

# **Salisbury Transport Strategy**

Salisbury Transport Strategy  
Summary

June 2018

# 1 Introduction

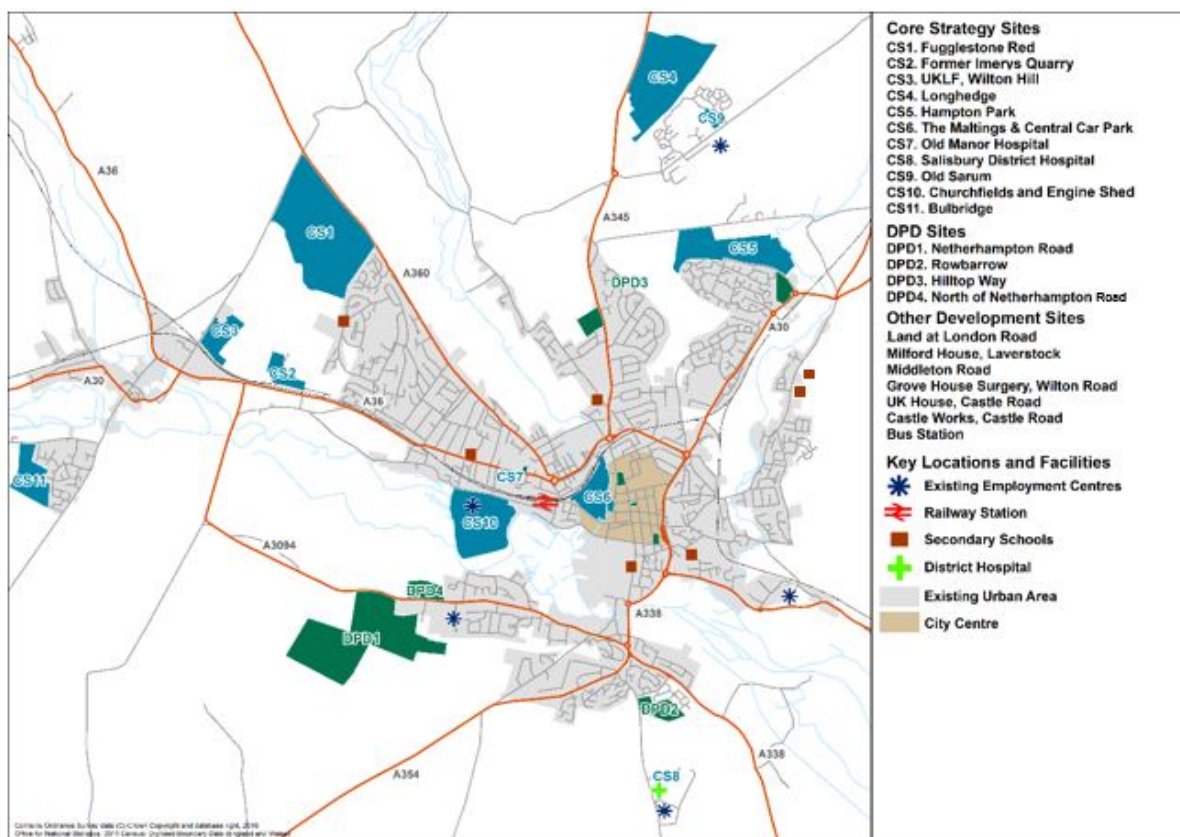
## 1.1 Background to the Strategy

The Salisbury Transport Strategy, covering the Salisbury and Wilton area, has been developed to support the growth identified in the South Wiltshire Core Strategy (SWCS), the Wiltshire Housing Site Allocations Development Plan Document (the 'DPD'), and the Local Plan. This strategy updates the existing transport strategy for Salisbury that was developed to support the Core Strategy.

## 1.2 Planned development

Table 1-1 outlines the development sites to deliver housing and employment growth in Salisbury up to 2026, whilst Figure 1-1 presents the location and approximate scale of these development sites.

Figure 0-1 Development sites in Salisbury



**Table 0-1 Salisbury development sites**

Source	Development site	2016 prediction for 2026	
		Housing (dwellings)	Employment (m <sup>2</sup> )
Wiltshire Core Strategy	Fugglestone Red	1,110	80,000
	Land NW of Fugglestone Red	141	-
	Former Imerys Quarry	-	40,000
	UKLF, Wilton (Wilton Hill)	397	30,000
	Longhedge	673	80,000
	Hampton Park	500	-
	The Maltings & Central Car Park	100	40,000
	Old Manor Hospital	71	-
	Salisbury District Hospital	-	705
	Old Sarum	30	-
	Churchfields & Engine Shed	1,100	50,000
	Bulbridge	45	-
DPD	Netherhampton Road	640	-
	North of Netherhampton Road	100	-
	Rowbarrow	100	-
	Hilltop Way	10	-
Other development sites	Land at London Road	-	6,030
	Milford House, Laverstock	31	-
	Middleton Road	12	-
	Grove House Surgery, Wilton Road	10	-
	UK House, Castle Road	78	-
	Castle Works, Castle Road	60	-
	Bus Station	47	-
Windfall Sites	Minor Sites	425	-
<b>Total</b>		<b>5,680</b>	<b>326,735m<sup>2</sup> (32 ha)</b>

### 1.3 Developing the Transport Strategy

Over the forthcoming years there will be an increase in the demand for travel. This will be as result of increased prosperity, changing technologies, an aging population, background growth and the growth identified in the Core Strategy. A transport strategy is therefore required for the Salisbury and Wilton area in order to mitigate the impacts of additional demand for transport. The strategy development process has been:

- based on a clear evidence base;
- objective-led;
- supported by stakeholders; and,
- linked to the County's wider Core Strategy development.

## 2 Transport Challenges and Issues

### 2.1 Current challenges

The development of the strategy has been informed by an understanding and assessment of current transport problems and issues. These have been identified by considering the views of local residents at consultation events and using transport data collected specifically for the development of strategy. The transport problems and issues are summarised below.

**Table 2.1 Issues and Consequences**

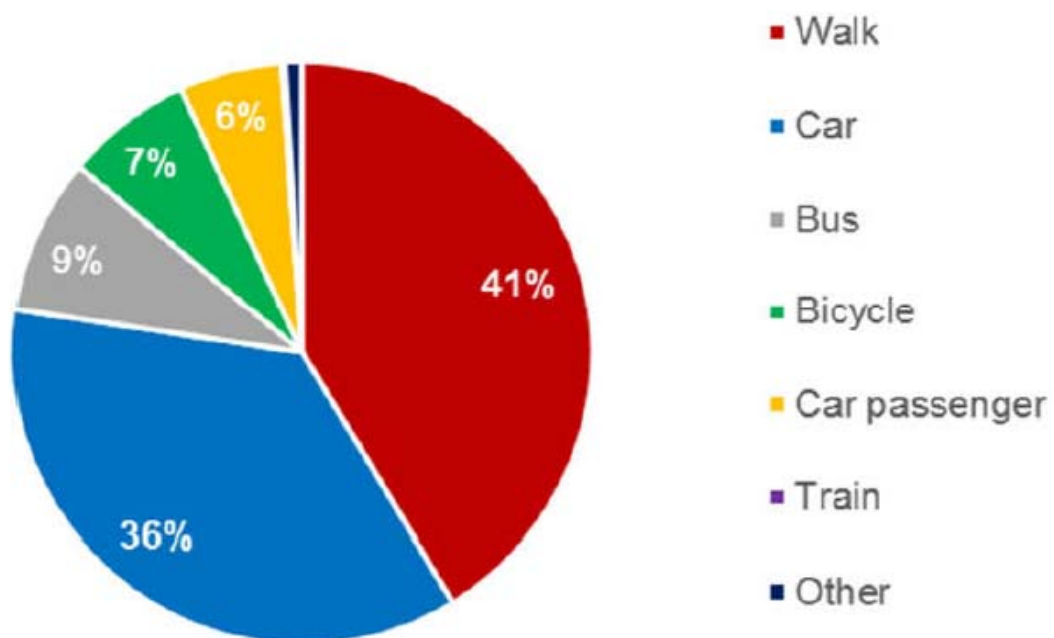
Summary of Issue	Summary of Consequence
Access to key services and facilities by sustainable modes of transport to/from some development sites is limited.	Development will generate additional car trips, and contribute to increased congestion.
Increased travel demand in Salisbury from development is forecast to further impact highway network performance.	Forecast increase in delays and congestion, whilst car reliance will remain without facilitating travel in the city on foot, by bike and bus.
Traffic flow is constrained by poor junction performance.	Delays and congestion on key routes and access to these routes. Increased cost of transport, impact on performance of strategic routes and regional connectivity which has consequences for economic performance.
Congestion and delays on Salisbury's highway network are forecast to increase.	Demand on the A36 and key routes increase as a result of planned development, resulting in further worsening highway network performance and overall accessibility.
Reliance on the car for journeys within Salisbury and journeys into and through Salisbury.	Contributes to congestion and delays on the network and levels of physical inactivity which has consequences for quality of life and health for residents.
There are a number of collision clusters on Salisbury's transport network.	Occurrence of collisions has a negative impact on network resilience, whilst also negatively impacting the attractiveness of walking and cycling due to negative perceptions/feelings of safety.
Transport continues to impact on air quality in Salisbury with three Air Quality Management Areas (AQMAs) designated.	Negative impact of poor air quality on health and subsequent cost to NHS whilst also reducing the attractiveness of Salisbury as a place to visit, live and work.

Summary of Issue	Summary of Consequence
Historic street layout is not designed for high volumes of vehicles.	Contributes to congestion in Salisbury, resulting in poor accessibility by all modes.
Poor integration, connectivity and severance of the pedestrian and cycle network for journeys to key destinations in the city including the rail station.	Health impact due to decreased attractiveness of using active modes. Contributes to high car reliance, congestion and air quality issues.
Oversupply of city centre car parking and underperforming bus Park and Ride.	Travelling by car into Salisbury is more convenient and attractive due to oversupply of car parking / parking pricing. Aspects of bus Park and Ride (service times, cost) is not achieving aims of abstracting car journeys into Salisbury, contributing to congestion.
Salisbury's bus network is unattractive because journey times and cost do not compete with the car, whilst access to bus services is limited due to the routing of some bus services.	Bus is not considered a convenient option. Short distance car trips in Salisbury contribute to congestion and delays.
Demand for rail travel to/from Salisbury rail station is forecast to increase, however poor accessibility for all modes to the station may constrain this growth in rail demand.	Increased car reliance for longer distance journeys and impact on ability to realise forecast demand
Ageing population in Salisbury will place changing demands on the transport network.	Accessibility of the transport network will be reduced with consequence for mobility of the resident population of Salisbury.
Reduced council revenue funding for highways maintenance and bus services.	Reduced programme of highways maintenance will impact on the condition of some parts of the transport network, whilst reduced bus subsidy is likely to reduce operation of bus services with subsequent impact on accessibility.
Technological disruption and cultural change e.g. hybrid/electric vehicles, increased internet shopping, ticketing systems, information systems (e.g. ride share), more demanding expectations of journey quality and experience by public transport users.	Transport interventions can be unpredictable. Potential for both increased car trips and reduced car trips. Increase in freight vehicles likely. Demand spreading (temporal and spatial) may reduce congestion but may undermine public transport and increase congestion.

Approximately half (8,994) of Salisbury's economically active residents also work in the city. As displayed in Figure 2-1, walking is the primary commuting mode for those living and working in the city, with car the second most used mode. However, whilst the walking mode share is high, cycling accounts for only 7% of journeys, which could indicate a reluctance to cycle for those living and working in the Salisbury urban area, a relatively small city (less than 5km diameter) which likely lends itself to travel by active modes.

The city's network of five Park & Ride sites and good rail links also provides substantial opportunity for modal shift amongst people who work in the city, but live outside.

**Figure 2-1 Mode share of those living and working in Salisbury**



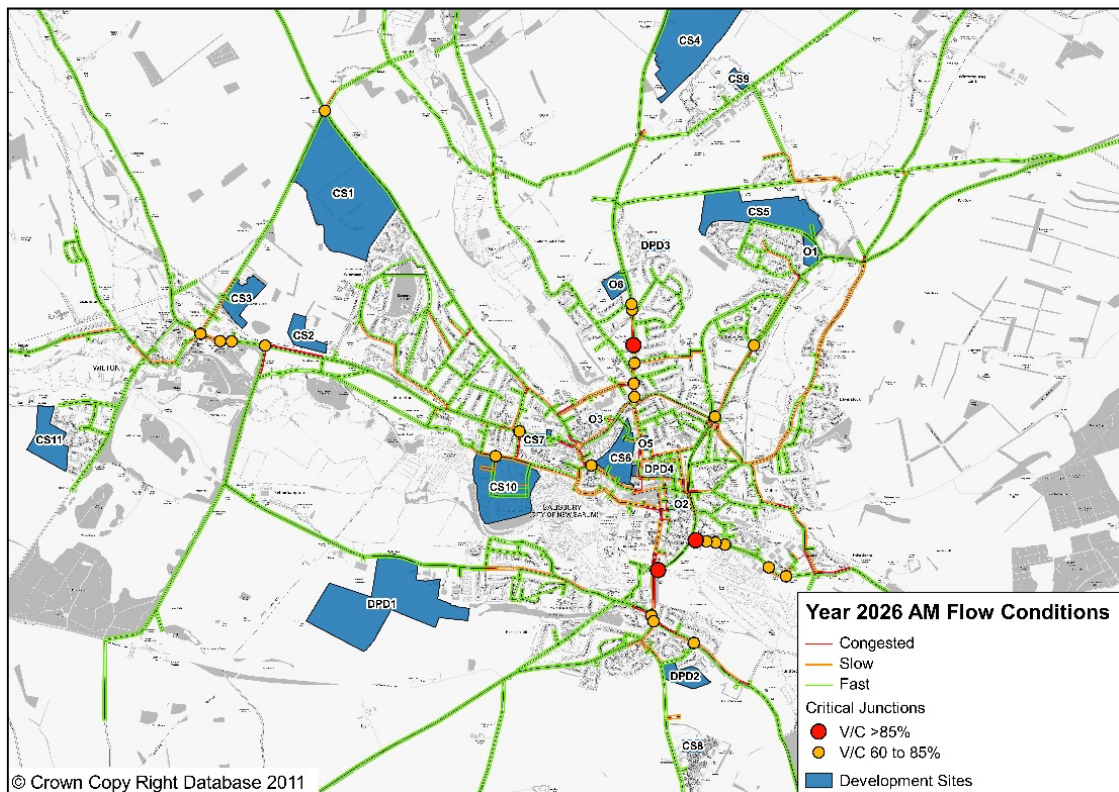
## 2.2 Future challenges

An assessment of future transport challenges and issues has been made using forecasts from the Salisbury Transport Model. The model was developed to represent the travel patterns and network conditions for a 2016 'base year'. Forecasts of travel and transport network performance were estimated for a 2026 'Business as usual' scenario which assumes the level of development proposed by the Core Strategy and known changes to the transport system.

The results of this analysis of the future year traffic forecasts are shown in Figures 2.2 and 2.3 for the key junctions in Salisbury and Wilton. The following junctions were found to be performing at critical levels during the AM peak hour:

- College Roundabout (Churchill Way and A36).
- A345 and Queensberry Road.
- Exeter Street Roundabout (Churchill Way and New Bridge Road).

**Figure 2-2 Network performance 2026 - AM (08:00-09:00)**



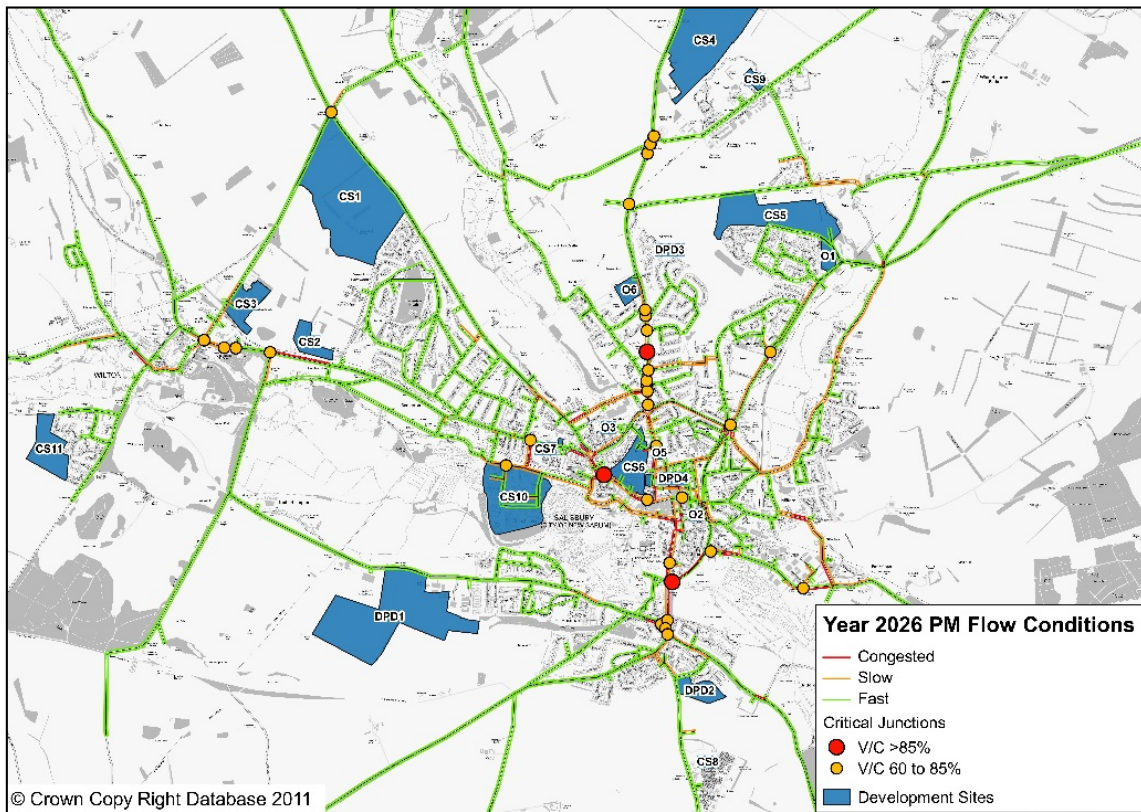
The following junctions were found to be performing at critical levels during the PM peak hour:

- A345 and Queensberry Road.
- Exeter Street Roundabout (Churchill Way)

A number of other junctions are operating under pressure during certain periods, but are not necessarily performing at critical levels. These junctions include St Pauls roundabout, St Marks roundabout and Castle roundabout. Bourne Way roundabout also operates under pressure particularly during weekends. These junctions would struggle with additional traffic (such as during special events or in the event of an incident on an alternative route).

Outputs from modelling suggest that delay will be exacerbated in all time periods, increasing by to 18%.

**Figure 2-3 Network performance 2026 - PM (17:00-18:00)**



Forecasts for future rail demand up to the 2026 end of Core Strategy period have been produced for the Wiltshire Rail Study Strategic Analysis Report. The study indicates that rail demand from Salisbury will continue to grow. Forecasts suggest that daily demand from Salisbury rail station would increase from 1,905 daily trips to 3,394 trips by 2026.



## 3 Objectives

### 3.1 Study objectives

The development of the transport strategy has been guided by the wider vision and objectives for Salisbury, South Wiltshire and for transport in Wiltshire. This enabled the following objectives for transport in Salisbury and Wilton to be defined as outlined in Table 2.1 below. The transport strategy has been designed to help deliver these objectives.

**Table 3.1 Objectives and Outcomes**

<b>Theme 1</b> Providing for strategic development sites	<b>Objective 1:</b> Ensure that development sites provide necessary infrastructure and services to facilitate journeys by sustainable modes of travel.	<b>Outcome:</b> Developments do not compound high levels of car use.
	<b>Objective 2:</b> Provide a transport network which caters for increased travel demand as a result of planned development.	<b>Outcome:</b> Maintain transport network performance (no worsening).
<b>Theme 2</b> Maintaining the strategic function of the A36 and key roads (including the MRN)	<b>Objective 3:</b> To maintain and improve the strategic function of the A36 (and other key routes) through/around Salisbury.	<b>Outcome:</b> Improved journey times and reliability on key routes. This may reduce ratrunning and use of inappropriate roads to avoid delays on the A36.
<b>Theme 3</b> Improving the accessibility & attractiveness of the city centre and other service centres	<b>Objective 4:</b> Improve road safety across the transport network in Salisbury.	<b>Outcome:</b> Increased safety/perception of safety will improve attractiveness of active modes. Fewer accidents result in a more resilient and reliable transport network. Fewer killed or seriously injured on Salisbury's roads.
	<b>Objective 5:</b> Reduce transport-related air pollutants and CO <sub>2</sub> emissions to within legal limits, and ensure transport minimises any adverse impacts on the local environment.	<b>Outcome:</b> AQMA is improved, improving the health of Salisbury's residents.
	<b>Objective 7:</b> Improve accessibility to the city centre by public transport.	<b>Outcome:</b> Good walking/cycling access to key destinations such as schools, rail station, employment areas, development sites. Increased rates of walking and cycling in the City.
	<b>Objective 8:</b> Reduce the need to travel by car and encourage flexible car ownership modes.	<b>Outcome:</b> Increased car club and car share usage, reduced out-commuting, reduced business travel.
	<b>Objective 9:</b> Better management of car parking supply, facilities and infrastructure.	<b>Outcome:</b> Improved efficiency of car parking operations.

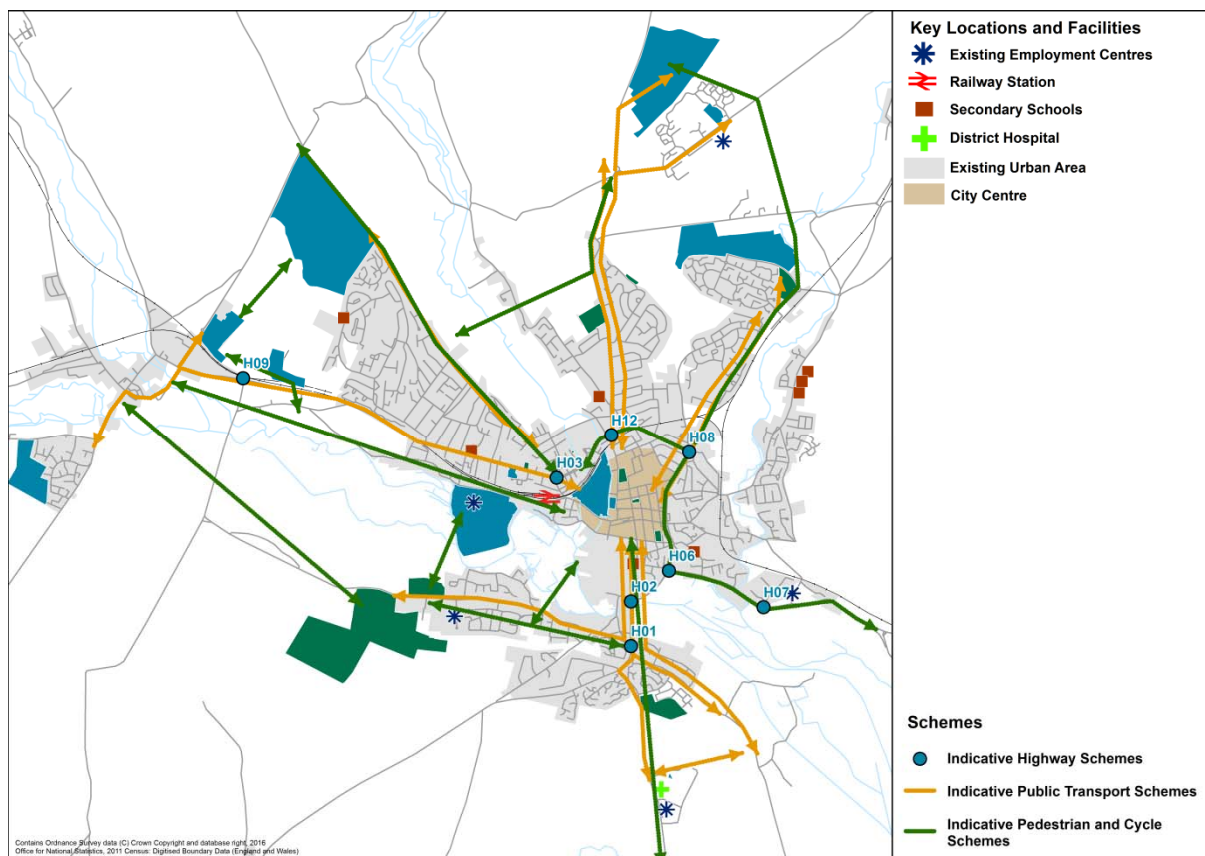
# 4 The Transport Strategy

## 4.1 Strategy components

The proposed transport strategy comprises the following components, and is illustrated in Figure 4.1 below.

- Highways schemes
  - Enhancing capacity at key junctions
  - Promoting Park & Ride while reducing long stay parking in the centre
  - Providing adequate coach parking
  - Managing traffic movements and delivering a Clean Air Zone
- Public transport network improvements
- Smarter choices
- Pedestrian and cycling improvements

Figure 4-1 All Transport Strategy schemes



The components that comprise each element of the transport strategy are described below.

## **4.2 Highways schemes – enhancing capacity**

The strategy proposes the following capacity enhancements:

- Harnham Gyratory remodelling.
- Exeter Street Roundabout remodelling.
- St Paul's Roundabout capacity improvements.
- A36 Park Walls signals improvements (i.e. improve timings of signals).
- A36 College roundabout improvements
- A36 Bourne Way/Petersfinger Park & Ride junction improvements.
- A36 St Mark's roundabout improvements (e.g. upgrade to MOVA).
- A36 Castle roundabout improvements (e.g. upgrade to MOVA).

Further design and feasibility work will determine the exact scope of these schemes. While it is not considered essential to the delivery of housing in the DPD by 2026, the council will continue to work with Highways England to investigate whether a more comprehensive scheme for the A36 Southampton Road can be delivered.

## **4.3 Highways schemes – demand management**

Park & Ride services are essential elements of the strategy which intercept car journeys that would otherwise enter the city centre. Park & Ride services are available on all five major approaches to Salisbury but are not optimised. Several of these services are combined with bus routes that serve new developments.

The strategy proposes maintaining high quality interchanges and continuing to provide high frequency services at all five sites (at least 4 buses per hour to new development sites). The strategy also proposes that the price differential between the city centre and Park & Ride sites is maintained.

Demand management will play a vital role in ensuring that the Park & Ride services are optimised. Long stay spaces are expected to be reduced particularly through the redevelopment of the Maltings, Brown Street and Salt Lane. A new short-stay car park is expected to be delivered in the Maltings and increased long-stay spaces for rail customers will be provided through the Rail Interchange scheme.

Parking provision at Culver Street may be reviewed to consider the conversion of long stay to short stay spaces or other options. On-street parking provision may be reviewed in certain locations to consider alternative uses such as bus stops, cycle parking, etc.

## **4.4 Highways schemes – providing adequate coach parking**

Adequate provision of coach parking in the city is a key provision as tourism is a key part of the city's economy. It is expected that some existing coach parking may be replaced through The Maltings redevelopment.

The level of provision achievable through the development will determine whether additional coach parking is necessary elsewhere, with fall-back options to be considered including Britford Park & Ride site (for longer stay coaches) and Brown Street car park.

#### **4.5 Highways schemes – traffic management**

The strategy proposes the following traffic management measures:

- Developing a hierarchy of route movements that restricts traffic movement in the city.
- Freight management scheme (hierarchy routes).
- A Clean Air Zone<sup>1</sup>.
- Using and improving UTMC<sup>2</sup> in accordance with the route-user hierarchy in Core Policy 61.
- Assess appropriate parking technology to manage parking spaces efficiently and improve user experience.

Further feasibility work will be needed to determine the exact scope of these measures, but they could include adjusting freight loading restrictions, improving bus priority, an HGV ban on Mill Road when Churchfields redevelops, or pedestrianisation of certain streets.

#### **4.6 Public transport network improvements – bus improvements**

There is good potential to increase both bus and rail usage in Salisbury. This will be done by

- Providing high quality bus stop infrastructure (including Real Time Passenger Information where appropriate),
- Introducing bus priority where possible - this is likely to involve a bus lane on London Road and possibly Exeter Street, with bus priority provided elsewhere through the UTMC system.
- Ensuring that at least 4 buses per hour will be provided to all new development sites (e.g. PR3, Red 10, PR11, PR7, Red 5).
- Developing a bus route between Britford Park & Ride and the Hospital site
- Working with the bus companies to improve cross-city bus connections where opportunities arise.
- Introducing electric buses.
- Salisbury Rail Station Interchange improvements – includes re-opening the northern entrance, better access for buses, a new car park, and enhanced cycle and pedestrian facilities.

While the following schemes are not considered essential to deliver the DPD housing by 2026, the council will also continue to advocate for the extension of the TransWilts rail service as part of the appropriate rail franchise, and support further work to develop the case for a new rail station at Wilton.

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<sup>1</sup> Likely to be a non-charging zone as set out in the Government's Clean Air Zone Framework: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/612592/clean-air-zone-framework.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/612592/clean-air-zone-framework.pdf)

<sup>2</sup> Urban Traffic Management and Control = management of the traffic signals system

#### **4.7 Smarter Choices**

'Smarter choices' refers to marketing and promotional campaigns, and other measures (e.g. Travel Plans, car sharing and car clubs) that try to change 'hearts and minds' and encourage travel in more sustainable ways.

The Salisbury Transport Strategy includes actions that continue or expand the effective programme of school, workplace and residential travel planning.

It is expected that development sites will provide the appropriate Travel Plans for their sites, with appropriate measures likely to include free period bus tickets for each households, support for [www.carsharewiltshire.com](http://www.carsharewiltshire.com), promotion of the council's travel information site: [www.connectingwiltshire.co.uk](http://www.connectingwiltshire.co.uk), distribution of walking and cycling maps, etc. Further details are provided in Wiltshire Council's forthcoming Supplementary Planning Document on Travel Plans.

The strategy also promotes the expansion of car clubs and electric vehicles (either through development-related Travel Plans or otherwise). The extent of these schemes will depend on what funding opportunities arise.

#### **4.8 Pedestrian and cycle improvements**

Pedestrian and cycle improvements can achieve vary high cost benefit ratios. As the Government's Cycling and Walking Investment Strategy sets out: for people, it means cheaper travel and better health; for businesses it means increased productivity and increased footfall in shops; and for society as a whole it means lower congestion, better air quality, and vibrant, attractive places.

The strategy sets out a range of measures:

- Improve pedestrian facilities and pedestrian priority in the city centre (bus and cycle routes to be maintained; pedestrianisation could be considered as part of this)
- Wayfinding improvements (signs, maps, route features, etc.)
- Maintaining and increasing cycle parking near key destinations and transport interchanges.
- Walking and cycling infrastructure improvements on a number of key routes that link proposed development sites to the city centre and employment sites.

Schemes will need to be designed so that they are safe, direct, convenient and attractive. Further feasibility work and land negotiations will have to take place to determine the exact scope of the schemes. These routes are likely to form a key part of the Local Walking and Cycling Infrastructure Plan for Salisbury that the council aims to publish.

## 5 Summary of Strategy Performance

### 5.1 Model results

Using the Salisbury SATURN Transport Model it has been possible to assess the majority of highway schemes in the 'With Strategy' scenario, except those that are specifically related to road safety or parking. Pedestrian and cycle network, and bus corridor schemes have been represented by a modest reduction in car trips along the corridors where schemes are proposed.

**Given that some schemes cannot be represented in the transport model, the actual benefits of the strategy are likely to be greater than reported in the Strategy document.** Similarly, many of the schemes that can be modelled are at concept stage and have not yet been optimised to achieve the best possible outcome. The forecasts contained in this chapter are therefore **only indicative**.

The forecast differences between modelling 'with the strategy schemes' and 'without the strategy schemes' is shown below:

#### *Salisbury City highway network:*

- Total journey times to reduce by 0.2% in the morning peak hour and 0.4% in the evening peak hour.
- 8% reduction in average queue lengths in both the morning and the evening peak hours.
- A 44% decrease in over-capacity queues in the morning peak hour.
- A 30% reduction in over-capacity queues forecast for the evening peak hour.
- Overall delay to reduce by 1% both the morning and evening peak hour.

#### *A36 West:*

- Total journey times between Wilton roundabout and just west of St Pauls roundabout to reduce by 4% during the morning peak hours and 0.2% in the evening peak hour.
- Over-capacity queues to decrease by 66% in the morning peak hour and 35% in the evening peak hour.

#### *A36 Central:*

- Total journey times between St Pauls roundabout and College roundabout increase by 3% in the morning peak hour and 8% in the evening peak hour.

#### *A36 East:*

- Total journey times between College roundabout and east of Petersfinger Park and Ride (A36/Milford Mill Road) junction to decrease by 4% in the morning peak hour and decrease by 13% in the evening peak hour.

#### *A338:*

- Total journey times between the A338 just south of College roundabout to Harnham Gyratory to reduce by 11% in both the morning peak and evening peak.
- Over-capacity queues to decrease by 93% in the morning peak and 58% in the evening peak.

- Average speed is forecast to reduce by 22% in the morning peak and 16% in the evening peak.
- Overall delay is forecast to reduce by 53% in the morning peak and 62% in the evening peak.

## 5.2 Costs and implementation

The costs of the Salisbury Transport Strategy have been estimated as shown below in Table 5.1. The costs are based upon feasibility estimates and should be considered as indicative at this stage.

A range of funding sources will be considered for these schemes including S106, conditions on developers, external funding sources (e.g. government funding streams, LEP funding) and Wiltshire Council's highways budget. Schemes where the council will need to work in partnership with other organisations are likely to be at least part-funded by those organisations e.g. SWR or Highways England.

The implementation timetable will depend on a number of factors including: when developments are due to be occupied, the availability of funding, and the internal capacity of the council to develop schemes.

**Table 5.1 – Salisbury Transport Strategy - Cost Summary**

<b>Schemes</b>	<b>Cost</b>
Highways - Enhancing capacity at key junctions	£6,638,912
Highways - Promoting Park & Ride	£500,000
Highways - Providing adequate coach parking	Through Maltings redevelopment
Highways - Managing traffic movements	£1,250,000
Public transport network improvements	£10,731,000 <sup>3</sup>
Smarter choices	£540,000
Pedestrian and cycling improvements	£12,663,000
<b>Total costs</b>	<b>£32,322,912</b>

<sup>3</sup> Approximately £1.5million is to subsidise bus routes to development sites, which would then become commercially operated after this initial pump-priming phase.

## 6 Conclusion

6.1 It is considered that the Salisbury Transport Strategy:

- enables more people to enter the city centre, thus supporting the vitality, viability and resilience of Salisbury's economy in a sustainable way;
- reduces congestion across the day, and it is projected to improve the performance of the most critical junctions in the highway network;
- contributes to increasing the use of more sustainable modes of travel; and
- reduces the impact in terms of air quality and carbon.

6.2 The Salisbury Transport Strategy would cost money to implement and operate. An estimate of the costs of the interventions has been undertaken and it is considered affordable within the expected envelope of total funding likely to be available from local sources, providing funding is secured through an appropriate levy mechanism on new developments. Similarly, although further work is required to assess the detailed deliverability of the interventions included in the Salisbury Transport Strategy, none of the schemes require powers that are not already available or rely on untested solutions.