

PURPOSE OF REPORT

The context in which we are operating in terms of transport issues is constantly changing and in recent years a whole host of new and different issues and challenges have been brought onto the agenda.

This report seeks to highlight these issues and draw out the key challenges faced in Swindon. The report provides information on current policy, transport proposals, and existing problem areas in the town, in order to help inform a debate around the creation of a business manifesto for transport in Swindon over the next five years.

NATIONAL CONTEXT

This section looks at the range of current government strategies and attitudes towards transport at a national level and the implications this has on the future development of the transport network in Swindon.

Currently the national transport network supports over 24 million commuters in their travel to work, and delivers five million tonnes of freight every day. However a growing dependence upon the transport network to sustain our economy faces some difficult challenges:

- An anticipated increase in congestion of 30% by 2025 is likely to see costs to businesses and freight rise by over £10 billion a year;
- The economic consequences of congestion are stated to be at £11 billion per annum in urban areas, with the indirect costs to society exceeding costs of £40 billion.
- Average delay due to congestion is forecast to increase by 35% from 2010 to 2025.
- Transport contributes to 23% of UK domestic CO2 emissions.

In order to maintain the network and tackle these growing issues, the Department for Transport (DfT) published "Delivering a Sustainable Transport System" (DaSTS)¹ in 2008, outlining the Government's five transport objectives to 2014. The document sets out a response to the findings and recommendations of both the Stern Review on the Economics of Climate Change² and the Eddington Transport Study³ both of which conclude that integrating spatial and land-use planning with transport is key to the promotion of sustainable patterns of development and economic growth.

Government's Five Objective for Transport (DaSTS)

1. To support national economic competitiveness and growth, through delivering reliable and efficient transport networks;
2. To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change;
3. To contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health;
4. To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society; and
5. To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

These five objectives which have been broadly endorsed by all political parties lie at the core of transport policy and transcend all levels of current transport policy formation in Government.

¹ Delivering a Sustainable Transport System: Main Report – DfT, Nov 2008

² The Stern Review: The Economics of Climate Change – Stern, 30th Oct 2006

³ The Eddington Transport Study The case for action: *Sir Rod Eddington's advice to Government* – Eddington, 1st Dec 2006

The broad nature of the five DaSTS objectives supports the need for a shared long term vision of urban transport by decision makers at all levels. Further it serves to illustrate the strong inter-relationships between transport and the themes of economy, sustainability and housing. The strength of these relationships was borne out in both the Eddington Transport Study, which assessed the link between the economy and transport and the Stern Economic Review which evaluated the economic challenges of climate change.

Indeed, a key conclusion of Eddington's study was that a 'well-functioning transport system is vital to the continued success of the UK economy and to our quality of life'. Eddington argues that the success of the transport system is under threat as a result of congestion and unreliability which, at certain places at certain times of the day constrains our economic growth. It was therefore recommended that a targeting of resources to congested urban centres such as Swindon was important in order to accelerate economic growth.

Government rail policy further echoes the conclusions of both Stern and Eddington through the publication of the Government's rail strategy 'Delivering a Sustainable Railway'⁴. This paper sets out guiding principles to be:

- To invest where there are challenges now, in ways which offer the flexibility to cope with an uncertain future; and
- To put in hand the right preparatory work so that, as the future becomes clearer, the necessary investments can be made at the right time.

The paper also identifies modernisation and enhancement of the Great Western main line as a priority, to be delivered through electrification of the route together with the re-modelling of the Reading station area and the introduction of flagship Intercity express trains.

Recently however, a change in the national government combined with a drive to reduce the national debt threatens to both delay and fundamentally alter transport policies and major infrastructure schemes. For example, not only has the DfT's major transport scheme approval process been suspended with immediate effect, but it is likely that electrification of the Great Western Main Line will be 'be put on the back burner'⁵. Combined with these capital spending cuts, it is anticipated that the ruling coalition Government will reform the way decisions are made on which transport projects to prioritise. It is suggested this move will ensure the benefits of low carbon proposals are fully recognised.

LOCAL CONTEXT

Over the past two centuries, Swindon has grown from a small railway town to its current size, with a population of over 189,500 people. As a result, much of the development that has occurred in the town has been delivered on the basis of national design and planning guidance, focused primarily around the needs of the private car. Typically, this has resulted in the development of numerous business parks and industrial zones across the town of an often dispersed nature, further encouraging the use of the car as the principle means of achieving mobility.

Indeed, as set out within the draft South West Regional Spatial Strategy (soon to be abolished), Swindon is set to grow a further 36% to 2026 making the town subject to proportionally the biggest planned development of any town or city in the southwest region⁶. In practical terms, this growth will equate to an additional 34,200 new dwellings in the Borough between 2006 and 2026, located at the following locations:

⁴ Delivering a Sustainable Railway – DfT, July 2007

⁵ Electrification plans in doubt - Local Transport Today, 11 June – 24 June 2010

⁶ The Draft Regional Spatial Strategy for the South West 2006-2026 - South West Regional Assembly, June 2006

Location	Dwellings ⁷
Swindon Central Area	3,500
Northern Development Area	3,550
Wichelstowe	4,500
Commonhead	750
Eastern Development Area (EDA)	12,000
Tadpole Farm	2,000
Sites within existing Swindon Urban Area	6,700
Sites in the remainder of Swindon Borough	1,200

EXISTING LOCAL TRANSPORT PLANS AND STRATEGIES

LOCAL TRANSPORT PLAN 2 (2006-2011)⁸

The principle local authority document, guiding the transport policy in the Borough is the Local Transport Plan 2, which sets out the aims and objectives for transport in Swindon over the period 2006-2011. Key areas of work highlighted within the plan, centre around;

- 1. Working to maximise existing junction efficiency;** For example through computer controlled and signal controlled junctions, in order to ultimately develop Urban Traffic Management Systems.
- 2. Work to maximise bus efficiency:** Real-time bus information network, new/updated bus interchange.
- 3. Work to raise awareness of opportunities for alternatives to driving alone:** For example promoting school travel plans and employer travel plans.
- 4. Work to reduce the number and severity of road accident casualties:** For example through implementing 20 mph areas.

Together, these four strategy areas of work assist in framing a set of 27 targets set out for delivery by 2011. Of these 27 targets, 19 targets are currently on-track (2008)⁹ with key shortcomings identifiable around targets associated with bus punctuality, limiting vehicle kilometres, and developing the towns 'Dial a Ride' service.

A list of commitments to delivering a set of infrastructure schemes over the plan period are further identified, including plans for;

- A replacement of the existing bus station with a state of- the-art "bus exchange". Whilst it would appear that plans for the new facility continue to be developed, uncertainty regarding the most suitable location of the new bus station means that this facility will not be completed within the plan period.
- A real-time information system for passengers will be progressed across the Borough.
- A third Park and Ride site to be built at Commonhead, together with the advanced design of a site in the Southern Development Area. Conversely over the plan period, plans for development of these sites have not materialised. Further, of the town's two remaining park and ride sites, one site (the £1.5 million Groundwell site) was closed for use in May 2009 for financial reasons.

⁷ Swindon Core Strategy 2006-2026, Proposed Submission – Swindon Borough Council, July 2009

⁸ Swindon Borough Council Local Transport Plan 2 (2006 to 2011) – Swindon Borough Council, March 20064.

⁹ Swindon Borough Council Local Transport Plan 2 Monitoring Report – Swindon Borough Council, November 2008

LOCAL TRANSPORT PLAN 3

With the current Local Transport Plan 2 nearing the conclusion of its time frame, work is currently underway to develop a Local Transport Plan 3 for the Borough, with consultation on the new document anticipated to take place in the second half of 2010.

In line with central Government guidance however, it can be anticipated that the new plan will present a distinctly longer-term strategy for transport with details of transport challenges, trends, vision, objectives and approaches acknowledged. Work on the Local Transport Plan 3, is being taken forward alongside the ongoing Local Development Framework process.

SWINDON TRANSPORT STRATEGY (MAY 2009)¹⁰

Informing both the Local Transport Plan 3 and the Local Development Framework, the Swindon Transport Strategy provides a comprehensive understanding of the transport interventions required to facilitate and support sustainable growth in the Borough over the next 20 years. Drawing upon similar principles to those advocated within the current Local Transport Plan, the Transport Strategy identifies key principles to be;

- To encourage short distance trips by walking or cycling;
- To encourage journeys into the town centre;
- To encourage journeys around but within Swindon; and
- To provide good access to the strategic transport network.

To assist in the realisation of these principles, whilst meeting travel demand and supporting sustainable growth of Swindon, the strategy identifies a range of transport measures with a combined cost of £370 million. This figure is based on conservative estimates and an indicative shortfall of £20 million pounds has been identified.

Key major scheme elements for Swindon identified in the strategy include:

- Rapid Transit Network;
- Improved bus services and an orbital bus route;
- Improved pedestrian and cycle networks and facilities;
- Parking Interventions;
- Highway improvements.

SWINDON 2030 TRANSPORT VISION (2007)¹¹

The Swindon 2030 Transport Vision addresses how transport can assist in achieving Swindon's aim of becoming both the UK's best business destination and the UK's number one sustainable community by 2030. Further to this, the publication aims to prevent transport issues becoming a barrier to the towns continuing economic success.

The threefold transport policy, outlined to achieve the delivery of Swindon's long term vision focuses on a need to:

1. **Reduce journey lengths and the need to travel.**
 - Supporting travel planning.
2. **Manage better the existing infrastructure and influence travel choice.**
 - Implementing intelligent transport systems,
 - Implementing a parking policy to ensure that car parking space is in the right place, in the right numbers and at the right price

¹⁰ Swindon Transport Strategy – Swindon Borough Council, May 2009

¹¹ 2030: A vision for Transport Swindon - successful – sustainable - Swindon Borough Council, 2007

3. Target investment in additional infrastructure where there is demonstrable need.

- Using existing and impending legislation to improve the management of roadwork's and incidents on the network

Further detail is provided in defining how this transport vision translates to various components of the borough including the towns business sector.

Here, it is envisaged that sustainable travel will be made more attractive for business journeys whilst recognising that the car will remain a fundamental business tool appropriate for many trips. Principally this will mean;

- Increased use of flexible hours working.
- Widespread use of travel planning to improve business efficiency.
- Widely available travel information.
- Discounted public transport for most of the workforce.
- Better quality buses, trains and infrastructure.
- Extended public transport operating hours.

EXISTING TRANSPORT NETWORKS

M4

The M4 represents the main strategic link between Swindon and London. However it is noted that there is every likelihood that unsustainable use of the M4 for commuting will be increased whilst not bringing the economic benefits wished for. It is therefore important that improvements to the M4 are considered as part of wider improvements to other items of existing transport infrastructure.

RAIL

Providing a key inter-regional rail link between the South West/ South Wales and London, the Great Western main line is to be subject to a range of major infrastructure improvements as set out within the draft RUS.¹² This includes proposals for the electrification of the London to Swansea line at a cost of £1 billion, the largest transport project to be undertaken in the South West region over the coming decade however is not estimated to be completed before 2017.

- By design, the railway in Swindon tends to cater for long distance journeys.
- 11% of those people travelling to work in Swindon from elsewhere commute by train highlighting the importance and convenience of this method of travel to the town.

A further rail scheme currently under consideration concerns the redoubling of the branch line between Swindon and Kemble. It is anticipated that improvements to this line will assist commuter travel to Swindon from the destinations of Gloucester, Cheltenham and Stroud. Indeed, the programme is unique in that it is one of the only urban/suburban rail developments planned/ currently underway in the South West region. In total, the redoubling project is likely to cost £50 million with funding for the scheme likely to be drawn from spending which had been previously earmarked for road building.

BUS

Bus services provide the majority of public transport provision in Swindon. The overall network is comprehensive, covering all areas of the town, with few urbanised areas being more than 400m distance (approximate five minutes walk time) from a bus route of at least 30 minutes frequency. Indeed, most areas fall within 400m of a route of at least 15 minutes frequency bus service.

¹² Great Western Route Utilisation Strategy Draft for Consultation –Network Rail, Aug 2009

In highlighting the importance of the local bus service to the town, the period of the first Local Transport Plan (2001 to 2006) saw an increase in the use of bus services in the town, with patronage up by 18%.

At a broader strategic level, Swindon's locational advantages see the town benefit from significant access to key international gateways, including: Heathrow and Bristol airport; Southampton Docks; and Avonmouth Docks.

ISSUES

The main issues and challenges identified in Swindon's current transport strategy review are:

CONGESTION

Congestion in Swindon is attributed to journeys by local commuters and capacity restraints at junctions. Compounding this issue further, is the fact that unlike many other UK towns and cities, Swindon's road network is not based on a series of key historic radial routes. For example, to the east of the town, the only major radial route is Queens Drive.

Currently, the heaviest congestion during the AM Peak occurs on the western and eastern approaches to Swindon, at Junction 16 of the M4 and at the A420 (west of the A419). It is predicted, that if this trend continues without major investment and change, by 2016 the road network in Swindon will be overloaded with 60,000 vehicles using the network in the morning peak hour. It is further anticipated that average speeds over the period to 2016 would reduce from the current 27 mph to 23mph across the Borough.

THE RAILWAY LINE, WHICH CAUSES MAJOR SEVERENCE

The railway effectively severs Central Swindon. Overcoming this historical barrier to movement is critical to the future development of Central Swindon, and in particular linking the Great Western Designer Outlet Centre and proposed new developments at North Star and North Star Village to the retail and office core.

Where the current crossing arrangement does not encourage pedestrian/cycle use, this has resulted in a significant number of short car trips in the town of between 2-4km. Indeed 52% of Swindon's employed population travel between 0.1km and 5km to access a workplace; a significantly greater proportion than the equivalent percentages for the South West or England and Wales (40-44%)

BOTH THE A419 AND A420 ACTING AS BARRIERS

Both of the identified roads act as physical barriers to pedestrian and cycle movement east – west and north – south across the town. Indeed, whilst the amount of traffic crossing the inner and middle cordons of Swindon has decreased over recent years, conversely traffic crossing the outer cordon (where both roads are situated) has increased. It is likely that this is partly a reflection of the increase in large edge of town employment sites such as Honda.

JOURNEY TIMES THAT ARE MORE ATTRACTIVE BY CAR

Preference for private car use in Swindon, would appear to be driven by current inadequacies of the towns public transport network.

- The current presentation of the bus network is potentially confusing to new bus users, with a large number of routes which overlap and a lack of emphasis on key high frequency corridors.
- A number of major employers are not currently well served by the current bus network.
- At more than 70p a mile, the cost of travelling from Swindon to London by train at short notice is already the highest in Europe.
- Historically, planned development of the town has been driven by a preference for the car.

CAR PARKING ISSUES

- Car parks in Swindon town centre are located in a tight collar around the town centre and close to the main retail opportunities. This arrangement draws vehicle traffic directly into the heart of the town impacting on the pedestrian and cycle environment and public transport journey times.
- Existing Park and Ride sites are underutilised.
- Indeed whilst there is a significant inward commuting population from North Wiltshire to Swindon, Park and Ride developments in the town have proven to be financially unviable.

MAJOR SCHEMES

It is predicted that an unprecedented level of public transport provision will be required if Swindon's proposed growth areas are to be integrated with the wider town. As such, key transport schemes identified within the Swindon transport strategy with a combined cost of £370 million include:

RAPID TRANSIT NETWORK

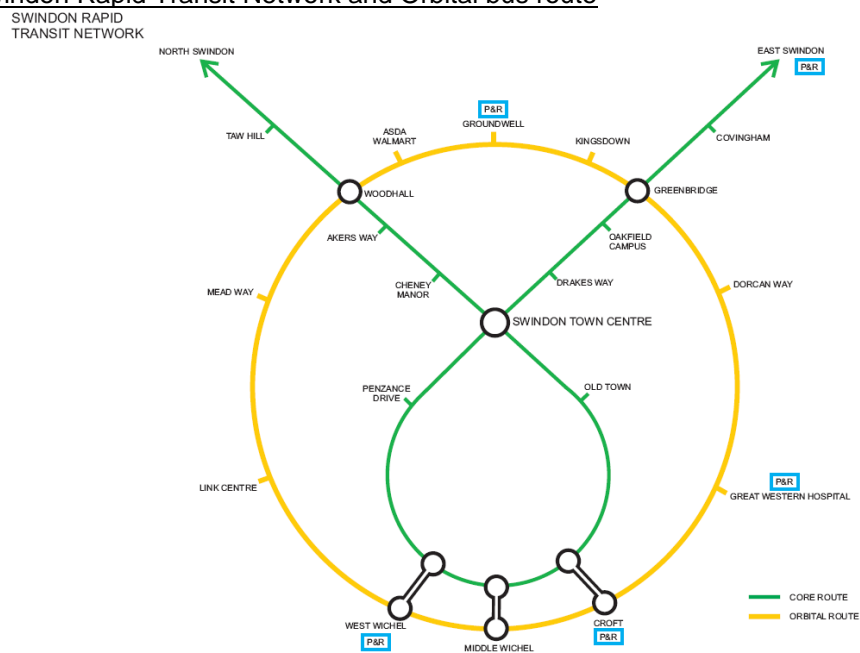
Rapid Transit provision forms the heart of the proposed transport strategy in Swindon. It is intended that the network (see diagram 1) will provide key high frequency transit corridors with direct access to the town centre/ railway station and key facilities throughout Swindon.

Principally envisaged to link new developments in the Eastern Development Area and at the Northern Development Area back to the town centre, the Rapid Transit route would¹³ also provide a meaningful choice for existing residents who at present choose to use their car.

ORBITAL BUS ROUTE

It is anticipated that the Rapid Transit System will be supported in its role by a new, conventional bus-based orbital route, catering for a known demand of orbital movements which do not wish to travel through the town centre. Initial suggestions predict the cost of providing the orbital bus service at £49.7 million, with suggestions indicating that the service would interchange with the Rapid Transit Network at five strategic locations across the town.

Diagram 1; Swindon Rapid Transit Network and Orbital bus route



¹³ <http://www.southwest-ra.gov.uk/media/SWRA/Regional%20Transport%20Board/29th%20January%202009/Swindon.pdf>

CAR PARKING INCLUDING PARK AND RIDE¹⁴

It is anticipated that in the region of 9,000 parking spaces will be required by 2026 in order to accommodate the levels of growth identified for Swindon. The provision of these parking spaces includes proposals for at least 1,000 spaces located at park and ride sites on the key radial routes serving the town centre. In the town centre it is envisaged that a ring of 5 car parks located on key radial routes will encircle the town centre, with a new 1,000 space car park located to the north of the railway line.

TOWN CENTRE IMPROVEMENTS

It is suggested that town centre transport improvements will be undertaken in line with a wider programme of town centre regeneration. This includes notions for a 20mph speed limit in all residential areas at a cost of £2.5 million. A variety of improvement options have also been suggested for the railway station, including;

Option 1 - Proposals for the Railway Station and Railway Crossings

A new entrance to the north of the railway station is suggested, to complement a proposed multi-storey car park and to encourage greater rail travel

Option 2- Proposals for the Railway Station and Railway Crossings

The Swindon Central development scheme should help deliver a new crossing linking North Star with the land to the south of the railway.

HIGHWAY IMPROVEMENTS

Key infrastructure projects include;

- Purton Road to Great Western Way link
- M4 junctions 15 and 16
- Green Bridge
- Purton Iffley Link
- White Hart Junction

Together, it is intended that these measures will facilitate an increased capacity at pinch points on the highway network, whilst reducing vehicular traffic in the town centre.

RAIL

Strategic

Proposed electrification of the Great Western Main Line should improve services between London and the Swindon, and is due to reach Swindon and Bristol by the end of 2016. In addition, a pressure group has been set up in a bid to further cut Swindon's train journey time to London to 35 minutes from the current 55 minutes. The Great Western Partnership, a joint venture delivered through the Local Authorities of Bristol, Swindon and Cardiff, is looking to lobby the Government on the back of its approval for High Speed 2 for the implementation of a High Speed 3 route, possibly building upon the existing electrification programme on the Great Western Main Line¹⁵.

Local

At an economic level, Swindon competes with Bristol and Reading, both of which have significant suburban rail networks. Indeed, whilst Bristol has 24 suburban stations in a 25 mile radius and Reading, 27 suburban stations in a 27 mile radius, Swindon has none¹⁶. As such existing line restrictions between Swindon and Didcot threaten and constrain sustainable rail links between Swindon and the South East/West.

¹⁴ Strategy for Parking – Swindon Borough Council, 2007

¹⁵ <http://www.bristol.gov.uk/ccm/content/press-releases/2010/mar/west-unites-for-high-speed-rail.en>

¹⁶ Vision Document, Swindon Chamber of Commerce – Swindon Chamber of Commerce, February 2009

Indeed, for many years there have been proposals to provide “parkway” stations within the Borough, for example at Moredon Bridge or at South Marston. Currently, with significant development proposed in the Eastern Development Area of the town, suggestions indicate that provision of a Parkway station in this area would be of significant benefit. There remains however, existing rail network concerns around the connectivity of Swindon to the nearby populations of Wootton Bassett, West Swindon, Blunsdon and North Swindon, Faringdon, Shrivenham and, in due course, the Southern (Wichelstowe) and Eastern Development Areas.

Table 1; Development schedule for major transport schemes in Swindon to 2026

Task Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Development Sites	<hr/>																			
Cumulative residential development	3922	5422	6972	8519	10369	12319	14369	16399	18399	20499	22499	24499	26449	28149	29799	31449	33049	34549	35999	
Key Infrastructure	<hr/>																			
M4 Jn 16	<hr/>																			
Rapid Transit 1		■																		
Green Bridge for RT and ped/cyclists				■																
Swindon Rapid Transit Network									■											
Public Transport				■																
M4 Jn 15					■															
White Hart Junction					■															
Common Head Junction									■											
Dorcan Link										■										
Purton Ifley Link													■							
Corridors - minor junctions				■																
Other Initiatives	<hr/>																			

FUTURE

In order to address these issues, work is underway to deliver Joint Local Transport Plan 3 (JLTP3) to guide transport strategy in Swindon between the period 2011 – 2026. Recognising the need for a transport plan that covers a longer timescale, the plan will further develop the list of Regional Funding Allocation 2 major transport schemes.