus services is not complex, however establishing commercial viability may be more challenging as might establishing case for operating subsidy if required.

9.6 Development of Car Sharing Schemes

Table 45. Development of Car Sharing Schemes

SCHEME		
Description	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 ad-hoc 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.	
ASSESSMENT		
Access to Growth Zones	5	Improving access to stations improves access between all Growth Zones
Support economic development	1	No GVA assessment is possible. However the impact on economic development is likely to be limited as car sharing is likely to replace existing trips rather than generate new ones.
Support housing development	1	Car share would be unlikely to have a meaningful impact on the development of housing.
Opportunity, resilience, quality of life	4	Car share may help provide improved access to opportunities especially from rural parts of the county where public transport provision is limited. .
Impact on air quality and climate change	2	The option would have a direct impact on air quality and carbon emissions as a result of the reduction in car use.
Regional and strategic connectivity	1	Car share would have a very limited impact on connectivity as it would be likely to supersede existing trips.
Policy Score Total	14/20	This option has achieved a medium policy score
GVA Impact (£M per annum)	N/A	
GJT Change/Trips	N/A	
Gaps Addressed	A16 Integration of sustainable and public transport access to the rail network	
Deliverability	5	Delivery of this option would rest with Wiltshire Council as the existing controller of the Car Share Wiltshire scheme.

9.7 Stations as Community Hubs

Table 46. Stations as Community Hubs

SCHEME		
Description	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, potentially also with the opportunity to develop employment and commercial hubs addressing the LEPs economic objectives.	
ASSESSMENT		
Access to Growth Zones	1	Impact on local community and economy of station catchment
Support economic development	2	No GVA assessment is possible. However the impact on economic development is likely to be limited to the catchment area of the station.
Support housing development	2	In rural or semi rural areas the colocation of station and facilities may retain the viability of facilities in turn making the area attractive to develop further.
Opportunity, resilience, quality of life	5	If colocation at station allowed facilities to be maintained this would help to retain access to those opportunities.
Impact on air quality and climate change	1	The option would have a very limited impact on air quality and climate change.
Regional and strategic connectivity	0	The option would have no impact on connectivity.
Policy Score Total	11/20	This option has achieved a low medium policy score
GVA Impact (£M per annum)	N/A	
GJT Change/Trips	N/A	
Gaps Addressed	A16 Integration of sustainable and public transport access to the rail network	
Deliverability	5	It is suggested that as part of the review of station travel plans the incorporation of community, commercial or employment facilities be considered. It should also be considered as a part of the development of any new stations.

9.8 Mobility as a Service

Table 47. Mobility as a Service

SCHEME		
Description	<p>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.</p> <p>With the development of a mobile phone app, residents would be able to plan their transport, be it by rail, taxi, bus, car-share or bike-share. 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</p>	
ASSESSMENT		
Access to Growth Zones	4	The option would have a strong impact on connectivity between all Growth Zones
Support economic development	3	No GVA assessment is possible. However it is likely that the overall impact would be positive as broader issues around congestion diminished.
Support housing development	0	MaaS would have little impact on housing development across the area.
Opportunity, resilience, quality of life	5	MaaS would present users with the opportunity to make informed decisions about trips potentially improving understanding and opening up opportunities.
Impact on air quality and climate change	1	The option would have a very limited impact on air quality and climate change.
Regional and strategic connectivity	0	The option would have no direct impact on connectivity.
Policy Score Total	13/20	This option has achieved a low medium policy score
GVA Impact (£M per annum)	N/A	
GJT Change/Trips	N/A	
Gaps Addressed	A16 Integration of sustainable and public transport access to the rail network	
Deliverability	2	Delivery of MaaS could be led by LEP and local authorities following the examples of others such as TfWM. Deliverability may be relatively complex, but the output would be worth more than sum of its parts as MaaS also supports a wide range of initiatives around transport integration.

10. REGIONAL & NATIONAL INTERVENTIONS

10.1.1 Set out below are assessments for a number of regional and national interventions, some of which are committed and close to delivery. These range from the impact of journey time reductions arising from Great Western electrification to the completion of HS2. As these schemes sit largely outside the influence of the SWLEP these should be seen as “free gifts” to the SWLEP area. For completeness we have presented scheme assessments so they can be compared against the other schemes assessed in the sections above.

10.2 GWEP Journey Time Reductions

Table 48. GWEP Journey Time Reductions

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	4	The improvements will support both the A350 and M4 Growth Zones.
Support economic development	4	The interventions will generate around £9.61m GVA per annum.
Support housing development	1	The intervention is unlikely to have direct impact on any housing development, but may make parts of the county more attractive for developers.
Opportunity, resilience, quality of life	1	The changes will represent an incremental improvement in access to opportunities.
Impact on air quality and climate change	1	The scheme will have a limited impact on mode shift, although it is likely that rail already holds a very high mode share for trips from the SWLEP area to the London area.
Regional and strategic connectivity	1	The intervention will not increase service frequency or introduce new services, but will reduce journey times.
Policy Score Total	13/20	The intervention achieves a medium policy score driven with very high scores in two categories and very low scores in other categories.
GVA Impact (£M per annum)	£9.61m	A very high GVA value is achieved due to the size of the London economy, and the number of flows impacted.
GJT Change/Trips	-4%	There is an average reduction of 4% in GJT values across the study area.
Gaps Addressed	MI3 Retaining and improving average services towards London on the GWML and B&H.	
Deliverability	5	This intervention will be delivered as part of the next timetable change in December 2019, when existing services are retimed to take advantage of the new IET trains now in use.

10.3 Metro West

Table 49. Metro West

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	2	Metro West would improve access to the A350 growth zone from Bristol.
Support economic development	1	A service to Westbury is estimated to generate £1.28m of GVA per annum.
Support housing development	1	The intervention is unlikely to have direct impact on any housing development, but may make parts of the county more attractive for developers.
Opportunity, resilience, quality of life	2	The service would enhance existing connectivity to and from opportunities in Bristol.
Impact on air quality and climate change	2	The service would promote mode shift for short/medium distance trips to Bristol improving air quality and reducing carbon emissions.
Regional and strategic connectivity	1	The service would provide an incremental change in frequency on a route where direct services already exist.
Policy Score Total	9/30	The service generates a low policy score, with no policy obtaining a more than a low/medium score.
GVA Impact (£M per annum)	£1.28m	The service generates a low GVA level of £1.28m per annum
GJT Change/Trips	-14%	The service would generate a GJT reduction of 14%
Gaps Addressed	MI5 Optimisation of services on Trans Wilts Corridor	
Deliverability	2	Delivering Metro West would require additional rolling stock and may require an additional platform at Westbury depending on the timing of services. It is also understood that level crossing may also require upgrading.

10.4 Western/Southern Rail Access to Heathrow

Table 50. Western/Southern Rail Access to Heathrow

SCHEME		
Description	<p>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.</p>	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	5	The improvements will support international connectivity from all Growth Zones.
Support economic development	4	The interventions will generate around £9.6m of GVA per annum. In practice the impact of high quality international connectivity is likely to have a strong marketing value to business.
Support housing development	0	The intervention is unlikely to have any impact on housing development in SWLEP.
Opportunity, resilience, quality of life	1	The changes will represent an incremental improvement in access to opportunities.
Impact on air quality and climate change	2	The scheme will have an impact on mode shift, for accessing Heathrow with rail becoming a viable alternative to car travel.
Regional and strategic connectivity	1	The intervention will not increase service frequency or introduce new services, but will reduce journey times.
Policy Score Total	13/20	Access to Heathrow produces medium score overall.
GVA Impact (£M per annum)	£9.6m	
GJT Change/Trips-22%	-22%	This option generates a large reduction in GJT with some individual results reaching a 45% reduction.
Gaps Addressed	C8 International access via Heathrow.	
Deliverability	3	The scheme is not fully committed at this point in time, and would require both additional rolling stock and new infrastructure. However the development of this scheme falls outside of the gift or responsibility of SWLEP.

10.5 Crossrail

Table 51. Crossrail

SCHEME		
Description	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.	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	4	The improvements will support both the A350 and M4 Growth Zones.
Support economic development	5	The interventions will generate around £12m GVA per annum. Although it should be noted that this is very sensitive to passengers responses to the use of the London Underground/Crossrail which they may not perceive in the same way they perceive the “trunk” part of their journey from Wiltshire.
Support housing development	0	The intervention is unlikely to have any impact on housing development in SWLEP.
Opportunity, resilience, quality of life	1	The changes will represent an incremental improvement in access to opportunities.
Impact on air quality and climate change	1	The scheme will have a limited impact on mode shift, although it is likely that rail already holds a very high mode share of trips from the SWLEP area to the London area.
Regional and strategic connectivity	1	The intervention will not increase service frequency or introduce new services, but will reduce journey times.
Policy Score Total	12/30	The intervention achieves a medium policy score driven with very high scores in two categories and very low scores in other categories.
GVA Impact (£M per annum)	£12m	This is likely to be an upper limit as the result is very sensitive to how passengers perceive the “trunk” part of their journey from Wiltshire.
GJT Change/Trips	-5%	The scheme will achieve an average 5% reduction in GJT between Wiltshire stations and station key locations in central London.
Gaps Addressed	MI3 Retaining and improving average services towards London on the GWML and B&H.	
Deliverability	5	Crossrail is complete, but service introduction is subject to the resolution of outstanding signalling control and stations issues.

10.6 High Speed 2

Table 52. High Speed 2

SCHEME		
Description	<p>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.</p>	
ASSESSMENT	SCORE	NOTES
Access to Growth Zones	0	HS2 will have an indirect impact on access to growth zones but with no direct impact it fails to generate a score
Support economic development	5	HS2 is estimated to generate around £10.59m of GVA for the SWLEP area.
Support housing development	0	The intervention is unlikely to have any impact on housing development in SWLEP
Opportunity, resilience, quality of life	1	The changes will represent an incremental improvement in access to opportunities
Impact on air quality and climate change	1	The scheme will have a limited impact on mode shift, although it is likely that rail already holds a very high mode share of trips from the SWLEP area to the London area.
Regional and strategic connectivity	5	HS2 will provide a transformational change in accessibility to the north of England and Scotland.
Policy Score Total	12/30	HS2 achieves a medium policy score through its impact on the economy and connectivity.
GVA Impact (£M per annum)	£10.59m	
GJT Change/Trips	-11%	The average GJT reduction is 11%, however this masks considerable variation, across a wide variety of O-D pairs. It is also constrained by the limitations of connecting service to and from Wiltshire, for example on the B&H route.
Gaps Addressed	<p>C1 Connectivity from Swindon to the Midlands & North. C2 Connectivity from Wiltshire to the Midlands & North.</p>	
Deliverability	3	The scheme is not fully committed at this point in time, and would require both additional rolling stock and new infrastructure. However the development of this scheme falls outside of the gift or responsibility of SWLEP.

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

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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 St

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

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The SYSTRA logo is rendered in a bold, red, sans-serif typeface. The letters are thick and closely spaced, with a distinctive design where the 'S' and 'Y' have a slightly irregular, hand-drawn quality. The 'A' is also bold and blocky. The overall appearance is clean and professional.