WILTSHIRE COUNCIL

WILTSHIRE RAIL STUDY STRATEGIC ANALYSIS REPORT

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INTRODUCTION

1.1 Background

- 1.1.1 Wiltshire is well served by rail with a number of different services providing connections to London, the South West, South Coast, Wales and the Midlands. Some of these services provide more local connections within Wiltshire and to nearby Swindon, Bath and Bristol. However, a high proportion of rail trips have an external origin or destination and only a small number of rail trips are wholly within Wiltshire. This is in contrast to the large numbers of car trips between Wiltshire towns and raises the question of whether existing rail services best serve travel needs within Wiltshire.
- 1.1.2 Consequently, one of the aims of this study is to identify potential rail demand within Wiltshire that would occur with new rail stations and new and improved rail services. A transport planning approach has been used that has identified rail demand relationships using local travel and planning data so that the effects of changed and new rail provision can be forecast. In this way, the forecasts are not constrained by current service provision and proposals.
- 1.1.3 The work has been carried out by Robert McLean, Transport Planning Consultant, who has extensive experience of road and rail planning, modelling and appraisal.

1.2 Scope of Work

- 1.2.1 The study is divided into the following work tasks:
 - Task 1 Travel Demand Available rail and other relevant data was assembled and summarised to provide a picture of rail services and facilities and of rail demand in relation to bus and car data to provide an understanding of current rail use and patterns and the initial identification of potential new rail demand;
 - Task 2 Rail Provision & Operations Review of existing rail operations in relation to concerns and aspirations to address gaps in services and stations. The rail provision and operations aspects were considered along with the preliminary demand review carried out in Task 1 in order to develop at an early stage of the study some preliminary rail themes and options to be quantified and developed in the next stage of the study;
 - Task 3 Patronage Forecasts Rail demand forecasting using relationships derived from local rail, travel and planning data;
 - Task 4 Rail Strategic Analysis Patronage forecasts and feedback from initial proposals used to firm up on a small number of options with further analysis and recommendations.
- 1.2.2 This report describes Task 4 including the analysis of rail strategy components and options leading to recommendations for inclusion in a Wiltshire rail strategy.

2. POTENTIAL RAIL DEVELOPMENT

2.1 **Existing Stations**

- 2.1.1 Projected housing and employment to 2026 in the vicinity of existing rail stations as set out in the Wiltshire Core Strategy document would, alongside expected rail passenger growth, result in some substantial increases in rail patronage, see Table 1. Trowbridge shows the highest level of development and the largest rail passenger increases but the development is located on the south east edge of the town and although within 2 to 3km of the station a frequent bus service and other measures may be needed to achieve the forecast passenger numbers. The potential new station at the White Horse business park would be much more convenient and if implemented would be expected to capture most new business. The low forecasts for Melksham are derived from the poor existing rail service and would be considerably more if the improved Trans Wilts service is implemented.
- 2.1.2 All of the stations with significant development, apart from Bradford-on-Avon, are the busiest stations of main towns in Wiltshire and are on the Trans Wilts line. The improvement of Trans Wilts services would be able to take up some of the additional rail demand resulting from future development and although there would be some abstraction from existing services the additional demand would help to make the case for the improvement.

Table 1: Rail Trips at Existing Stations From Future Development

:elfect Hi	2004/5	2026 NRTS	Development to 2026			
Existing Station	NRTS Rail Trips (boarding) (1)	Rail Trips (boarding) (2)	Homes (3)	Jobs (4)	Rail Trip Increase (boarding) (5)	
Westbury	517	1277	835	1850	273	
Trowbridge	1034	2439	4590	2500	875	
Bradford-on- Avon	492	1367	425	200	132	
Melksham – Existing	33	23	1530	600	3	
Melksham - Trans Wilts	291	570	1530	600	74	
Chippenham	2138	4186	3515	2650	687	
Warminster	526	1014	1385	600	144	
Salisbury	1905	3394	3690	2900	576	

- Notes: (1) 2004/5 boarding trips per day, all purposes & destinations.
 - (2) Recorded growth 2004/5-2010, 3% per year growth estimated 2010-26.
 - (3) Development to 2026 from Area Strategies of Wiltshire Core Strategy, Feb 2012.
 - (4) Rail trips from future employment assumes 100 jobs per hectare.
 - (5) Increase in rail trips due to new development based on rail trip rates applied to existing and future homes and jobs.

2.2 Potential New Rail Stations

- 2.2.1 The list of potential new stations was obtained from various proposals from Wiltshire Council and other organisations. Some of these, notably Corsham, had been studied in some detail in the past and others were suggestions with little analysis to support them. The rail patronage forecasts for the potential new stations, Table 2, have provided demand forecasts using a consistent methodology so that the potential performance of the stations can be compared.
- 2.2.2 It is realised that only a small number of new stations are likely to have sufficient passenger demand, are able to fit into existing and future services and are affordable. So it is necessary to consider the merits of all relevant aspects of the potential new stations to identify those that should be progressed.
- 2.2.3 The feasibility and cost of new stops on existing services or providing new services is a key factor in determining the viability of new stations. New stations are most cost effective where an additional stop can be accommodated on existing services. However, it is often difficult to include additional stops due to signalling and timetable constraints. Also new services, even when financially viable, are not always easy to introduce due to train capacity and infrastructure constraints. Such train service issues relating the potential new stations are described below and summarised in Table 2:
 - It is very unlikely that additional stops would be possible on the Great Western services between Paddington and Bristol, South Wales and the West of England. These are long distance, high speed, limited stop services and additional stops at Royal Wootton Bassett, Corsham, Chippenham / Hullavington Parkway and Devizes Parkway would be too close to existing stations. New local services would be needed for these new stations, the Trans Wilts service for Royal Wootton Bassett or the Bristol-Swindon service for Royal Wootton Bassett and Corsham and the extended Paddington-Bedwyn service for Devizes Parkway. There is no likely new service for Chippenham / Hullavington Parkway;
 - The South West Trains Waterloo-Exeter service is also long distance, high speed and limited stop and additional stops would mostly be unlikely. Dinton is close to and can be served by the existing Tisbury station. Wilton although close to Salisbury could be served by existing local services as well as the improved Trans Wilts service. Porton, although 10km from Salisbury, has high potential demand and there could be an opportunity to introduce an additional stop on the Waterloo-Exeter service as there is no likely new local service;
 - The Paddington to Cheltenham service is also long distance, high speed and limited stop. The Minety and Purton potential stations have low forecast demand and are unlikely to be progresses. The Moredon Bridge station has high potential demand because of the proximity to the Swindon urban area but it is within 4 km of Swindon station. The Swindon to Kemble section is currently being double tracked and there

could be an opportunity to include the Moredon Bridge station. However, Swindon Borough Council's Local Plan proposes a rapid transit route linking the north western urban extension with the town centre. The rapid transit route partially follows the disused Cricklade branch, passing within 1 km of Moredon Bridge station site, and could well abstract much of the Moredon station demand;

- Holt and Staverton potential stations are close to Melksham and Trowbridge and have low forecast demand and would be unlikely to be used by existing or new services. White Horse potential station is on the edge of Trowbridge and although relatively close to the existing station, high demand is forecast from existing and future development. The White Horse station would best be served by the new Trans Wilts service;
- Wylye Parkway potential station is located midway between Warminster and Salisbury and has the lowest forecast demand due to its location at the junction of the A303 and A36 away from development. Consequently the station would rely almost entirely on park & ride patronage from the A303 and A36. Patronage from A303 traffic would be low as a change of train at Salisbury would be required for both London and Exeter bound traffic. Patronage from A36 traffic would be low as there are only 126 journey to work car trips with origins in the A36 corridor south of Warminster and destinations within 1 km of Salisbury station and a low number of rail park & ride trips are likely;
- Ludgershall potential station is at the end of an existing branch used solely for freight. Rail passenger demand is forecast to be high but a new passenger service would be needed and there is the likelihood of substantial abstraction from the existing frequent bus service to Andover as Census journey to work data shows a high proportion of car trips from Ludgershall are to Andover.
- 2.2.4 Consideration of these aspects shows that only a few potential new stations are feasible and form a short list to be considered further. Each of these potential new stations depends on an additional stop on an existing service or a new service:
 - Royal Wootton Bassett, White Horse and Wilton primarily but not exclusively with the new Trans Wilts service;
 - Corsham and Royal Wootton Bassett with the new Bristol-Swindon service;
 - Porton with an additional stop on the existing Waterloo-Exeter service;
 - Devizes Parkway with the extended Paddington-Bedwyn service.

Table 2: Rail Trips at Potential New Stations

	Development		2026	Existing	Potential New	
Station	Homes (1)	Jobs (2)	Trips/Day (boarding) (3)	Services (4)	Services (5)	
Moredon Bridge	Manage Sand	1201188	2153	PC	-	
White Horse	4590	2500	1286	BP,BW,SS	TW,PBB	
Porton	les melites	1000	1067	WE		
Royal Wootton Bassett	850	500	837	PB,PSW,SS	TW,BCS,BBS	
Wilton	1390	100 811	769	BP,WE,SS	TW	
Ludgershall	1545	1200	720	v Encarous		
Chip/Hullavington Pkwy	1108 8130	11.6 911	568 *	PSW	-	
Devizes Parkway A	660	1000	483 *	PWE	PBB	
Corsham	910	ALTE: NO	327	PB	BCS	
Purton			166	PC	-	
Minety			161	PC		
Holt	V-Supervisor or no		140	SS	TW,BBS	
Staverton			104	SS	TW,BBS	
Dinton	200	ic piot	97	WE	-	
Wylye Parkway	a suction	PHIQU I	40 *	BP	TW	

Notes:

- (1) Development to 2026 from Area Strategies of Wiltshire Core Strategy, Feb 2012
- (2) Rail trips from future employment assumes 100 jobs per hectare.
- (3) Forecast rail trips from mode share applied to 2001 Census journey to work car trips with NRTS expansion factor to all purposes, average rail trip growth in Wiltshire 2001-2010 and 3% per year growth estimated 2010-26.

 * specific park & ride demand estimates not included.
- (4) Existing Services:

PWE: Paddington - West of England PSW: Paddington - South Wales PC: Paddington - Cheltenham Spa

WE: Waterloo - Exeter BP: Bristol - Portsmouth BS: Bristol - Weymouth SS: Swindon - Southampton

(5) Potential Services: TW: Trans Wilts

BCS : Bristol – Corsham – Swindon BBS : Bristol – Bradford – Swindon

PBB: Paddington - Bedwyn - Bristol (extension)

2.3 Service Improvements

- 2.3.1 The results of the elasticity forecasts for new and improved services are shown in Table 3 along with the passenger forecasts for the short list of potential new stations from which the following conclusions can be drawn.
 - The additional stop at Porton with the Waterloo-Exeter service will provide a useful new rail connection with high potential demand;
 - The improved Trans Wilts service would provide a small number of additional direct connections but would provide a large increase in train departures from Wiltshire stations and a significant increase in passenger boardings. It would also strongly support the case for three potential new stations to open, each of which shows high passenger demand. It should be noted that the forecast patronage shown for White Horse station is just for future development but the amounts for Royal Wootton Bassett and Wilton will include some abstraction from Swindon and Salisbury stations;
 - The new Swindon-Bradford on Avon-Bristol service would provide a useful increase in direct connections and a large increase in train departures from Wiltshire stations. However the increase in passenger boardings would be relatively small in relation to train departures and no new stations would be served;
 - The increased frequency on the Bristol-Weymouth service would provide no additional direct connections, a small increase in train departures and a small increase in passengers. It would connect the White Horse potential new station but this station would be better served by the Trans Wilts service;
 - The introduction of the Bristol-Corsham-Swindon stopping service would provide no additional direct connections, a small increase in train departures but would connect the Royal Wootton Basset and Corsham potential new stations;.
 - The extension of the Paddington to Bedwyn service to Bristol Temple Meads via Westbury and Bradford-on-Avon would provide a few additional direct connections, a large increase in train departures at Wiltshire stations and a reasonable increase in passengers. It would also enable the Devizes potential new station to be connected.
- 2.3.2 Consideration of the forecast performance of the new and improved services and the short list of potential new stations shows that the following are likely to prove viable:
 - Trans Wilts new service connecting Royal Wootton Bassett, White Horse and Wilton new stations:
 - Bristol-Swindon new service connecting Corsham and Royal Wootton Bassett new stations;
 - Additional stop at Porton on the existing Waterloo-Exeter service;

 Extension of the Paddington-Bedwyn service to Westbury, Bradford-on-Avon, Bath Spa and Bristol connecting Devizes Parkway new station.

Table 3: Effects of New & Improved Services

	Measure of Connectivity- No. of Direct Connections (1)	Measure of Level of Rail	Forecast Daily Passengers Using Stations in Wiltshire (boarding)		
Improvement		Service – No. of Train Departures Per Day (2)	Potential Service Improve- ments (3)	Potential New Stations (4)	
Existing	83	903	27,675	Porton +1,067	
Trans Wilts	+6	+205	+1,240	Wootton Bassett +837 White Horse +652 Wilton +652	
Swindon-Bradford-Bristol +12 Bristol-Weymouth 0 Bristol-Corsham-Swindon 0 Paddington-Bedwyn-Bristol +2		+160	+663	- White Horse +652	
		+50	+203		
		+32	+427	Wootton Bassett +837 Corsham +327	
		+145	+659	Devizes Parkway +483	

Notes:

- (1) No. of direct connections between stations in Wiltshire.
- (2) No. of train departures per day from stations served by Wiltshire rail services.
- (3) 2026 forecasts for working weekday based on 2004/5 NRTS data. 2004/5 to 2010 average growth over all Wiltshire stations = 1.23 2010 to 2026 forecast growth at 3% per year = 1.03¹⁶ = 1.60
- (4) From Table 2.

2.4 Bus Connections

- 2.4.1 The passenger forecasts for notional rail stations in the centre of Devizes, Marlborough, Malmesbury and Calne were made to provide an initial assessment of the potential use of such services and a direct comparison with the forecasts for potential new rail stations. These forecasts represent an upper limit of what is possible with "rail-like" bus services for which it has been found that users have rail-like demographics and travel behaviour.
- 2.4.2 These towns do not have passenger railways passing through them but transport policy seeks to provide better transport connections throughout Wiltshire and high quality bus or coach services could provide a level of service similar to rail and can be thought of as 'virtual rail links'.

- 2.4.3 The distribution of journey to work car trips used to forecast the number of notional rail trips identified the bus and coach links that would be attractive for the bus and coach services:
 - Devizes has a high number of car commuters to the centre of Swindon and Pewsey and to and from Melksham, Calne, Chippenham and Trowbridge;
 - Calne has a high number of car commuters to the centre of Swindon and to and from Chippenham and Devizes;
 - Malmesbury has lower car commuting to the centre of Swindon and Calne and to and from Chippenham;
 - Marlborough has the least car commuting to the centre of Swindon, Pewsey and Bedwyn and to and from Devizes.
- 2.4.4 Consideration of the passenger forecasts for the notional rail stations suggests the following bus or coach services would be attractive and could attract current car drivers with high quality services:
 - Direct high quality bus or coach link from each town to Swindon;
 - Direct links between Calne and Chippenham, Devizes and Calne and Melksham, Malmesbury and Chippenham.

Table 4: Daily Rail Trips at Notional Stations

	Existin	With Future Development				
Station	2001 JTW Forecast 'Rail' Trips (1)	NRTS All Purpose Factor (2)	2026 'Rail' Trips (3)	Growth Factor (4)	2026 'Rail' Trips (5)	2026 Increase (6)
Devizes	475	1.72	1567	1.12	1757	190
Marlborough	166	1.97	628	1.17	733	105
Malmesbury	212	1.97	801	1.17	941	140
Calne	376	1.72	1239	1.12	1384	145

Notes:

- (1) Forecast rail-like trips per day from mode share applied to 2001 Census journey to work car trips.
- (2) Expansion factor to all purposes from NRTS data for similar existing station.
- (3) 2004/5-2010 rail trip growth for similar stations, 3% per year growth 2010-26.
- (4) Rail-like trips growth factor due to new development based on rail trip rates applied to existing and future homes and jobs.
- (5) 2026 rail-like trips per day (3) x (4)
- (6) 2026 increase in rail-like trips per day due to future development (5) (3)

2.5 Infrastructure

- The new stations that have been identified as candidates for further consideration are Porton, Royal Wootton Bassett, White Horse, Wilton, Corsham and Devizes Parkway. It is likely that each of these new stations would involve platforms and footbridges without the need for trackwork. Engineering studies are needed but at this stage it would appear there are no unusual infrastructure requirements that would constrain or delay any implementation.
- 2.5.2 Timetable studies are needed to confirm the feasibility of the new and improved passenger services that have been identified as part of this study. But initial work shows that there should be sufficient track capacity to accommodate the proposed services:
 - Current proposals for the Trans Wilts service would add one additional train every two hours in each direction with the aspiration to increase the frequency to an hourly service. There are on average four trains per hour in each direction between Swindon and Chippenham and there would be an additional train and a stop at Royal Wootton Basset. On the single track section between Chippenham and Trowbridge a two hourly service in each direction and a stop at Melksham should be possible as there are currently few passenger and freight trains during the day. The Trowbridge to Westbury section currently has three to four trains per hour in each direction and the Trans Wilts service would add an additional hourly train. Current line usage is lower between Westbury and Warminster;
 - The Bristol-Corsham-Swindon service would add one train per hour in each direction and together with the Trans Wilts service would add two trains per hour to the four high speed trains on the Royal Wootton Bassett-Swindon section. The feasibility of this operation will need to be investigated. Between Chippenham and Bath Spa there are two high speed trains per hour and the additional hourly service and stop at Corsham should be feasible:
 - The extension of the Paddington-Bedwyn service to Westbury, Bradford-on-Avon, Bath Spa and Bristol Temple Meads with the Trans Wilts service would add two trains per hour in each direction between Westbury and Trowbridge and the feasibility of this will need to be verified. The Great Western Route Utilisation Strategy (RUS) includes an additional platform at Westbury and this may be sufficient.
- 2.5.3 It is considered likely that the proposed new and improved services can be introduced without the need for track and signalling improvements and the new stations would only need limited signalling and track changes. An hourly frequency for the services has been assumed and this would provide an attractive service that is likely to optimise patronage and costs. If, through necessary further analysis, it is not found possible to provide such a level of service without significant infrastructure improvements then it would be

satisfactory to provide two hourly services and still attract significant patronage. Also there could well be operational and funding benefits to run two hourly initial services.

2.6 Rail Passenger Services

- The patronage forecasts have confirmed that the Trans Wilts service would be attractive and provide a major improvement in connectivity for several Wiltshire towns. It is therefore recommended that it should form the core of a Wiltshire rail strategy and should be accorded a high priority. Ideally, it should run between Swindon and Salisbury as these are major attractors and rail destinations. New stations at Royal Wootton Bassett and Wilton would ideally be opened at the same time or as soon as possible after the service starts. These stations would generate high patronage from existing development straight away. The White Horse station should open when future development builds up.
- 2.6.2 The Bristol-Swindon service would best be introduced with the opening of Corsham and Royal Wootton Bassett stations to maximise patronage. Again it is important to run the service between the major attractors and rail destinations of Bristol Temple Meads and Swindon.
- 2.6.3 Porton new station would be dependent on the timing of new development.
- 2.6.4 The extension of the Paddington-Bedwyn service to Westbury, Bradford-on-Avon, Bath Spa and Bristol Temple Meads could proceed as soon as feasible as patronage will largely be gained from existing development. Similarly, the new Devizes Parkway station is not dependent on future development and could be introduced as soon as feasible. Ideally the new station should be ready for service opening to create maximum impact.
- 2.6.5 Consideration of the passenger forecasts for notional rail stations in Devizes, Calne, Marlborough and Malmesbury, which are unconnected by rail at present, suggests that rail-like bus or coach services would be attractive and could attract current car drivers with high quality services. Specifically identified bus to rail links are: a direct high quality bus or coach link from each town to Swindon; and direct links between Calne and Chippenham, Devizes and Calne and Melksham, Malmesbury and Chippenham.

2.7 Freight

2.7.1 Network Rail's Freight RUS shows 20-30 freight trains per day between Swindon and Royal Wootton Bassett, 10-20 between Royal Wootton Bassett and Bristol and Reading and Westbury and 5 to 10 between Southampton and Wesbury. The Freight RUS did not identify any capacity or capability gaps in Wiltshire with predicted growth to 2019.

- 2.7.2 There could be implications from the gauge clearance enhancement scheme from the port of Southampton to the West Coast Main Line (WCML) via Winchester, Reading West, Coventry and Nuneaton. Diversionary routes have been identified to accommodate the enhanced gauge:
 - Via Laverstock and Andover has been approved under the strategic freight network as a committed scheme;
 - Via Melksham is currently uncommitted but remains an aspiration for the strategic freight network (SFN) and studies have been initiated. The outcome of these and any implications on passenger train operations or infrastructure improvements are not known.
- 2.7.3 Wiltshire has not been identified as the location for any strategic intermodal terminals. As elsewhere, the negative local impacts of a concentration of HGV traffic are a significant consideration. Efforts so far have tended to seek opportunities to establish smaller-scale facilities serving local industry and a number of possible locations have been identified, see Table 5. A review of these possibilities has led to the following conclusions:
 - A rail freight facility adjacent to the Westbury railway sidings would be possible subject to feasibility study;
 - The Lafarge site has a rail connection that continues to be used. It is recommended that the future use and safeguarding of the facility is considered in the development of a Wiltshire rail strategy;
 - The former Quidhampton quarry is identified for employment in the Wiltshire Core Strategy. It has a rail connection and it is recommended that the future use and safeguarding of the facility is considered in the development of a Wiltshire rail strategy;
 - The Bowerhill site is identified for major new employment in the Wiltshire Core Strategy but reconnection to the rail network may not be feasible and cost effective as there is no certainty that businesses would wish to use rail freight.

Table 5: Rail Freight Opportunities

Location	Description
Westbury rail freight facility	Site within existing rail property. The land identified in local planning documents is now in use by Network Rail for dismantling track. Temporary freight flows have utilised wagon repair sidings.
Lafarge rail freight facility	The former cement works at Westbury is rail- connected and continues to serve as a distribution centre for cement products.
Quidhampton rail freight facility	The former Quidhampton quarry between Salisbury and Wilton is rail connected.
Bowerhill rail freight facility	Bowerhill, south of Melksham is the location of industrial and distribution activity adjacent to the A350. The site is adjacent to the route of the former Holt Junction-Devizes railway.

3. STRATEGIC ANALYSIS

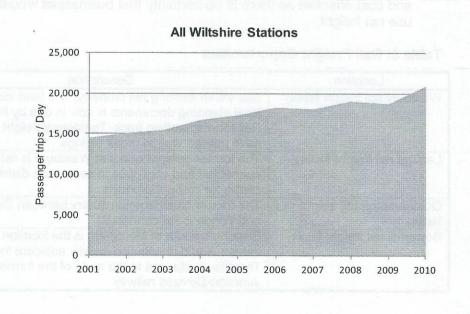
3.1 Background

- 3.1.1 The next 10-15 years will be a time of rapid growth with 37,000 new homes and 27,500 new jobs being envisaged in the 2006 to 2026 period by the Core Strategy spatial plan. In order for Wiltshire Council to meet its key strategic objectives of delivering a thriving economy, addressing climate change and providing everyone with access to a decent, affordable home, it must have a transport system which offers high quality access to jobs, retail and leisure opportunities in the Wiltshire towns and to the adjacent major centres.
- 3.1.2 The aim is to encourage people to use sustainable transport, such as walking, cycling and public transport instead of the private car. There are opportunities to enhance the rail travel journey experience within and to and from Wiltshire which could facilitate both economic growth and a reduction in carbon emissions.

3.2 Current Situation

3.2.1 Wiltshire is well served by rail with a network of rail lines with 13 stations and a number of different services providing connections to London, the South West, South Coast, Wales and the Midlands. Some of these services provide more local connections within Wiltshire and to nearby Swindon, Bath and Bristol. Patronage has grown above the national average – around 4.1% per annum between 2001 and 2010. Patronage at Westbury and Bradford-on-Avon stations doubled in this period and increased by 76% at Trowbridge.

Figure 1: Rail Passenger Growth at Wiltshire Stations



- 3.2.2 However, a high proportion of rail trips have an external origin or destination and only a small number of rail trips are wholly within Wiltshire. This is in contrast to the large numbers of car trips between Wiltshire towns and raises the question of whether existing rail services best serve travel needs within Wiltshire.
- 3.2.3 With pressures on the Wiltshire road network there are opportunities to increase the number of areas served by rail and to provide improved connections between towns in Wiltshire and to the major external attractors, principally Swindon, Bath and Bristol. This would improve connectivity, reduce cross Wiltshire car movements and connect to significant growth areas.

3.3 Potential for Improvement

- 3.3.1 Rail is used more than cars for journeys to work where there is a train station within walking distance of home according to travel data for Wiltshire. This confirms findings from other cities that rail travel is popular if it is convenient, comfortable and competitive in travel time and cost.
- 3.3.2 Rail usage rates are much higher at, for instance, Chippenham, Salisbury and Westbury where there are many trains per day, than at Melksham where are only two trains per day at present. Providing an hourly, or even a two hourly, service on the Trans Wilts line would require additional rolling stock but not expensive infrastructure works and could result in greatly increased patronage particularly because of the considerable future developments planned along the corridor.
- 3.3.3 There are clear indications elsewhere that rail patronage would increase with the introduction of new stations and more frequent services. Wiltshire has not had the benefit of new stations in recent times, only the removal and reduction of services which reduce demand. But experience elsewhere and the high increases in patronage where services have been maintained, indicates that carefully planned new stations and new and improved services would be successful due to the proximity of housing and employment.
- 3.3.4 New stations and new and improved services would potentially be good value for money providing travel time benefits for rail users who would be able to avoid traffic congestion on surrounding roads. Other road users would also benefit from congestion relief.
- 3.3.5 In the short term to medium term, it is considered that some new stations and service improvements could be implemented with additional rolling stock and only minor infrastructure changes. Other additional new stations and further service improvements would require new infrastructure, passing loops and more rolling stock that can only be achieved in the longer term.

3.4 Implementation Plan

- 3.4.1 Wiltshire's Local Transport Plan 2011-2026 (LTP3) includes a balanced rail strategy that seeks to increase rail connectivity through the provision of busrail links and assist with the implementation of some new stations. There is support for the function of rail stations as transport hubs and Wiltshire Council will proactively work with partners to introduce service and corridor improvements particularly between Chippenham, Salisbury and Trowbridge. The LTP3 also states that Wiltshire Council will cover the administration costs of community rail partnerships and where appropriate and necessary, safeguard and purchase land for rail improvements. Finally, the LTP3 outlines that Wiltshire Council will be actively involved in encouraging rail usage by working with the rail industry and local partnerships.
- 3.4.2 The rail industry's Great Western Route Utilisation Strategy (RUS) includes plans to improve the Swindon and Gloucester line by redoubling the line between Swindon and Kemble (which has started) and later by signalling improvements. Capacity and performance at Westbury station is recommended to be improved through the provision of an additional platform. Electrification of the Great Western Main Line to South Wales and Bristol is programmed to be completed in the next five year period. Longer trains in the peak periods are proposed for the Cardiff to Portsmouth and Bristol to Weymouth services to overcome existing and future overcrowding. addition, one morning and one evening peak service on the Cardiff to Portsmouth route would have limited stops between Westbury and Bristol Temple Meads and a separate stopping service would be introduced. An hourly service between Westbury and either Chippenham and Swindon was considered in the RUS but further investigation was required.
- Modelling of forecast patronage suggests that a Trans Wilts service would be attractive and provide a major improvement in connectivity for several Wiltshire towns. It is therefore recommended that the service should form the core of a Wiltshire rail strategy and be accorded a high priority. Ideally, it should run between Swindon and Salisbury as these are major attractors and rail destinations. New stations at Royal Wootton Bassett and Wilton would ideally be opened at the same time or as soon as possible after the service starts. These stations would generate high patronage from existing development straight away. The White Horse station should open when future development builds up.
- A new hourly service between Bristol Temple Meads and Swindon, serving local stations and new stations at Royal Wootton Bassett would also be an attractive new service. This service would best be introduced with the opening of Corsham and Royal Wootton Bassett stations to maximise patronage. Again, it is important to run the service between the major attractors and rail destinations
- 3.4.5 The new stations and the new and improved services will provide an enhancement of rail services at the local and sub-regional level. Existing

track can be used and even with the requirement for new rolling stock, they should offer a medium cost but high value transport solution.

- 3.4.6 Provision of extra rolling stock for local services is difficult as there is a national shortage of local diesel units. However, opportunities will exist in the medium term for such trains to be cascaded to local lines in Wiltshire as electrification of local networks proceed in other parts of the country.
- 3.4.7 Consideration of the passenger forecasts for notional rail stations in Devizes, Calne, Marlborough and Malmesbury, which are unconnected by rail, suggests that rail-like bus or coach services would be attractive to current car drivers if high quality services were provided. Subject to a feasibility analysis, direct high quality bus or coach link from each town to Swindon could be implemented at an early stage with direct links to stations on the Trans Wilts line being introduced when the service begins.

3.5 Longer Term

- 3.5.1 In the longer term, more costly options with associated new infrastructure would be needed to deliver more frequent services. In the interim, the Trans Wilts and other new services could be introduced with a lower frequency and new infrastructure provided in the longer term to provide the desirable level of service.
- 3.5.2 Porton new station would be dependent on the timing of new development and resolving any issues concerning an additional stop on the Exeter to Waterloo service.
- 3.5.3 The extension of the Paddington-Bedwyn service to Westbury, Bradford-on-Avon, Bath Spa and Bristol Temple Meads would be attractive but involves a change to an existing long distance route and might be best implemented in the longer term. Patronage will largely be gained from existing development and the new Devizes Parkway station would not be dependent on future development. Ideally the new station should be ready for service opening to create maximum impact.

3.6 Rail Freight

- 3.6.1 The Freight RUS did not identify any capacity or capability gaps in Wiltshire with predicted growth to 2019 but there could be implications from the gauge clearance enhancement scheme from the port of Southampton to the West Coast Main Line. The diversionary route to accommodate the enhanced gauge via Laverstock and Andover has been approved under the strategic freight network as a committed scheme and the route via Melksham is currently uncommitted but remains an aspiration for the strategic freight network.
- 3.6.2 Wiltshire has not been identified as the location for any strategic intermodal terminals. As elsewhere, the negative local impacts of a concentration of HGV

traffic are a significant consideration. Efforts so far have tended to seek opportunities to establish smaller-scale facilities serving local industry with the conclusion that the Lafarge site, which has a rail connection that continues to be used, and the former Quidhampton quarry, which is identified for employment in the Wiltshire Core Strategy, should both be considered for support and safeguarding in a Wiltshire rail strategy.

3.7 The Way Ahead

- 3.7.1 The delivery of new stations and services requires considerable and sustained commitment by the stakeholders involved. The first step in the process should be an agreement between Wiltshire Council, the train operators and Network Rail to develop and take forward a Wiltshire rail strategy. Initial patronage and economic assessments have been undertaken as part of this study and the next significant step after the development of a strategy would be preliminary design work to determine the viability and feasibility of delivering identified rail improvements.
- 3.7.2 Further design and preparation work will then be required to meet the requirements of Network Rail's Governance of Railway Investment Projects (GRIP) process. At the same time an implementation programme would be agreed.