South East Dorset Multi-Modal Transport Study

Final Report

April 2012

Notice

This report was produced by Atkins Transport Planning and Management for the South East Dorset Client Partnership for the specific purpose of the South East Dorset Multi-Modal Transport Study.

This report may not be used by any person other than the South East Dorset Client Partnership without its express permission. In any event, Atkins accepts no liability for any costs, liabilities or losses arising as a result of the use of or reliance upon the contents of this report by any person other than the South East Dorset Client Partnership.

Document History

JOB NUMBER: 5062559			DOCUMENT REF: 5062559 SEDMMTS Final Report V1.21.docx			
1	Final Report – Issued	Various	TP	RT	PR	April 2012
Revision	Purpose Description	Originated	Checked	Reviewed	Authorised	Date

Contents

List of Tables

List of Figures

Appendices

Executive Summary

Background

The South East Dorset conurbation is the second largest centre of population in the South West, but historically it has not been the subject of the same level of strategic study which neighbouring areas have experienced. As a consequence, the evidence base and technical tools needed to secure major investments in the area's transport system have not been available. Atkins was appointed in June 2008 to undertake the South East Dorset Multi-Modal Transport Study (SEDMMTS) which was designed to identify the initiatives and interventions that would ensure the area has an excellent transport system in the future, and provide the evidence base to help secure the funding required.

The transport strategy developed within the SEDMMTS is the combination of a wide range of potential measures derived from a variety of sources. In preparing the strategy, the study has followed a step-by-step process in order to ensure that the strategy reflects the real issues across the South East Dorset area and examines the full range of potential measures before identifying and assessing an effective outcome.

The study was undertaken for , and with the active participation by the client partnership which included the breadth of organisations with a responsibility for, or an interest in, the operation of the transport network in the South East Dorset study area (see Figure 1) – the local authorities (the Borough of Poole, Bournemouth Borough Council and Dorset County Council), Highways Agency, regional bodies (Government Office for the South West, South West Regional Development Agency and South West Councils) and the Department for Transport.

Figure 1 – South East Dorset Study Area

The study worked closely with the joint team from the Borough of Poole, Bournemouth Borough Council and Dorset County Council which prepared the Local Transport Plan (LTP) for the combined South East Dorset and Dorset area for 2011 to 2026. The strategy developed by the SEDMMTS forms the long term strategy for the LTP while the short term implementation plans for the two programmes were dove-tailed.

Although the study area for the strategy development has concentrated on South East Dorset, many of the issues and the resulting measures have a wider general applicability and hence are appropriate for the Dorset area as a whole and were therefore included within the wider LTP.

The seven stages within the strategy development process reflect the need to use a systematic approach to the identification of potential strategy measures which are designed to resolve the specific problems and issues identified for the area. At the same time, a strong evidence base was assembled during the study, predominantly through the development of a comprehensive strategic transport model, but also by preparing a baseline report which documented the principal characteristics of the transport network and its operation in the study area. The development of the transport model formed a significant element within the overall £2.3million budget for the study and therefore represents a major investment in an evidence base that would assist the South East Dorset local authorities in achieving funding from central government for transport improvements in the future, including through the Local Sustainable Transport Fund. The investment in the study must be seen in the context of the long term investment requirements for the area and the opportunities to secure significant levels of funding from central government. To achieve this, the transport model has been developed in line with the standards specified in the government WebTAG guidance for multi-modal models, with which it is fully compliant.

The SEDMMTS transport model comprises a suite of modules which have been developed for the study (Figure 2) with the principal components of:

- a highway model representing vehicle-based movements across the sub-region for a typical 2008 morning peak hour (0800 – 0900), an average inter-peak hour (1000 – 1600) and an evening peak hour (1700 – 1800);
- a public transport model representing bus and rail-based movements across the same area and for the morning and evening peak and inter-peak time periods; and
- a five-stage multi-modal incremental demand model that considers the impact on frequency choice, main mode choice, time period choice, destination choice, and sub-mode choice in response to changes in generalised costs across the 24-hour weekday period.

The transport model was developed following an extensive data collection and processing exercise, involving a survey programme was formulated to infill where required, namely:

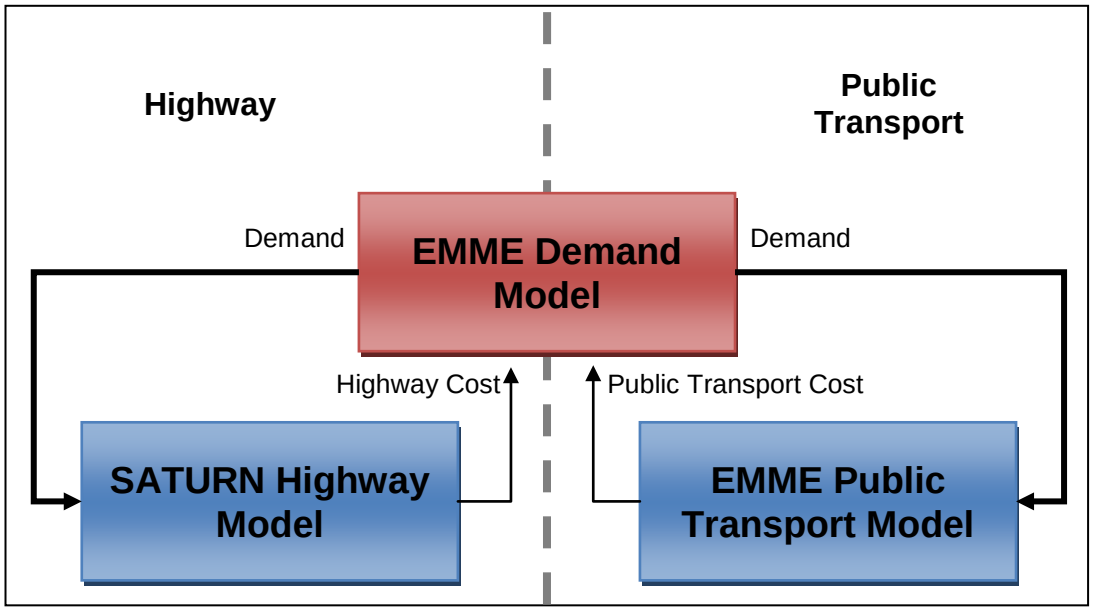
- roadside driver interviews (including automatic number plate recognition technology) and classified vehicle counts;
- journey time surveys;
- car park surveys;
- workplace interviews; and
- public transport surveys (bus and rail) and counts.

To minimise the number of new surveys, extensive use was made of existing data from a number of sources:

- school travel database;
- Wayfarer ticket data from bus operators;
- rail ticket sales data;
- earlier public transport passenger and car driver surveys; and
- bus real-time passenger information database – a dataset of actual bus travel times, provided for most services within the study area.

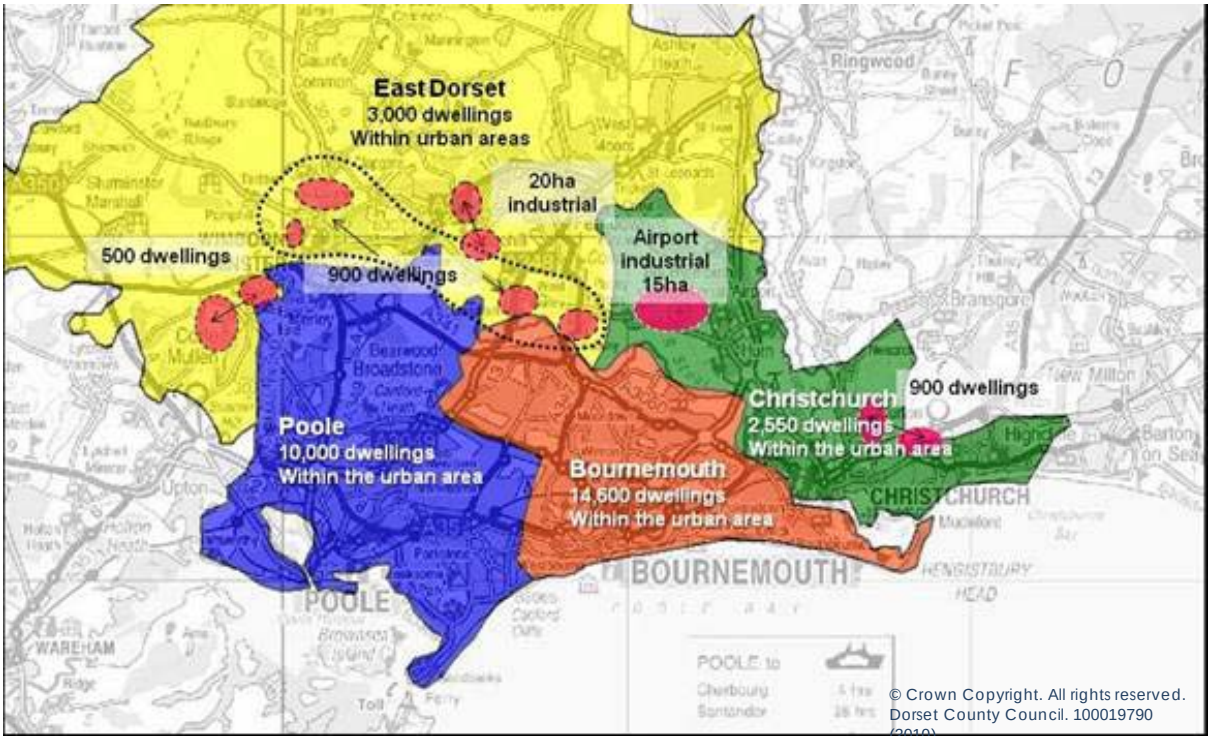
Particular care and attention to detail was followed in the amalgamation of the data from such a wide variety of sources in order to ensure that the strength and precision of each data source was retained.

Figure 2 – Transport Model Components



Although the base year for the model is 2008, its main function is to forecast future changes to the transport system by 2026 taking into account the projected increases in population and employment in the area. Figure 3 summarises the locations of the main growth in dwellings and employment to 2026.

Figure 3 – Growth in Dwellings and Employment 2006 to 2026



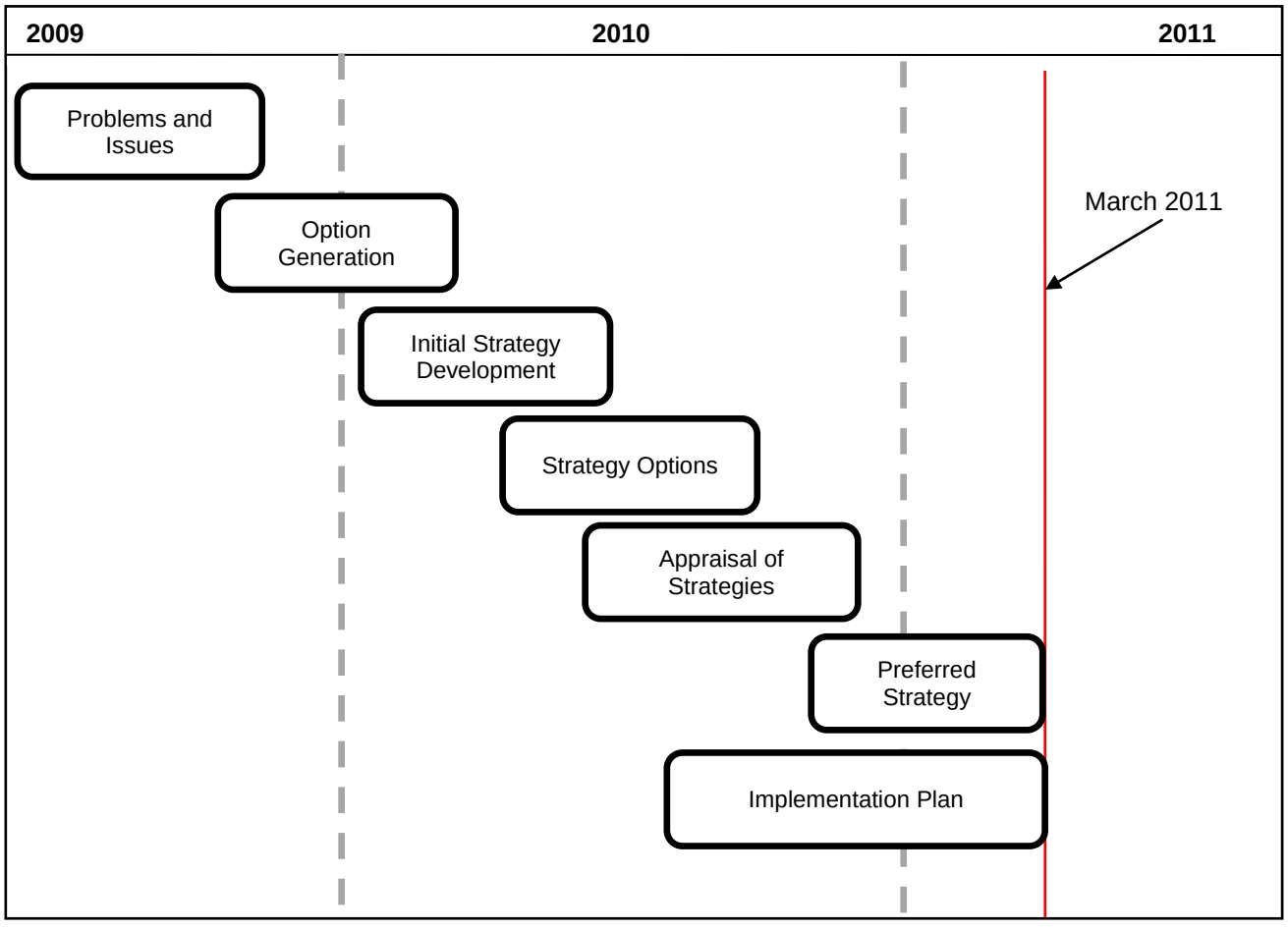
Development of the Transport Strategy

The development of the recommended transport strategy was directed towards achieving the strategy objectives, which may be summarised as:

- supporting national economic competitiveness and growth;
- tackling climate change;
- contributing to better safety, security and health;
- promoting greater equality of opportunity;
- improving the quality of life and promoting a healthy natural environment;
- being affordable; and
- being capable of implementation.

The transport strategy development process is shown in Figure 4 and consists of seven key stages.

Figure 4 – Outline of Transport Strategy Development Process



The seven stages in the study's strategy development process comprised:

- **Stage 1 (Problems and Issues)** – combined a review of current transport policy; a major consultation exercise involving local authority members and officers, the stakeholder group, local transport interest groups and the general public to understand the local perceptions of the problems and issues; and the application of the transport model to establish the forecast future travel demand and the location and magnitude of future problems and issues;

- **Stage 2 (Option Generation)** – the range of potential measures to resolve the problems and issues emerging from Stage 1 were identified from a range of sources, including: earlier studies; the results from the Stage 1 consultation; discussions with transport providers; research by the study team; and outputs from the transport model;
- **Stage 3 (Scenario Testing)** – explored the impact of potential components of the transport strategy by identifying a series of measures to be assessed using the transport model, with the measures being formed into a series of themes, each representing a different emphasis (committed schemes with a similar level of investment achieved in recent years; significant public transport improvements with extended greener choices; more ambitious public transport measures with greener choices; and extensions to the highway network with demand management);
- **Stage 4 (Strategy Options)** – used the transport model to assess the themes from Stage 3, followed by further consultation with local authority members and officers, the stakeholder group, local transport interest groups and the general public in order to establish their reactions to the potential measures;
- **Stage 5 (Appraisal of Strategies)** – the preferred strategy components from Stage 4 were assembled into four alternative strategies which were then assessed using the transport model to identify their performance against the study's objectives, including the application of the Department for Transport's Strategic Appraisal Framework to ensure that all relevant criteria were taken into account;
- **Stage 6 (Preferred Strategy)** – the preferred strategy emerged from a combination of the technical work undertaken in Stages 1 to 5, and represents a package of measures which form the basis for a further range of consultation prior to being finalised for formal adoption. While the strategy concentrates on a principal time horizon of 2026, in line with LTP3, the measures are disaggregated between short, medium and long term timescales; and
- **Stage 7 (Implementation Plan)** – running concurrently with Stage 6, the preparation of the implementation plan and programme included identifying the outline costs for the strategy components, with the potential funding sources, and developing an overall implementation programme for the schemes, with the short term measures feeding directly into the LTP3.

Consultation formed a major element within the strategy development process, with active engagement of local authority members and officers, key stakeholders and the general public. Major consultation events occurred in Stages 1, 4 and 6 and involved the preparation of a leaflet which outlined the aims of the particular stage of consultation and sought contributions through the completion of a carefully designed questionnaire. Copies of the leaflet were made available extensively across the area including in libraries, hospitals, public building, supermarkets, etc. In addition, throughout the duration of the study, a website was maintained where the consultation material was made available and the questionnaire could be completed on line. Specific meetings were held with the Strategy Advisory Group (formed by Partnership representatives, local authority members and officers) and the Wider Reference Group (comprising representatives of organisations with an interest in the operation of the transport network in the South East Dorset area). These meetings included detailed discussions of the issues associated with each stage of the consultation. The outcomes from the consultation played a direct role in the development of the study's final strategy.

Content of the Transport Strategy

The development of the transport strategy inevitably represents a compromise between a range of competing alternative directions which influence the scale and content of the strategy (Figure 5), including:

- short and long term measures – although the overall horizon for the strategy development within the study looks forward as far as 2026, **there are problems across the transport system which exist at the moment and need to be resolved immediately**;
- containing a vision for the future which at the same time **includes practical measures designed to deal with specific issues;**

- taking into account the **short and long term changes to land uses**, particularly the planned significant new housing and industrial developments which could have a marked impact on the volume of travel demand within the vicinity of individual developments or perhaps, depending on the scale, further afield;
- reflecting the **current uncertainties about the economic climate** and the associated constraints on central and local government finance while taking a realistic position about the **likely availability of finance from a range of sources in the future**;
- with the recent change in central government, announcements by Ministers have indicated **likely changes to government policy**, particularly in relation to the availability of funding for measures, the types of scheme that are likely to receive support, the specific appraisal requirements and the scheme approval process – flexibility is therefore required in the contents of the strategy in order to **reflect the changing government requirements**;
- as well as existing government policy, the **strategy would be developed within the current legislative framework** and any elements should not require changes to legislation;
- taking into account that the need to travel is based on a complex range of circumstances and therefore the solutions to problems across the transport system may include **measures outside the transport sector** as well as within it;
- although the partnership group for the transport study includes the three local authorities within South East Dorset and the Highways Agency, which between them are the relevant transport authorities for the area, there are nevertheless **significant aspects of the transport system in South East Dorset which are outside their direct control**, e.g. elements of the bus and rail system; and
- the operation of the transport system within South East Dorset is influenced by the highway and public transport networks outside the area – the **connections to the west, north and east have an impact on travel within South East Dorset**, although there are limitations to the influence that the study partners can have on the network beyond their boundaries.

Many of these features highlight the need for the strategy to be flexible in being able to respond to possible changes in areas such as the policy framework, funding, and legislation that currently underpin its contents. To maintain the flexibility, there is merit in considering the strategy as a 'live' document which is regularly reviewed and updated to reflect the changing circumstances. In this way, the transport strategy would mirror the LTP3 itself.

Figure 5 – Influences on the Transport Strategy

The contents of the strategy developed during the study are summarised in Figure 6 (short and medium measures to 2020), Figure 7 (long term measures to 2026) and Figure 8 (measures beyond 2026).

In considering the contents of the strategy, it is important to distinguish between those measures which are **recommended** for implementation and those which would be outside the responsibility of the client partnership and hence cannot be formally implemented by them; these measures are therefore **supported** by the study. For some measures, the allocation to short, medium or long term implementation is provided as a guide; an indicative implementation plan has been developed which will need to be refined as the individual measures are progressed, taking into account a range of factors not the least of which will be the availability of funding.

Due to the uncertainties with the major scheme funding process, and hence the speed with which new major schemes may be progressed, together with the progress with housing and industrial developments, there is the possibility that the situation represented by the 2026 strategy may actually occur beyond that date. As a result, the full transport strategy should be considered to reflect a level of development rather than a specific year, and a distinction is made between measures likely to be achieved before 2026 (Figure 7) and those measures to be implemented after 2026 (Figure 8). Additional potential Park and Ride sites are shown separately in Figure 9.

Figure 6 – Strategy Short/Medium Term Measures up to 2020

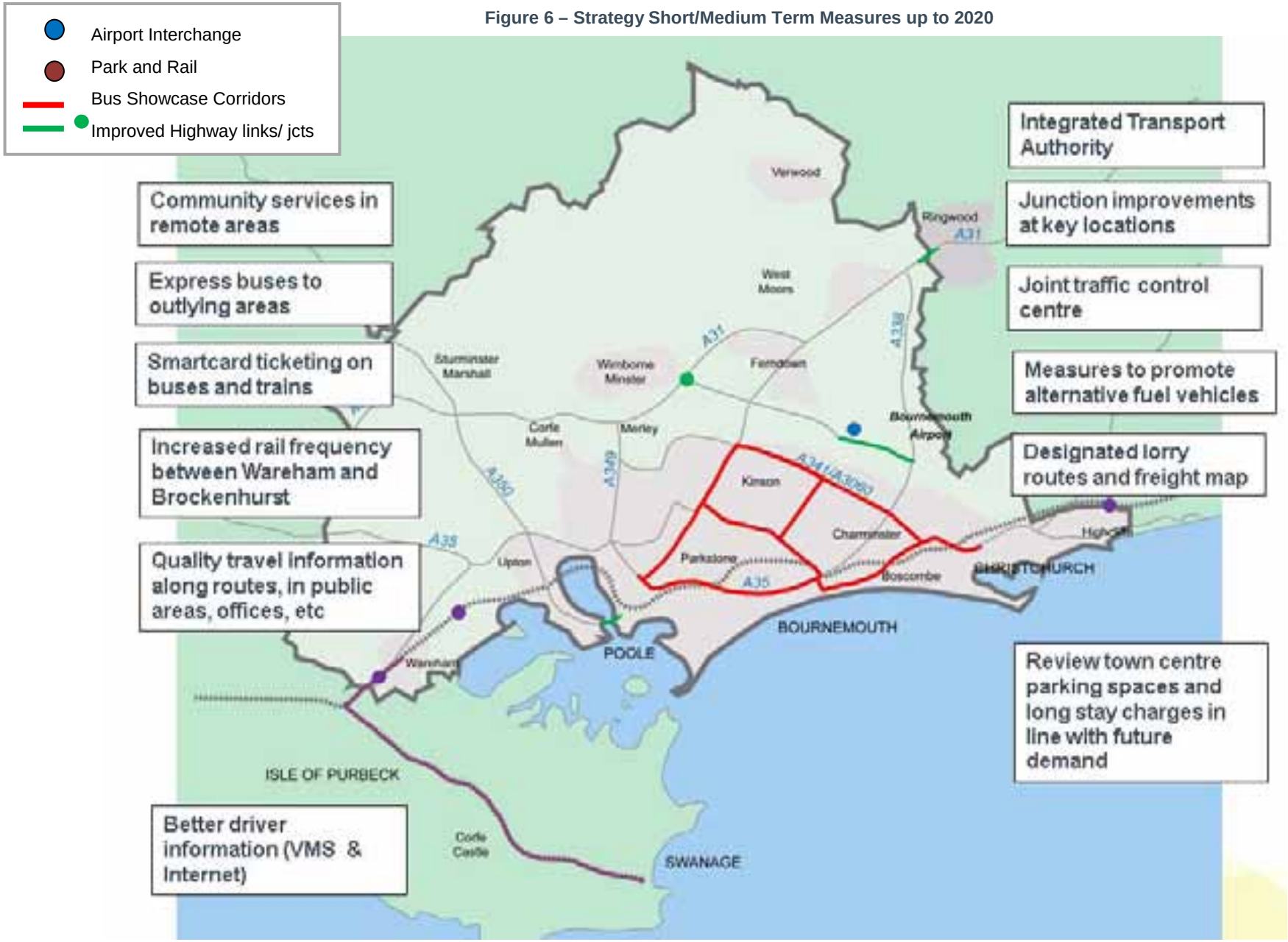
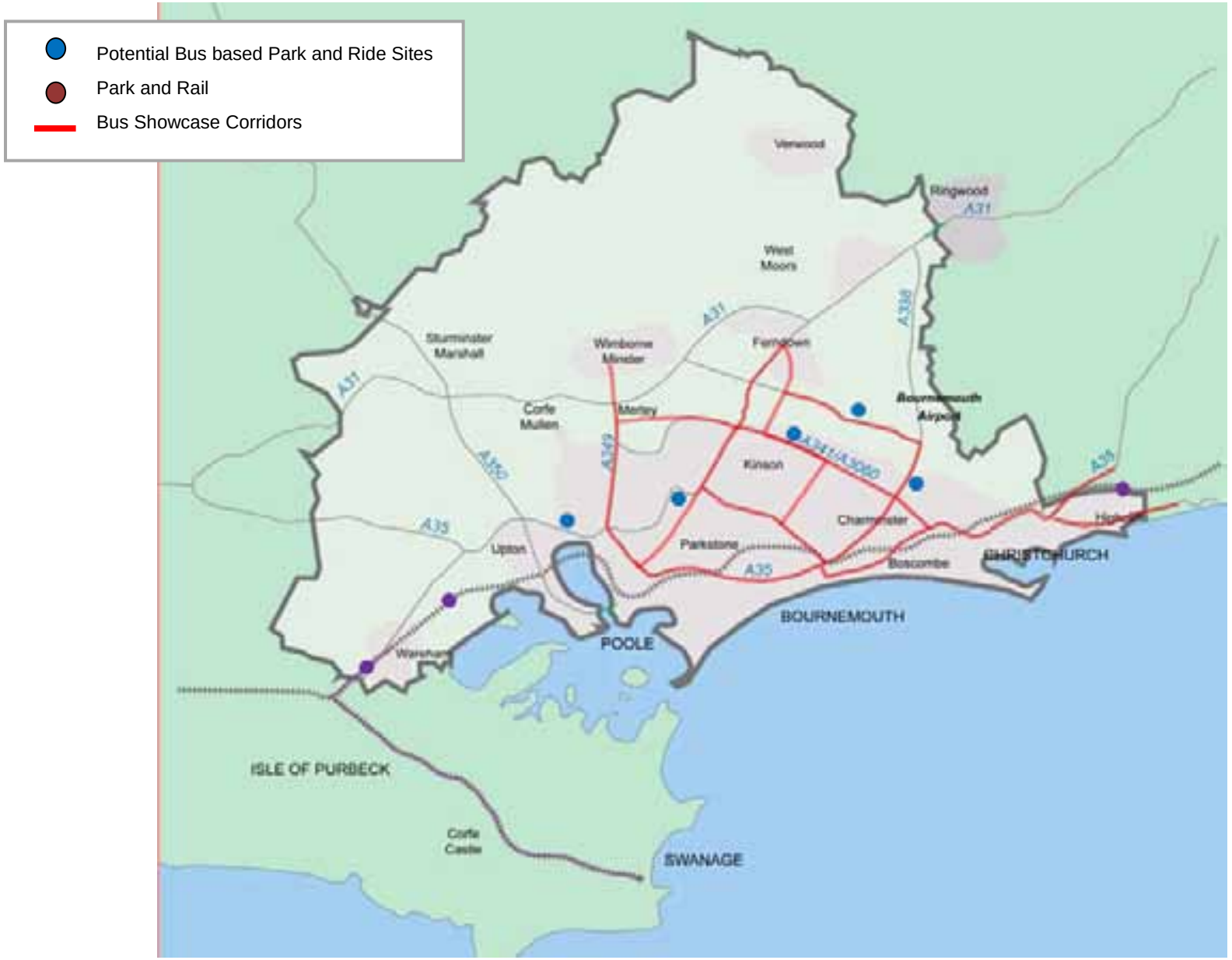


Figure 7 – Strategy Long Term Measures to 2026

Figure 8 – Strategy Long Term Measures beyond 2026

Figure 9 – Potential Park and Ride sites



Cycling, walking and smarter/greener choices

In an environment where financial resources for investment in transport are limited, a strategy in which the emphasis is on the more effective use of existing resources becomes more prudent. At the same time, where small-scale measures to improve cycling and walking can be brought forward, there is the opportunity to influence modal choice in favour of more sustainable modes. Furthermore, improvements to walking and cycling facilities and the expansion of smarter choices to make more effective use of existing infrastructure were given strong support within the consultation, reinforcing the importance of these measures.

The development of the strategic cycle network is key to providing continuous routes between significant trip generators and destinations (e.g. residential areas with employment) and encouraging a mode shift to cycling. The strategic cycle network would provide links to town centres, rail stations, Bournemouth University, the Port of Poole, Bournemouth Airport and major employment centres. This will involve addressing gaps in the existing network and improving the road environment for cyclists. Links would also be provided from the strategic cycle network to recreational routes, including links to green spaces and corridors. New cycle and pedestrian bridges will help to reduce severance and provide more direct routes. New/improved secure cycle parking will reduce fears of cycle theft, which makes some people reluctant to cycle. The feasibility of a cycle hire scheme at key locations, e.g. railway stations, beaches, etc should also be explored.

In parallel with improvements for cyclists, benefits for pedestrians would be achieved through measures including enhanced facilities in town centres (incorporating public realm enhancements), footpaths, crossings, signing, lighting, etc. Outside town centres, by working with local residents, it will be important to identify pedestrian links where changes to lighting, street furniture, etc can enhance existing routes and increase pedestrian activity.

Smarter choices have been shown to be an effective approach of influencing the level of private car use and increasing the take-up of more sustainable modes, without incurring major new infrastructure. However, introducing smarter choices is not without costs for the local authorities with the need to reallocate staffing and other resources to achieve an effective control of the different smarter choices initiatives.

In order to ensure that South East Dorset residents are fully aware of the range of alternatives available for their usual journeys and to enable them to select sustainable options, a programme of personalised travel planning (PTP) should be initiated by the local authorities as the focus for their smarter choices activities. Although including some improvements to facilities, the objective of PTP is to make better use of existing resources. To achieve this through PTP, the local authorities would need to set up and train a dedicated team which would follow a programme of contacting residents to highlight to them the alternative ways in which they could make their current journeys, emphasising the more sustainable and cost effective options. The application of PTP elsewhere in the country has achieved significant reductions in car use and changes in the use of alternative modes.

There is the opportunity to gain significant benefits by working with major employers to develop travel plans which reflect the opportunities for cyclists and promote integrated measures. Further work will be undertaken with schools, colleges and the University to introduce/update travel plans and deliver cycle improvements.

The smarter choices framework encompasses a variety of initiatives, often with a different emphasis, although at the same time with the potential for a degree of overlap between them. They could include:

- origin-based travel plans and measures:
  - residential travel plans,
  - car clubs,
  - car sharing.
- destination-based travel plans and measures:
  - workplace travel plans (including employer-led car share schemes),

- teleworking and teleconferencing (as part of workplace travel plans),
- school travel plans,
- leisure travel plans,
- rail station travel plans and access to stations.

- information and marketing:
  - public transport information and marketing,
  - travel awareness campaigns (including promoting car sharing, etc).

The combined impact of the varied smarter choices elements would be effective in influencing the mode choice and the volume of travel. However, this requires **active** implementation of the measures rather than passive or token reference to them. The experience from the London Borough of Sutton has been that, if sufficient resources are devoted to smarter choices, in terms of staff resources, materials, equipment, publicity, etc then a significant impact may be achieved in changing the behaviour of the travelling public. Furthermore, the resources would be required on a continuing basis in order to ensure that smarter choices initiatives are updated to react to the changing circumstances, so that as new companies are formed or move into the area, new residential developments are completed, people change job or move home, the appropriate travel plans or smarter choices measures are updated. In recognition of the benefits, the local authorities would therefore need to achieve a reallocation in resources to planning, implementing, monitoring and reviewing the smarter choices.

Non-transport policy measures

An increasing interest and attention is being paid to the impact of policy measures outside the immediate transport sector which could nevertheless make a significant contribution to reducing the general level of travel across the South East Dorset conurbation and the use of individual modes, particularly sustainable modes. This reflects a growing awareness of the wider implications of policies on travel behaviour. Central Government is placing increasing emphasis on the wider policy implications on transport of broader measures. The study has therefore reviewed the emerging policy measures and identified those which have the potential to have a significant impact on travel behaviour in South East Dorset. In considering the impacts of non-transport policy measures, attention is concentrated on those measures that are under the direct control or influence of the study's client partnership, particularly the local authorities.

Land use and planning

Within the time horizon of the strategy, South East Dorset is projected to experience a significant increase in homes and jobs through a range of new developments. The location and form of these developments can have a significant impact on travel patterns. In line with current planning policy, new developments should be located where they have (or can potentially provide) access through a range of modes of transport, especially sustainable modes. Hence, the developments should be located close to public transport corridors and/or be planned so as to encourage walking and cycling for shorter distance journeys.

Large-scale developments should include a mix of different land uses, including residential areas, employment opportunities and local services to reduce the need to travel and enhance the potential use of sustainable modes. These local services would include schools, health centres, community and leisure facilities as well as local shops, post offices, etc. Clustering the range of services together can generate benefits in reducing the overall need to travel, shortening the length of journeys required to reach the facilities and broadening the range of potential modes. The local centres could also include a range of measures to promote the use of sustainable transport, many of which form part of the smarter choices category, including public transport information, personalised travel planning, electric vehicle charging points and drop off/pick up points for deliveries.

Cooperation between companies could be increased in making office space, meeting rooms, etc available to other companies or individuals (although for a charge) and therefore potentially reducing the amount of travel. The local authorities could be the catalyst for increased activity by creating a database of organisations offering and seeking these facilities.

Digital Connectivity

Digital connectivity includes technological solutions which provide the opportunity for individuals and organisations to:

- work from a variety of locations outside the normal office base, particularly at home;
- access a range of services from a variety of locations; and
- communicate with clients, business associates and partners without travelling to meet them.

By supporting and encouraging a comprehensive network of 'super-fast' broadband and the establishment of work hubs, the local authorities would promote increased local working and reduce the need for travel. This opportunity could be further increased through an expansion of community hubs in local buildings such as post offices, pubs and community centres.

As part of this, the wider availability of internet connections through the provision of Wifi at public transport interchanges (rail stations, bus stations, etc) and on trains could encourage the use of public transport journeys.

Education and skills

Although smarter choices includes school travel plans, the coverage of these plans is almost at saturation level and hence other opportunities are required to influence sustainable travel to schools. These could include:

- the staggering of school opening and closing hours;
- changing the school selection process (especially for secondary schools) so that students are more likely to attend a school close to home;
- provide guidance to parents and students during the selection process to highlight the sustainable travel implications of their choice of school; and
- increase the use of school buildings within the community to increase the volume of local activities and reduce the amount of travel.

Beyond schools, the wider enhancements of skills through retraining could contribute in some sectors to the narrowing of skills gaps and a reduction in the levels of in-commuting to the area in order to resolve skills shortages. By shortening commuting distances, the potential for sustainable travel is generally enhanced.

Health

The linkage between travel and health is gaining increased prominence and therefore elements within the overall strategy which encourage greater walking and cycling will create health benefits. However, there are changes that can be made to the provision of health services which can contribute to the effectiveness of transport measures, including changes to visiting hours at surgeries, clinics and hospitals; increased health education; and greater use of technology to avoid/reduce travel to hospitals and surgeries.

Public transport

Improvements to public transport provision form a key element within the transport strategy for South East Dorset. They comprise a wide range of improvements across a number of public transport sub-modes and include changes to both infrastructure and operations. The extent of measures within the emerging strategy includes:

- Creation of an **integrated transport authority** to progress and administer some of the proposals.
- **Bus Showcase Corridors** – large-scale series of measures designed to improve bus journey times and reliability along key corridors, initially on A35 Poole to Christchurch and North Bournemouth (Wimborne Road, Whitelegg Way, Redhill Avenue, Boundary Road, Talbot Road) and then subsequently on other key corridors including Wallisdown Road, Ringwood Road (Poole), New Road, Gravel Hill/Waterloo Road, including links with other public transport improvements:

- bus lanes and/or High Occupancy Vehicle (HOV) lanes;
- bus pre-signals;
- bus priority at signals/SVD (selective vehicle detection)/AVL (automatic vehicle location) in conjunction with Urban Traffic Control (UTC) systems – possibly operating only when a bus is delayed against its timetable,
- relocation/rationalisation of parking where parking is causing delays, or removal where no alternative location can be found;
- improvements to bus stops, including bus boarders, raised/accessible kerbs, and some relocation of stops;
- changes to traffic lanes;
- restrictions on turning movements;
- redirection of general traffic onto other routes – primarily use of Boundary Road for north-south traffic movements rather than Wimborne Road; and
- impacts could be enhanced by increased enforcement, better real time passenger information, new buses, increased frequency of services, marketing and publicity.

- **Bus services** – series of improvements designed to extend the coverage of bus operations within the conurbation:
  - express bus services to Poole and/or Bournemouth from Wimborne, Ringwood, Ferndown, Verwood, and Bournemouth Airport;
  - improved north-south routes;
  - improved links to major industrial areas, e.g. Uddens/Ferndown, Bournemouth Airport;
  - better links to Bournemouth Hospital from Bournemouth town centre and west Bournemouth.
- **Community transport/demand responsive transport** – especially serving areas outside the main conurbation;
- **Interchange** – improved interchange, especially between bus, rail and coach, between bus services in town centres and out-of town facilities e.g. an Interchange/Hub at Bournemouth Airport;
- **Real time passenger information** – more accurate and more widely available real-time passenger information with display screens containing departures by all public transport modes located in principal buildings including stations, shopping centres, libraries, hospitals and major offices;
- **Fares and ticketing** – containing a series of initiatives designed to ease the payments by passengers (especially for multi-operator or multi-mode journeys), and speed up boarding times, moving ultimately towards a Smartcard/Oyster card type of operation;
- **Rail:**
  - reconnecting the Swanage rail line to the main line at Wareham incorporating new/reopened stations, Park and Rail, with necessary signalling enhancements as part of the Network Rail Poole to Wool scheme;
  - increase to the frequency of local rail services within the study area – from Wareham to Brockenhurst;
  - improve Park and Rail at existing stations, e.g. at Wareham, Holton Heath, Hinton Admiral;
  - improve access, parking, and walking/cycling links at all stations.

- **Rapid transit** – Dorset Area Rapid Transit (DARTS) between Christchurch and Hamworthy/Poole with a new off-line town centre section between Westbourne and Bournemouth Interchange:
  - split into two sections (Christchurch to Branksome and Boscombe to Hamworthy/Poole); and
  - further work is required to clarify a number of operational issues with the scheme being operational after 2026.
- **Park and Ride** – series of new Park and Ride sites with links to Bournemouth and/or Poole town centres to be implemented in phases (see Figure 9):
  - Phase 1 (up to 2020): Bournemouth Airport Interchange/ hub, Park and Rail - Hinton Admiral, Holton Heath and Wareham
  - Phase 2 (post 2020): Implementation dependent upon future circumstances and demand, and the success of other elements of the public transport improvements;
    Mannings Heath to Bournemouth and Poole, North of Bournemouth to Bournemouth and Poole, Riverside Avenue to Bournemouth and Creekmoor to Poole – these schemes could emerge after 2020 in line with town centre developments.

Highway improvements

Enhancements to the highway network range between techniques designed to help make better use of the existing infrastructure, local junction improvements, widening of existing roads and the construction of new road links.

In addition to resolving the main congestion problems, both now and in the future, where relevant the schemes include elements designed to integrate with other transport improvements, such as public transport priority improvements in the Bus Showcase Corridors, introduction of High Occupancy Vehicle lanes (HOV), etc.

In this way, the emphasis is on the movement of people, across a number of modes, rather than purely vehicles. At the same time, some of the measures listed under the public transport heading will have impacts on the highway network with associated schemes, particularly in the longer term e.g. DARTS. Also parking issues are considered under the heading of demand management.

The range of highway measures extends from short term measures through to more extensive longer term improvements, with significant new construction. The strategy assumes that immediate highway improvements associated with the currently under construction Twin Sails Bridge would be completed in the short term.

- elements of the **intelligent transport system** (ITS) strategy, including:
  - combined traffic control centre for the three local authorities;
  - extended variable message signing, including routeing/congestion issues and availability of parking spaces;
  - improved driver information;
  - availability of online travel information on local authority websites.
- **traffic management:**
  - junction enhancements – variety of detailed junction improvements at key junctions, extending from changes to traffic signal settings, changes to priorities, etc, e.g. at Stony Lane, Fountains, Ensbury Park gyratory, County Gates, etc;
  - parking capacity and charging in town centres;
  - revisions to on-street parking, particularly on Bus Showcase Corridors;
  - local traffic calming schemes including 20 mph home zones;

- introduction of HOV lanes (potentially on B3073 corridor);
- coordination of road works using permit system;
- inclusion of powered two wheeled vehicles in bus lanes;

- **new highway schemes (before 2026):**
  - completion of the Twin Sails Bridge (under construction);
  - Poole Bridge Regeneration Initiative highway improvements;
  - Canford Bottom junction improvement – 'hamburger' junction;
  - A31 westbound widening at Ringwood;
  - B3073 widening between Blackwater junction and Chapel Gate, including alterations to Blackwater junction;
  - A31 dualling between Ameysford and Merley ;
- **new highway schemes (post 2026):**
  - new east-west link between B3073 Chapel Gate /A341 Magna Road /A31 Canford Bottom;
  - A338 widening between B3073 Blackwater and A3060 Cooper Dean junctions.

The combined introduction of the variety of highway infrastructure measures provides an increase in the total capacity available across South East Dorset in the horizon year of 2026. However, with the significant increase in demand for travel by 2026, even with the highway improvements, there are nevertheless residual levels of congestion that would remain. It is not prudent or viable to endeavour to resolve all future levels of congestion by increasing highway capacity. In addition to improvements to public transport, smarter choices, walking, cycling, etc which are designed to offer alternatives to the private car for many journeys, a range of demand management techniques have been considered to reduce the demand for private vehicle travel and thereby reduce congestion.

Demand management

Although the smarter choices measures and public transport improvements will have an impact on the use of sustainable modes, the level of mode split and hence the volume of congestion on the South East Dorset road network, it is expected that additional measures would be required in order to further influence the decisions on the choice of mode. A number of potential demand management measures were identified and the following were included in the strategy:

- an increase in long stay town centre parking charges, at levels above inflation; and
- a reduction in the number of long stay spaces available to commuters within town centre car parks, on street and in new developments.

In the event of Park and Ride sites coming forward, the changes in charging levels and parking capacity in the town centres would be linked with the introduction and charging levels for Park and Ride sites, with a need to maintain a balance between them and to ensure the effectiveness of the Park and Ride sites. At the same time, changes to the parking capacity could enable the redevelopment of car parks in town centres.

Specific freight measures

Many of the highway and traffic management improvements will benefit the operation of freight services as well as general traffic. However, specific further measures to enhance freight operations would be included, particularly as part of the Freight Quality Partnership. Specific aspects which should be progressed include specific lorry routes and other driver facilities, including a new lorry map covering the study area. There should also be further investigation of the potential for a freight transhipment facility on the edge of the conurbation to permit the consolidation of loads and the reduction of freight vehicles entering the town centres.

Performance of the resulting Strategy

At each stage in the strategy development process, the contents of the overall strategy and the principal individual components were assessed against a number of criteria identified in the government New Approach to Appraisal. Particular attention was given to the impact of the individual measures in changing the choice of mode across the study area and level and location of congestion. Wider appraisal considered the impact on a range of environmental criteria, and changes to the levels of accessibility and safety of travel across the transport system.

The overall impact of the both the 'full' and 2026 strategy against the 2008 base and 2026 Do Minimum, measured by key indicators is shown in the following figures:

- the change in the volume of morning peak trips and mode split (Figure 10)
- the carbon emissions by area (Figure 11)
- total delay on the highway network during morning peak (Figure 12)

Figure 10 highlights that for the morning peak period the number of car trips in 2026 with the preferred strategy is similar to the corresponding level for 2008. This contrasts with the increase in car trips in the 2026 Do Minimum as a result of the growth in housing and employment detailed earlier. At the same time to mode split for car falls from 91% in 2008 to 86% in strategy. From a different viewpoint, the proportion of public transport trips in the morning peak rises from 8.6% in 2008 to over 13% with the 2026 strategy, an increase of 60%.

Figure 10 – AM Peak Mode Split and Total Trips

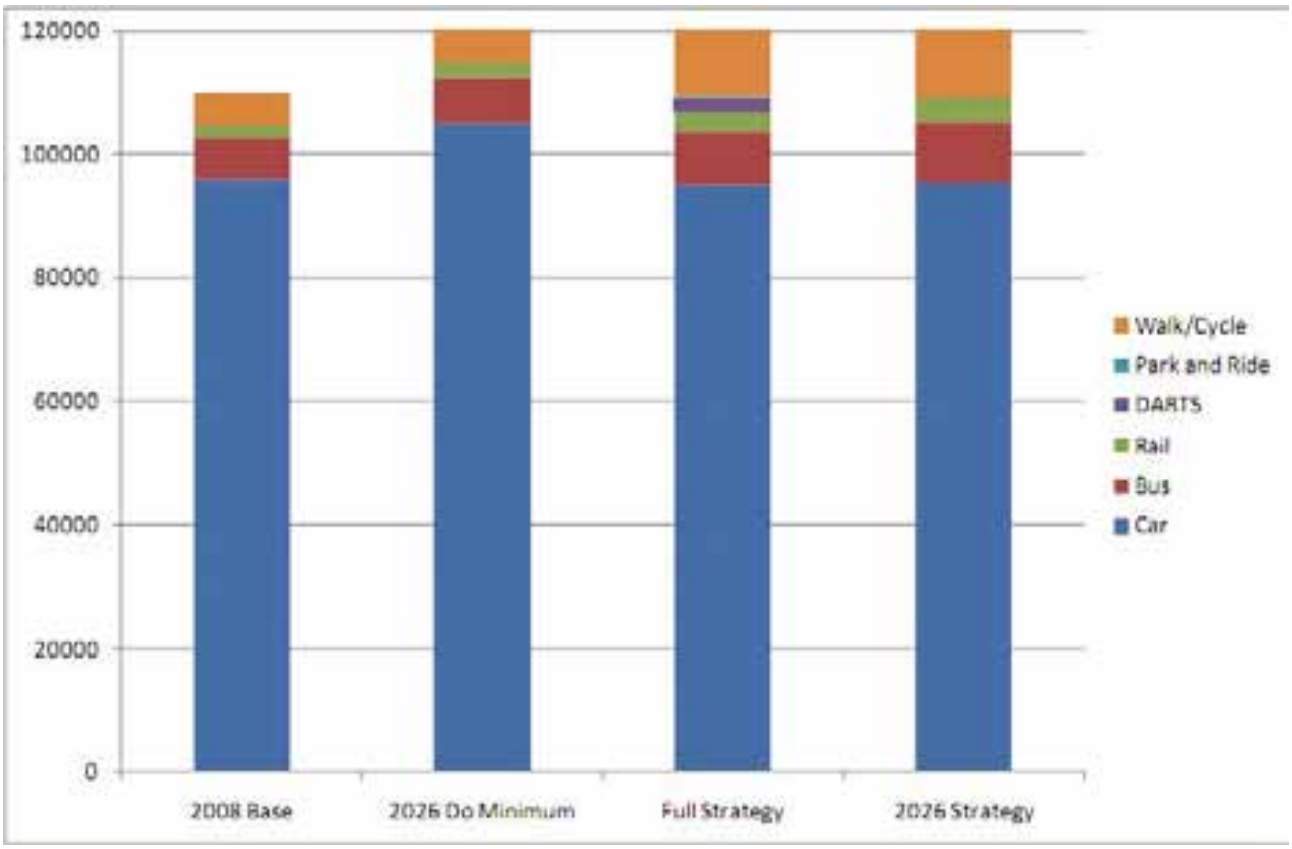
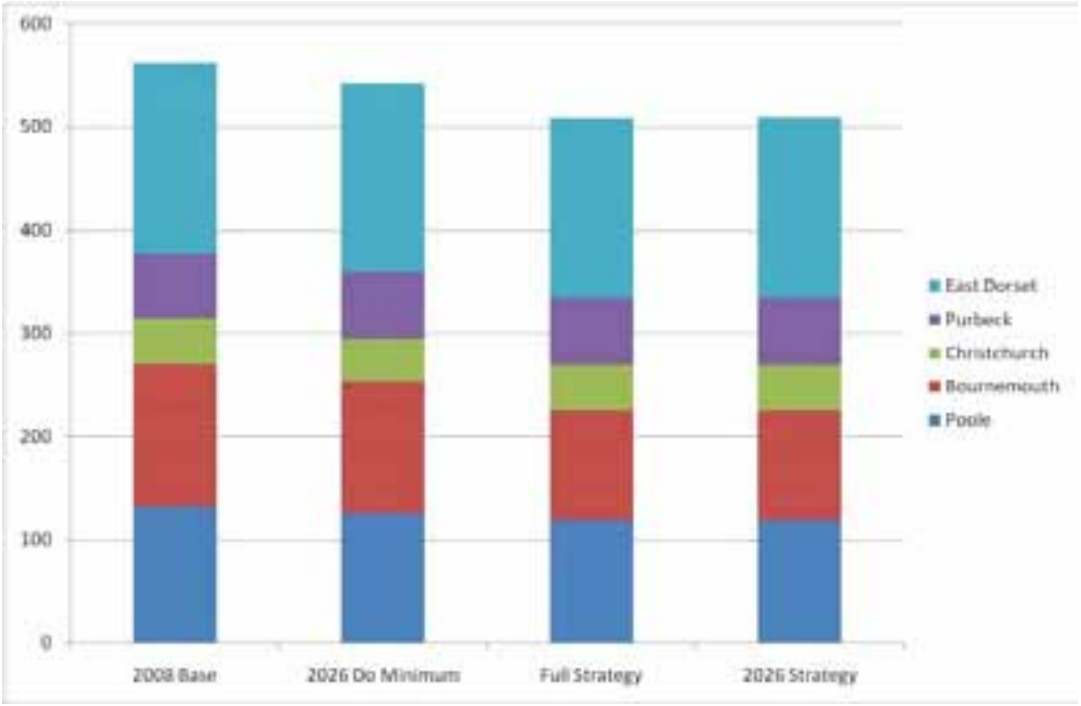


Figure 11 illustrates the annual vehicular carbon emissions by area. This demonstrates that carbon emissions are predicted to reduce due to cleaner and more efficient engines and uptake of electrical vehicles. With the strategy further reductions can be achieved due to the increased uptake of cycling, walking and public transport.

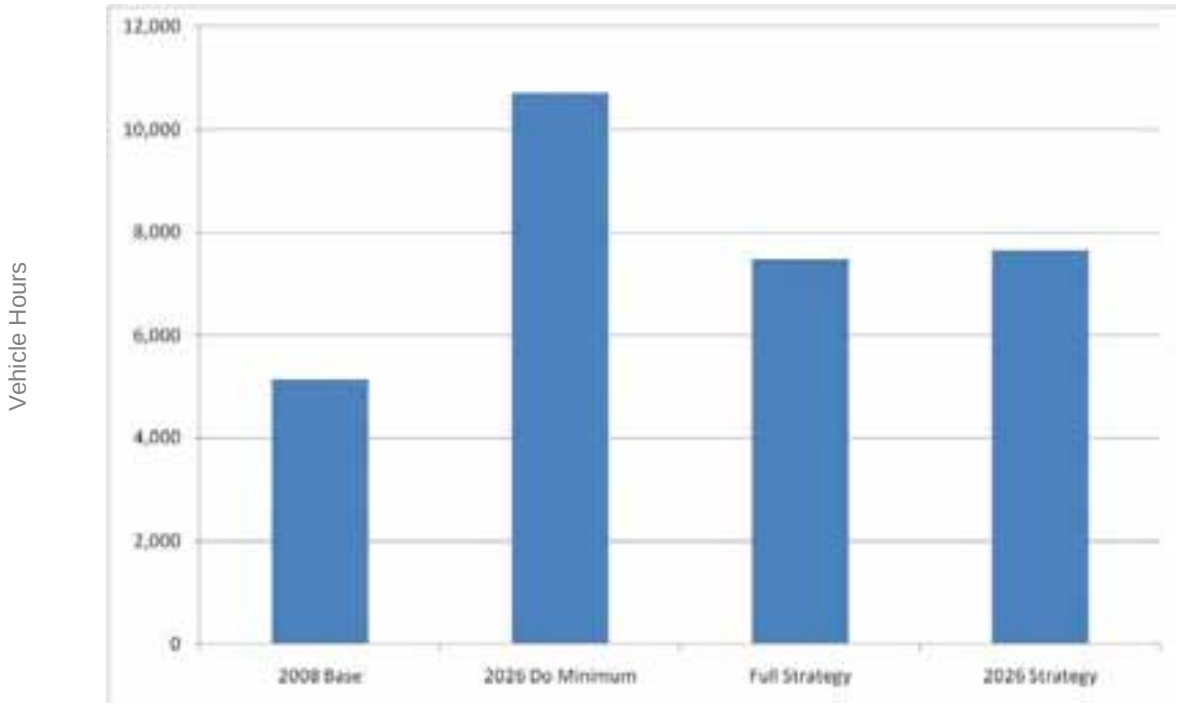
Figure 11 – Annual Vehicle Carbon Emissions by area (K Tonnes)



East Dorset contributes the greatest share of carbon emissions, partly due to the A31 trunk road and partly due to higher levels of car ownership and use across the District. The highest reductions in carbon emissions are predicted in Bournemouth as a result of this area having the greatest potential transference to more sustainable modes.

Figure 12 presents the variation in the total delay across the highway network. This highlights the significant rise in delays between 2008 and the 2026 Do Minimum increasing by 109% in the morning peak as a result of the growth in housing and employment. The strategy produces a marked reduction in the growth in the peak periods – less than half the increase in the Do Minimum.

Figure 12 – Total Delay on Highway Network during morning peak



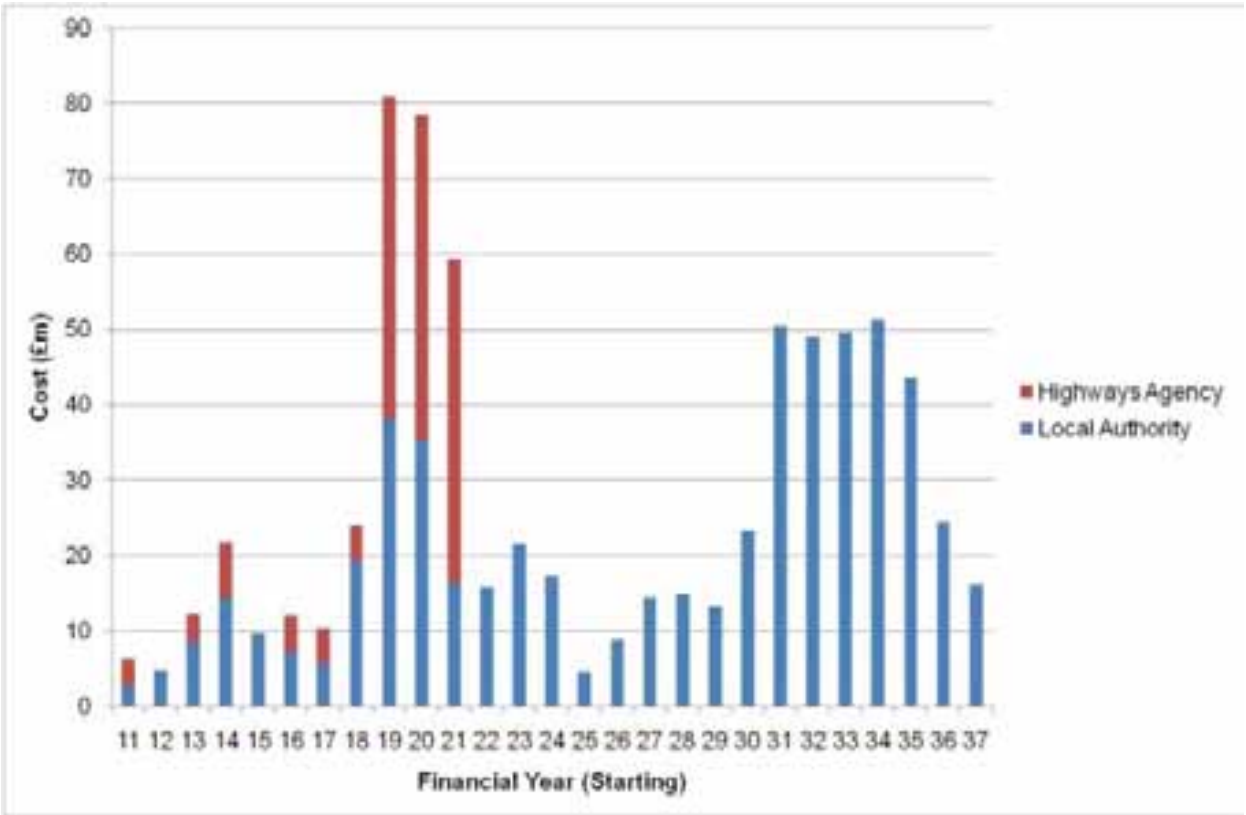
The contents of the strategy would require a significant investment of funds, from local and central government and through contributions from new developments and therefore a key indicator is the effectiveness of the funding in generating benefits across the South East Dorset area. As measured by the Benefit Cost Ratio (BCR), the performance of the strategy to 2026 produces a strong BCR of 5.5; because the full long term strategy contains a number higher cost measures which could not realistically be implemented until after 2026, it demonstrates a slightly lower, although still strong BCR of 4.5.

Funding

The content of the transport strategy being developed through the study is crucially linked with the available funding for the emerging policy measures and the focusing of the different funding sources to particular types of measure. With the change in Central Government in May 1010, the general contraction of budgets due to the October 2010 Comprehensive Spending Review and the subsequent announcements of funding initiatives by relevant Government departments, it has been necessary to maintain flexibility in the consideration of funding for the measures within the strategy.

The capital funding requirements for the strategy, including Highways Agency schemes, are in Figure 13.

Figure 13 – Overall Capital Funding Requirement



The available funding sources include:

- funding provided by central government, sourced from taxes paid by individuals and businesses, business rates, and central government borrowing:
  - revenue funding (e.g. Formula Grant);
  - capital funding (e.g. Integrated Transport Block, Maintenance Block, major schemes);
  - Private Finance Initiative grant support (e.g. street lighting, highways maintenance).
- local authority internal resources:

  - council tax – the level set for residents is influenced by the amount of other funding available from central government;
  - use of the council's financial reserves;
  - borrowing within the Prudential Capital Finance System.
- additional support from national and EU Sources (e.g. grants for demonstration projects from CIVITAS);
- developer contributions (e.g. Section 106/38/278 agreements and the South East Dorset Transport Contributions Scheme);
- local revenue raising mechanisms (e.g. car parking charges); and
- schemes delivered by third parties (e.g. the Highways Agency, Network Rail).

New forms of funding have emerged recently, for example the Local Sustainable Travel Fund (LSTF) for packages of measures to encourage sustainable travel, e.g. bus priority, traffic management, walking and cycling schemes, and integration between travel modes. LSTF is replacing a number of smaller transport grants.

It is also expected that no new bids for major scheme funding can be submitted until 2014. Hence, the availability of funds to progress measures in the strategy is likely to be limited, especially in the short term.

Taking into account the availability of funds, a proposed implementation plan has been produced, identifying funding sources and timescales for the proposed programme; this is shown in Figure 14.

The next steps

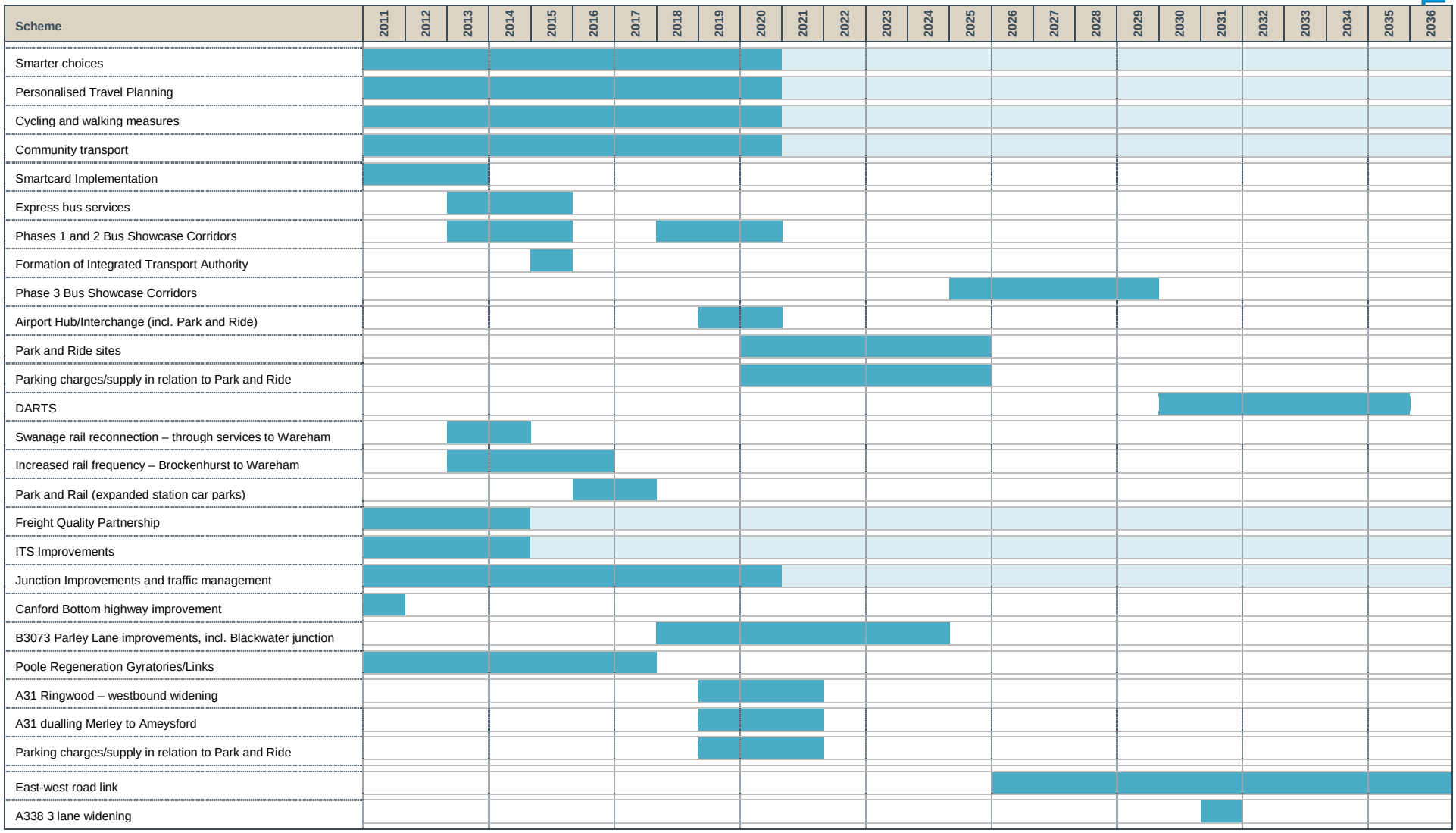
The transport strategy has been developed by the study within a range of constraints, conditions and assumptions. It should be considered as a live document subject to review as part of the three year LTP implementation plan development, taking into account:

- variations to the scale and pace of housing, industrial, office and leisure developments;
- where progress is made on other initiatives in the area, e.g. Bournemouth town centre vision;
- alterations to government policy, including the emphasis on particular types of measures;
- changes in wider local authority policies, e.g. education or health;
- the availability of funding, in general and for specific types of scheme, from central government, private developers and other sources; and
- significant changes in the underlying assumption for variables such as fuel prices, economic growth, etc.

The tools are in place to take these potential variations into account in revising the content of the strategy and reviewing the assessment of the strategy's performance. The strategy should be reviewed and refreshed at regular stages, e.g. as part of LTP implementation plan, to establish whether it continues to satisfy the assumptions and conditions that underpin it.

The government's introduction of the Local Sustainable Transport Fund presents the opportunity for the local authorities to seek funding for transport measures emerging from the transport strategy. Evidence to support the funding application would be available from the transport model developed and applied during the study.

Figure 14 – Indicative Programme



1. Introduction

Background

1.1 This is the Final Report of the South East Dorset Strategic Transport Study (SEDMMTS), setting out the study's recommended transport strategy for South East Dorset from the end of the second Local Transport Plan (2011) to 2026. This report describes the process undertaken in the development of the strategy, including consultation, and the modelling and appraisal of the strategy options. The strategy was developed through close collaboration with the local authority team preparing the LTP for the period 2011 to 2026 (LTP3); the SEDMMTS recommended strategy represents the long term aspirations for LTP3.

1.2 The principal partners for the study included:

- Borough of Poole (BoP);
- Bournemouth Borough Council (BBC);
- Dorset County Council (DCC);
- Highways Agency (HA);
- South West Regional Development Agency (SWRDA);
- South West Councils (SWC); and
- Department for Transport (DfT)/Government Office for the South West (GOSW).

1.3 The study partnership was led by the Borough of Poole and senior representatives from these organisations formed the study's Project Management Group which had the responsibility of steering the direction of the study, and providing advice and guidance at each key stage.

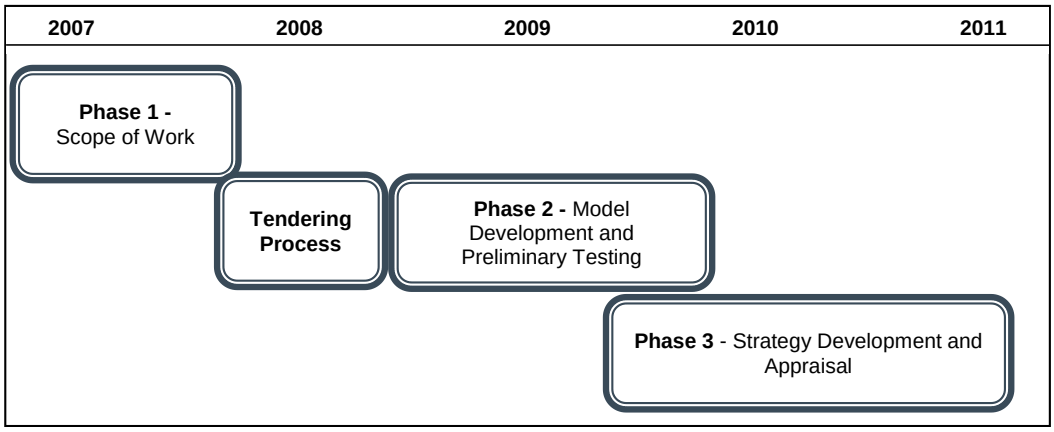
1.4 There have been no significant strategic transport studies in the South East Dorset area in recent times, and the transport model was previously updated in 2003. This lack of evidence base has resulted in South East Dorset falling behind other parts of the South West in terms of securing funding for major transport measures. An important element of the study has been the development of a new WebTAG-compliant multi-modal transport model, to inform the preparation of the strategy and provide the evidence base for future major investment in transport across South East Dorset.

1.5 The SEDMMTS has been undertaken in three principal phases (Figure 1.1):

- **Phase 1 – the scoping of the study** was undertaken in 2007-2008 and examined the availability of existing information, including transport models, and proposed the necessary data collection necessary to develop a new model;
- **Phase 2 – the development of the multi-modal model**, including the associated data collection was undertaken in 2008-2009; and
- **Phase 3 – the design, development and appraisal of the sub-regional transport strategy** for South East Dorset including the application of the transport model, which was carried out, from 2009 to 2011, in seven key stages described in Chapter 2:
  - Stage 1 – Identification of current and future problems:
  - Stage 2 – Option generation;
  - Stage 3 – Initial strategy development – scenario testing;
  - Stage 4 – Identification of strategy options;

- Stage 5 – Appraisal of strategies;
- Stage 6 – Development of the preferred strategy; and
- Stage 7 – Preparation of an implementation plan.

Figure 1.1 – Study Phasing

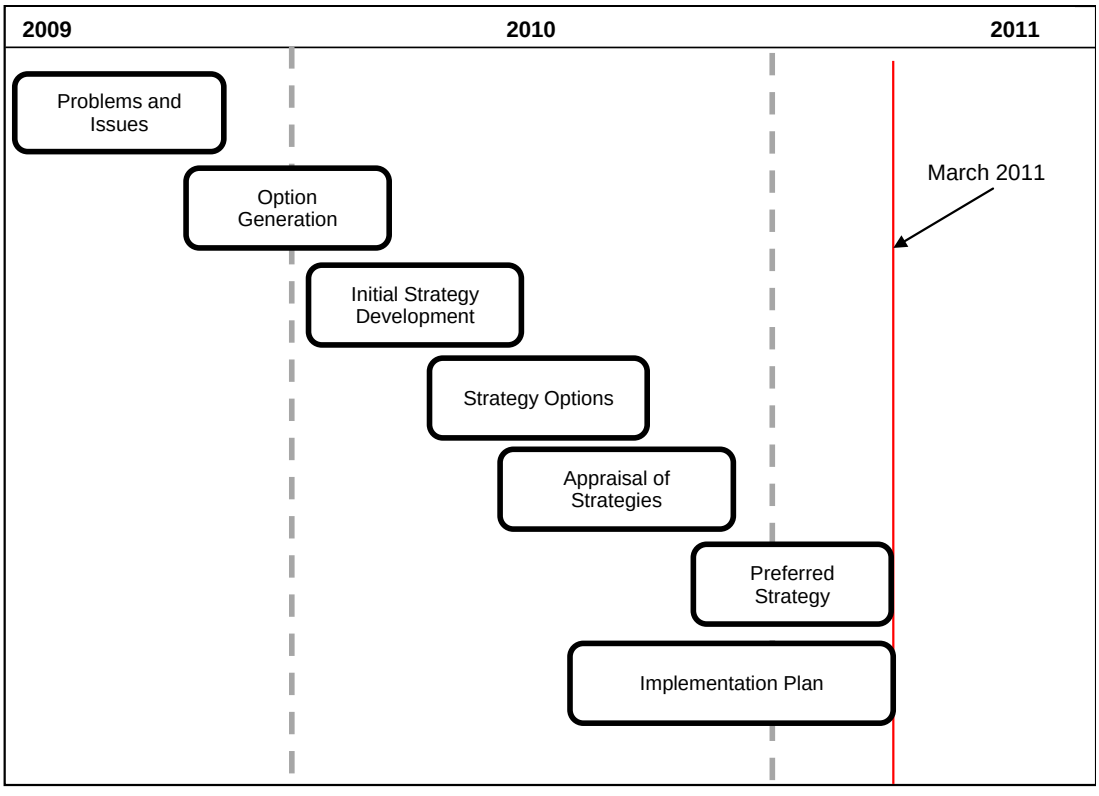


1.6 The process used in the development of the transport strategy followed a hierarchical approach designed to firstly establish the key problems and issues in the study area, then to identify measures which seek to make best use of existing infrastructure before considering the impact of new, potentially costly, infrastructure.

1.7 At the outset, a wide range of potential measures was identified and each was considered in relation to its appropriateness to solving the problems in the study area, taking into account the objectives and time horizon of the study, the characteristics of the area and the availability of resources, including potential sources of finance.

1.8 The outline timetable for the seven key stages is shown in Figure 1.2.

Figure 1.2 – Outline of Transport Strategy Development Process



Purpose of this Report

1.9 This is the final report of the SEDMMTS, presenting the Preferred Strategy for the South East Dorset area. It builds upon the earlier reports prepared during the study, the main features of which are incorporated into this report to provide a complete description of the strategy development process, from identifying current problems and issues, through to an implementation plan for the recommended transport strategy.

Study Area

1.10 The study area for the SEDMMTS is shown in Figure 1.3. The South East Dorset conurbation (covering Bournemouth, Christchurch and Poole) is the second largest conurbation in the South West, with over 400,000 residents. The draft Regional Spatial Strategy (RSS), published in 2006, identified Bournemouth and Poole for significant levels of housing and employment growth to 2026, yet the SEDMMTS has been the first strategic transport study to cover this area in recent years. Following the change in Government in May 2010, the new coalition Government announced the abolition of the RSS, resulting in the local authorities in the study area revising their future land use scenarios to reflect local priorities. The population and employment projections, and associated changes in travel demand, prepared by the study were therefore revised from those in the draft RSS to reflect the emerging future land use plans of the local authorities. This is covered in more detail in Chapter 3.

Figure 1.3 – The SEDMMTS Study Area

1.11 Although the study concentrated on measures within the study area shown in Figure 1.3, there was recognition that there is significant interaction with the hinterland and the neighbouring sub-regions. In particular, the South East Dorset sub-region includes the A31/A35, which is a critical access route onto the strategic national corridors for a wider part of the South West region, providing connections to Southampton and onwards to the South East and London. The sub-region also includes the international gateways of Bournemouth Airport and the Port of Poole, a

busy international passenger and freight ferry terminal, both of which have a catchment area extending across a large proportion of southern England.

1.12 Figure 1.4 shows the study area in relation to national corridors that are most relevant to the South East Dorset sub-region, covering highway and rail connections and principal gateways.

1.13 As indicated earlier, the transport strategy developed by the SEDMMTS is closely linked with detailed plans within LTP3. In essence, the output from the study represents the long term strategy for LTP3, while the programme of measures in the first phase of LTP3 comprises the short term measures for the SEDMMTS. It was therefore vital that close collaboration was achieved between the teams undertaking SEDMMTS and preparing the LTP3, particularly for aspects such as consultation, in which it was important that information in the public domain presents a consistent view of the two areas of work.

1.14 At the outset of the study, the intention of the local authorities was to prepare separate LTP3s for South East Dorset (in line with the SEDMMTS area) and the rest of Dorset. However, at an early point in the strategy development process, the local authorities made the decision to prepare a single LTP3 for the combined South East Dorset and Dorset areas. While it was not appropriate to adjust the SEDMMTS area, it was necessary to refine aspects of the study approach, e.g. the consultation process, in order to reflect the change in the LTP3 coverage.

Figure 1.4 – Linkages to the National Corridors and Gateways

Study Objectives

1.15 The study brief, issued in February 2008, specified the overall objectives of the study, which were to:

- **undertake an investigation into the current performance of both the strategic and local highway and public transport systems** serving the South East Dorset sub-region, including the immediate surrounding areas and cross boundary movements;

- **understand the impact of population and employment growth** on future travel patterns and implications for capacity across the transport system;
- **identify and appraise transport strategies that embrace all modes of travel** to address current and future transport related problems and issues over the short, medium and longer term;
- **undertake a range of assessments of transport and development scenarios t**o determine how well they support the local transport plan and the local development framework, urban extension proposals, and in doing so support future aspirations for economic activity, sustainable development and regeneration of urban areas;
- **provide specific evidence that can be used to inform and support the development of business cases** for future transport intervention across the sub-region;
- **provide a series of policies and priorities that will feed into and influence future rounds of community and corporate planning** across the sub-region and support the emerging Multi Area Agreement (MAA);
- **examine the scope for different funding sources to support future transport investment across the sub-region** and to assist the sub-region in the development of a business planning approach for the delivery of infrastructure, identifying a programme for implementation; and
- **provide an essential framework for future developer contributions**, which are likely to be crucial for the funding and successful delivery of necessary transport infrastructure improvements.

1.16 A key requirement was that the strategy developed by the study should be implementable from a number of perspectives, including the scale of construction and operating constraints, the availability of funding and the level of local political support. This requirement has a particular repercussion on the possible inclusion of specific demand management measures, particularly forms of area-wide congestion charging, which may not have local or national political support. As explained in Chapter 8, the study identified that the introduction of area-wide congestion charging would have a potentially significant impact on the level of travel on the highway network and, at the same time, would influence the relative shares of public transport and private car within the overall travel across the study area.

1.17 However, to be cost effective, area-wide congestion charging across the study area would need to be part of a national scheme, and hence would have to be an important element of national transport policy. In addition, there would need to be strong political support for congestion charging, if it were to be implemented, on similar lines to the support given by Mayor Ken Livingstone in London; it was considered that such a level of political support would be unlikely within the South East Dorset context. In view of the technological, practical, financial and political hurdles that would need to be cleared before a national scheme could be implemented, and the length of time necessary to achieve implementation, it was felt to be impractical to develop a single transport strategy that relied on area-wide charging as a cornerstone for the strategy.

Other Reports Prepared during the Study

1.18 The objective of this Final Report is to summarise and highlight the key aspects within the development of the transport strategy during the study. Details of the work undertaken during the study are included in the technical reports which have been prepared on specific aspects. The contents of the associated reports, and the dates of the issued versions, are summarised in Table 1.1.

Table 1.1 – SEDMMTS Reports

Report	Description
South East Dorset Transport Model Scoping Report (October 2007)	Summarises the findings of the model scoping study, including main requirements for the updated model, its specification, and data collection requirements.
Inception Report (Phase 2 – December 2008, Phase 3 – July 2009, updated May 2010)	Prepared at the outset of both Phase 2 and Phase 3. Contains an outline of the process to be followed in each phase and a review of the available documents and reports of relevance to the study. The Phase 3 report was updated in May 2010 to reflect the additional requirements of the extra DaSTS work.
Data Report (April 2009)	Provides a summary of the data collected for use in Phase 2, with a view to developing and validating base year transport models for the South East Dorset study area.
Current Problems and Issues Consultation Report (November 2009)	Presents the responses to the consultation on current problems and issues.
Demand Model Development Report (November 2009) **Highway Model Validation Report** (September 2009) **Public Transport Model Validation Report** (August 2009)	A description of the development of the main components of the multi-modal transport model (South East Dorset Transport Model), prepared specifically for the study, and their validation against observed travel patterns.
Baseline Report (May 2010)	An assessment of existing data sources and relevant documents to identify the location and magnitude of current problems and issues across the transport system, together with the views expressed during the first consultation stage.
DaSTS Phase 1 Report (May 2010)	A description of the progress in developing the transport strategy in line with the requirements of the DaSTS approach.
Forecasting Report (September 2010)	Summarises the approach to updating the transport model with land use forecasts to 2026 with outputs from the model indicating the principal impacts on the transport network.
Strategy Options and Appraisal Consultation Report (October 2010)	Summarises the consultation on the relative impacts of the main themes to be included in the transport strategy.
Interim Transport Strategy Report (October 2010)	Records the progress on the development of the transport strategy.
Preferred Strategy Consultation Report (March 2011)	Summarises the conclusion from the consultation on the preferred strategy developed by the study.

Structure of this Report

1.19 This final report contains a summary of the main steps in the development of the transport strategies, under the principal headings:

- Chapter 2 describes the **overall study approach**;
- Chapter 3 summarises the **development of the transport model** which under-pinned the assessment of problems and issues and the appraisal of strategies and their components, together with the contents and location of the **future spatial developments** and associated population and employment forecasts;

- Chapter 4 describes the detailed components of the **strategy development process**;
- Chapter 5 outlines those elements of the transport strategy designed **to encourage the use of alternative modes** through the introduction of ‘‘smarter choices’’, together with features to be included in the design of new developments and the potential significance of non-transport measures which would impact on transport demand;
- Chapter 6 concentrates on the range of **enhancements to the public transport system** within the transport strategy;
- Chapter 7 considers the range of potential **demand management measures** with the relative scale of their impacts;
- Chapter 8 examines **improvements to the strategic highway network**, concentrating firstly on ways of making best use of the existing highway network before turning to the provision of additional capacity across the network;
- Chapter 9 concentrates on those measures designed specifically to deal with **freight** issues, although noting that many measures within the transport strategy will have an impact on all transport movements, including freight movements;
- Chapter 10 outlines **the appraisal of the transport strategy** including an assessment of the wider economic impacts of the measures; and
- Chapter 11 presents the **implementation plan** and summarises the range of **potential sources of funding** for the measures included in the transport strategy together with the **next steps** in the further development of the strategy.

1.20 Further details of the appraisal of the strategies are included in Appendices to the report:

- Appendix A lists the abbreviations used within this report
- Appendix B contains the long list of schemes identified and considered in the development of the strategy;
- Appendix C contains the set of summary appraisal tables for the SEDMMTS strategy;
- Appendix D includes maps and diagrams which summarise key site specific impacts of the strategy; and
- Appendix E contains the leaflets used in the public consultations.

2. Study Approach

Introduction

2.1 This chapter describes the overall study approach followed for the SEDMMTS. Phase 1 is presented in the South East Dorset Scoping Report (October 2007). Phase 2 is covered briefly in this chapter, and in more detail in Chapter 3. The approach for Phase 3 was introduced in Chapter 1, with further details provided within this chapter. In this, the transport model and the consultations issues are introduced, which cut across the seven stages in the strategy development process. Each of the seven stages is then outlined in turn.

Development of the Transport Model

2.2 To aid the development, assessment and appraisal of potential strategy components, the study constructed a suite of transport models designed to estimate the main responses to a wide range of possible measures. Chapter 3 contains further details of the development and application of the transport model, with the main principles summarised below. The model is multi-modal, with linked demand model, highway assignment model and public transport assignment model. From the outset, the model was designed to be WebTAG compliant, following the relevant current DfT guidance in its design, calibration, validation and application. A wide variety of surveys were undertaken in 2008 and 2009 to identify the detailed characteristics of current travel on all principal modes across the South East Dorset study area, supplemented by available information from a number of sources, including public transport ticketing data, the 2001 Census and existing travel databases. The model uses a base year of 2008 with the 2026 forecast year.

2.3 A key element in the forecasting of travel demand in the future is the contribution of changes in population and employment to the growth in travel across the area. The transport model must therefore reflect current views on the size and location of new dwellings, industry, employment, and other planned future land use developments. The initial modelling of scenarios reflected the land use forecasts from the draft Regional Spatial Strategy (RSS) and the subsequent adjustments proposed by the Secretary of State (SoS). Forecasts were in line with the DfT TEMPRO 5.4 database. Part way through the modelling of scenarios, in May 2010, the new coalition Government announced the abolition of the RSS. In response to this, at the request of the study team, the local authorities prepared a preliminary assessment of the anticipated changes to the land use forecasts. These resulted in revised travel demand forecasts which are reported in the Forecasting Report. The modelling of the emerging preferred strategy therefore reflects these updated land use assumptions.

2.4 The demand model comprises the range of relevant responses within a standard hierarchical structure: frequency choice, main mode choice, time period choice, destination choice and sub-mode choice. The model has been prepared since the DfT's review of transport models, reported within 'A Review of Regional Modelling Capabilities and Capacity' and hence is not covered by that review. Likewise the model has yet to be applied in the preparation of a Major Scheme Business Case (MSBC), although in view of its compliance with the relevant WebTAG guidance, it is not expected that any significant issues will be encountered in the future when it is necessary to prepare a MSBC for schemes emerging from the transport strategy.

2.5 In line with standard strategic transport modelling, the SEDMMTS model does not contain a specific walk/cycle model; the impacts for these modes are inferred within the demand model. The model, together with other information collected during its development and validation, represents a strong database for the assessment of strategy components. The main gaps in knowledge about current travel related to the existing levels of walking and cycling and the coverage of Smarter Choices initiatives; these gaps were filled through close working with the

three local authorities for the study area (Borough of Poole, Bournemouth Borough Council and Dorset County Council) including the team responsible for preparing the LTP3.

Consultation Overview

2.6 Consultation has been a central element throughout the study to ensure that stakeholders and the general public share their valuable local knowledge and give a local perspective to the potential measures considered for inclusion within the strategy.

2.7 There are two main levels of the target consultation population in this study.

2.8 Firstly, the **general public** living within, working in or travelling through the study area, who are main users of the transport systems and provide an important perspective not only on the location, form, magnitude and significance of the problems, but also an understanding of potential solutions that could be implemented.

2.9 Secondly, **representatives of key groups and organisations** for who transport in the study area is either a direct responsibility or an important issue and who are aware of the implications of different policy options. This includes officers and members of local authorities, members of transport/environment groups, local community groups, MPs and Parish Councillors.

2.10 Consultation was undertaken at three stages during the development of the strategy:

- Stages A and B – Problems and issues and long list of options;
- Stage C – Strategy options and appraisal; and
- Stage D – Preferred strategy and implementation plan development.

2.11 Consultation has been completed for Stages A (summer/autumn 2009), B (January 2010), and C (June-August 2010) with Stage D following in January-February 2011. The original consultation timescales were extended to:

- avoid the run up to the General Election in May 2010;
- enable the recommended transport strategy to be reviewed after the Comprehensive Spending Review, announced October 2010; and
- take into account the emerging guidance from the coalition government on the potential sources of funding and the criteria that would need to be satisfied to achieve contributions from government for the funding of measures.

2.12 The consultation process involves four main groups, with varying levels of engagement:

- Project Management Group (PMG) – comprising senior representatives of the client partnership for the study – Borough of Poole, Bournemouth Borough Council, Dorset County Council, HA, SWRDA, South West Councils, GOSW and the DfT;
- Strategy Advisory Group (SAG) – formed by the PMG and supplemented by additional officers from the client partnership, covering wider disciplines, and elected members with responsibility for transport in the study area;
- Wider Reference Group (WRG) – wide-ranging group formed by individuals and representatives of organisations with an interest in, or responsibility for, the operation or use of the transport system in the study area; and
- the public who live or work in the study area, or who travel through the area, and use the various elements of the transport system.

2.13 A variety of techniques were adopted to engage with the different groups, including:

- preparation of explanatory leaflets describing the relevant issues at each of the three stages;

- inclusion in the leaflet of a questionnaire designed to gain views on specific aspects;
- to publicise the consultation process, liaison with the local media involving radio and newspapers, including the Bournemouth Echo as well as local authority publications (Poole News, BH Life, Your Dorset, etc);
- development of a website to provide a further source of information about the study, with regular updates, copies of study reports and the provision of a message board for organisations and members of the public to record their views;
- organisation of events to which members of the Wider Reference Group were invited including structured discussions on specific issues of importance for that particular phase of the consultation;
- social media (e.g. Twitter and Facebook) to raise awareness of the consultation on strategy options and encourage responses; and
- a free prize draw with a prize linked to a local transport theme (e.g. a day out on the Swanage Railway) to encourage more responses to the questionnaire.

2.14 The results from the consultation at each stage provided an important input into the assessment of the transport system in the study area and the development of transport strategies to cater for the problems and issues.

2.15 The responses from the consultation process do not, of course, represent a statistical sample of views; they are the opinions expressed by stakeholders and members of the public responding to the consultation questionnaire and, hence, are to a large extent self-selecting. Nevertheless, the responses provide an indication of the range of views on a number of transport issues. Considerable effort was made to ensure that the leaflets, and hence the questionnaires, were available as widely as possible, with publicity in the local press and media to announce their publication and availability. The overall response to the consultation was good, bearing in mind that SEDMMTS was one of a number of consultation events within the area in recent times.

2.16 As introduced in Chapter 1, the development of the transport strategy within the SEDMMTS was closely linked with the preparation of LTP3 by the local authorities. A feature of the alignment of the two initiatives was the coordination of consultation such that the public, transport interest groups, and councillors were presented with a consistent message from the two teams (SEDMMTS and LTP3). This was achieved by close working between the two teams including the preparation of a single set of consultation material and the coordination of events and publicity activities.

2.17 Further details of each phase of consultation are provided at relevant points in the strategy development process covered in Chapter 4.

Strategy Development

2.18 The following section provides further details of each of the seven stages within the strategy development process shown in Figure 1.2.

Stage 1 – Current and Future Problems

2.19 The first stage involved the identification of problems and issues, to inform the development of the strategy, and included:

- consultation on Problems and Issues;
- preparation of a baseline review of transport related problems and issues; and
- identification of the strategy objectives for the SEDMMTS.

Consultation on Problems and Issues

2.20 The consultation process was designed to capture the views of different groups identified earlier. In relation to the **general public**, a newsletter with a questionnaire was produced and distributed across the study area. This allowed members of the public to input directly into the study. There was a media briefing, press releases, and articles in local authority publications to publicise the study consultation and encourage participation.

2.21 The **stakeholder engagement** process consisted of various meetings and workshops including:

- SAG involving local Councillors and officers and representatives of other organisations on the PMG for the study – a discussion forum was held to identify problems, issues, opportunities and priorities;
- WRG including key stakeholders attending a workshop to discuss problems, issues and potential solutions;
- meetings with District Councillors; and
- contacts with Statutory Environmental Agencies (Environment Agency, English Heritage and Natural England).

2.22 A total of 611 completed questionnaires were received. Some questionnaires were returned on behalf of groups or organisations; these were included within the analysis of the general public responses. Results from the consultation on problems and issues are summarised in the Strategy Development chapter (Chapter 4).

Baseline of Transport Related Problems and Issues

2.23 A baseline review of transport related problems and issues was undertaken and recorded in the Baseline Report (May 2010); the key issues are summarised in Chapter 4. The purpose of the Baseline Report was to develop a description of the transport, economic and social conditions within South East Dorset. A key to understanding the problems and issues in the study area was the consultation exercise, which was correlated with additional information in the baseline report. For example, where a cluster of people in the consultation stated that there were insufficient direct bus services to/from a specified location, the bus services were mapped along with travel to work data to check whether there was a real or perceived shortage of direct bus services.

Development of Transport Strategy Objectives

2.24 The development of transport strategies during the SEDMMTS was guided by a series of objectives which the strategies would aim to satisfy. A number of relevant existing documents contained overarching objectives relating to the provision of transport in the study area, including:

- DfT goals contained in Delivering a Sustainable Transport System (DaSTS);
- South West Regional Transport Strategy; and
- Dorset LTP3.

2.25 Based on an analysis of these documents, a series of core objectives was developed that the strategy should satisfy; these sit within the overarching DfT goals – see Chapter 4.

Stage 2 – Option Generation

2.26 In developing a set of potential measures which could resolve the problems and issues identified earlier, it was important to establish a comprehensive set of alternatives generated from a variety of sources. The creation of an extensive long list of potential measures followed a series of steps designed to ensure that a comprehensive set of potential options was generated. The first step was to review a list of potential generic measures and identify instruments which would be relevant to both the SEDMMTS study area and the contents of the transport strategy; in this

review, the instruments were categorised as having primary or secondary significance for the study. The Long List is presented in Appendix B.

2.27 As with all local authority areas, the South East Dorset study area has experienced a number of studies over time, which have resulted in the identification and assessment of a variety of potential measures spread across a range of modes. For the second step, a review was made of existing reports in order to capture the details of the schemes. The list from the first step served as the starting point for the review. Further details of the schemes were identified in a series of meetings, including with:

- SAG – on problems and issues and strategy scenarios;
- WRG – on problems and issues;
- officers from the local authorities; and
- key transport organisations in the study area including the HA, bus operators (Wilts and Dorset and Yellow Bus), South West Trains, Network Rail, Port of Poole, Bournemouth Airport and LA21.

2.28 The identification of the potential range of measures provided the starting point for the preparation and testing of the transport scenarios.

Stage 3 – Scenario Testing

Initial Scenario Testing

2.29 The long list of measures (see Appendix B) was reviewed to establish their performance against each of the strategy objectives. The review contained an initial assessment of whether the measures was expected to have a positive (✓✓) or negative (**xx**) significant contribution to the objective with (✓) or (**x**) denoting a small impact. At this stage, no attempt was made to quantify the scale of the impact beyond the scoring system.

2.30 The assessment against the objectives was used to identify a series of scenarios which were formed by selected elements from the strong performing components of the long list. These were combined into the following four scenarios:

- Do Minimum – continuing with existing policies and interventions in both content and scale;
- smarter/greener choices (including more extensive travel plans) together with bus showcase corridors, Park and Ride, express bus services and rail frequency improvements;
- expanded smarter/greener choices combined with more ambitious public transport comprising expanded bus showcase corridors, rapid transit (DARTS), further Park and Ride, express bus services and rail frequency improvements; and
- highway schemes comprising junction improvements and new links combined with measures to control demand – increased parking charges and congestion charging.

2.31 In selecting the individual measures, where relevant, reference was made to previous studies in which some of the schemes had already been assessed, in order to take advantage of the earlier work to identify the best-performing options for inclusion in the scenarios. The scenarios were assessed by applying the transport model for the 2026 future year. In parallel with the modelling, the scenarios were also assessed using the Strategic Appraisal Framework, released in draft the DfT in January 2010. By applying the range of decision trees for individual criteria under each objective, an assessment was made of the performance of each scenario.

2.32 To consider the regional connectivity issues, an assessment was made of DaSTS studies in the South West to establish potential measures. In addition, an exploration of wider measures, including non-transport initiatives, involved a review of other DaSTS studies, e.g. Cheltenham and

Gloucester Connectivity, West of England DaSTS, Milton Keynes South Midlands Transmodal, Gatwick Diamond DaSTS, Thames Valley DaSTS, and South West Quadrant (M25) studies.

2.33 The purpose of undertaking the scenario tests and completing the Strategic Appraisal Framework was to:

- explore the performance of the transport model in representing the impacts of different strategies;
- understand the relative impacts of the different scenarios in achieving changes in mode choice, reductions in congestion and other key indicators;
- understand the operation of the Strategic Appraisal Framework; and
- provide inputs into the development of strategies in the subsequent stage of the study.

2.34 The results of the initial scenario testing were presented in the SEDMMTS DaSTS Phase 1 Report (May 2010).

2.35 At the end of this stage, the initial scenarios were developed into a series of themes for consultation. A second leaflet with questionnaire was produced and distributed across the study area, allowing members of the public to input directly into the study. There were media briefings, press releases, radio and social media campaigns to publicise the study consultation and encourage participation. The stakeholder engagement process consisted of various specific meetings and workshops including:

- SAG meeting and WRG workshop to discuss the strategy options;
- a series of exhibitions for Members, transport and planning officers and interested representatives of organisations from the Local Strategic Partnerships;
- letters to MPs and neighbouring Local Planning Authorities; and
- letters to all Parish Councils and Residents Associations.

2.36 For the purposes of the public consultation, the initial scenarios were developed into a series of themes, reflecting the ways in which measures could be combined to create completely different transport strategies. The contents of the themes were presented in two different ways. Firstly a table summarised the contents of the theme, with an indication of how the scheme performed against the study objectives. Secondly, a diagram identified the broad location of specific schemes:

- **Theme A: 'Do Minimum'** – continuing with current policies and the type of transport measures that have been delivered over the last few years;
- **Theme B: Significant public transport improvements and 'greener' choices** – all schemes from Theme A, plus more investment in public transport and measures to promote 'greener' travel choices. This theme is consistent with the current Local Transport Plan vision;
- **Theme C: More ambitious public transport and 'greener' choices, while discouraging car-based commuting** – all schemes from Themes A and B, plus major investment across public transport modes and measures to promote 'greener' travel choices. A charge on workplace parking spaces and increased long-stay parking charges were included in the theme to fund these measures;
- **Theme D: Highway and public transport improvements and controlling demand for travel by car** – all schemes from Themes A and B along with an emphasis on increasing road capacity. Road pricing would probably be needed to control traffic levels, especially traffic generated by the scheme, and to provide additional funding. In the public consultation,

it was indicated that road pricing is not currently part of the councils' policy, and that it was included to ensure that a full range of measures was considered.

2.37 The themes built upon each other, so that Theme B contains all the schemes from Theme A, Theme C contains all the schemes from Themes A and B, and Theme D also contains all the schemes from Themes A and B.

2.38 The consultation included a leaflet which outlined the strategy options and a questionnaire which sought views on the options. Responses from the general public (553), Poole Opinion Panel (672) and the Dorset (East Dorset, Christchurch, and Purbeck) Citizens' Panel (817) were combined, totalling 2,042.

Stage 4 – Strategy Options

2.39 Following the initial scenario testing work in Stage 3 and the consultation on the scenarios, the schemes and interventions were packaged for strategy testing. The strategies were then taken forward for testing and appraisal.

Definition of Strategy Options

2.40 Whereas the scenarios examined in Stage 3 concentrated on different modes, the strategies were designed as packages of measures, across all modes. There were also variations in the scale of new infrastructure and the timescale for their delivery, i.e. distinguishing between short, medium, and long term implementation.

2.41 Strategies comprised packages of options (interventions/schemes) which aimed to best meet the strategic needs of the South East Dorset sub-region, and which delivered benefits against the strategy objectives.

2.42 The number of interventions contained within the strategy options would be informed by funding availability, so that the strategies included a realistic level of the likely investment. Where interventions relate primarily to new housing and employment developments, i.e. their need could be directly linked to specific major developments, it would be assumed that there would be a significant element of developer funding.

2.43 The development of the measures considered for inclusion in the strategies examined the alternatives within a hierarchy which considered the following sequence:

- making best (or better) use of existing transport infrastructure;
- encouragement of alternative modes;
- improvements to the public transport system;
- demand management measures including parking supply and charging; and
- enhancements to the highway network.

Stage 5 – Appraisal of Strategies

2.44 The appraisal framework developed for the study has been used to assess how the transport system performs now, and how this would change in the future, initially in the Do Minimum situation (when only committed schemes are introduced) and then for each of the alternative future strategies. The key principles which have underpinned the appraisal are that it would be:

- firmly grounded on policy objectives and priorities, and would reflect the views emerging through consultation;
- fully compliant with DfT requirements in WebTAG etc to ensure that the work can be adapted easily or developed further for any subsequent funding submissions, e.g. as part of a major scheme business case;

- aligned to the study objectives;
- transparent and logical for the wider stakeholder audience; and
- focussed on deliverability and value for money, including any possible ongoing revenue commitments.

2.45 As part of the appraisal, the strategy packages were tested with the single development forecasts defined by the local authorities. This contributed to understanding the ability of the strategies to support the local transport plan and the local development frameworks as well as urban extension proposals and, hence, understand the way in which they support the future aspirations of the client partners for economic activity and sustainable development.

2.46 Each strategy package was assessed against the appraisal framework.

Stage 6 – The Preferred Strategy

2.47 The recommended strategy has emerged from the technical work in Stages 1 to 5, including the consultation exercises which were designed to elicit views on the emerging strategy options. In developing and finalising the preferred strategy, some refinement of the strategy components was undertaken, building on analysis undertaken using the transport modelling tools.

2.48 Strategy refinement focused on a number of major elements and the extent to which they delivered outcomes in line with the strategy objectives. Strategy elements with marginal performance which could contribute to the strategy, but which would require further work to establish the feasibility or viability, were also identified. The emerging preferred strategy was set out during the final consultation stage when stakeholders (SAG, WRG and general public) had the opportunity to comment on the recommendations and to provide further feedback.

Stage 7 – Implementation Plan

2.49 The implementation plan forms an important element of the final strategy (see Chapter 11). It is a critical output from the study, indicating not just *what* the strategy comprises, but also *when* elements of it should be implemented and *how* they will be progressed, in terms of funding, political processes, etc. The LTP3 would represent the basis of the implementation programme in the short term.

2.50 Initially, the existing profile of funding of transport measures by the study partners was reviewed together with an assessment of the likely availability of funds from additional sources, including central government, taking into account the emerging proposals from the coalition government, including the Regional Growth Fund and the Local Sustainable Transport Fund. In addition, potential contributions from developers, including the South East Dorset Transport Contributions Scheme, were taken into account. Each of the elements proposed within the recommended strategy have been assessed against available funding sources (subject to legislative and guidance constraints).

What Happens Next

2.51 Following the finalisation of the Final Report, the recommendations from the study will be presented to the partner group, identified in Chapter 1, and elected members of the local authorities, who will then consider which schemes and measures should be taken forward. Once these decisions have been made, further work will need to be undertaken on the schemes and measures to enable them to be entered into the appropriate implementation programmes of the DfT, the Highways Agency and the local authorities. This will take into account the preparation of LTP3 by the three local authorities covering the period 2011/12 to 2025/26. The schemes and measures will be subject to the normal statutory planning processes.

2.52 Some of the SEDMMTS recommendations outlined in this report may cause anxiety amongst residents and businesses which may be affected by the schemes and measures. However, it should be highlighted that no decisions have yet been taken about whether any individual measures within the strategy should go ahead.

2.53 The study has been progressed in an open and consultative manner and the possible options have been discussed publicly. Many of the proposals are at an early stage in the planning process and, if the recommendations are accepted, considerable further work would be required to prepare detailed designs for the schemes, and to consult widely on them, including specific route alignments.

3. Forecasting Future Traffic Levels

Introduction

3.1 This chapter provides an overview of the transport model development, and the application of the model to forecast the future impact of measures.

3.2 A new suite of transport models has been developed for SEDMMTS with a base year of 2008 and forecasts up to 2026. Model development has involved an extensive data collection and processing exercise – further information on which is contained in the SEDMMTS Data Report. This chapter summarises the model development process, and presents a comparison of 2008 base year results with the 2026 Do Minimum. Originally the study intended to use the forecasts of population, dwellings and employment corresponding to the SoS Proposed Changes to the draft RSS as the foundation for the projections to 2026. Following the abolition of the RSS by the coalition government, the central case projections were updated to reflect the priorities of the local authorities in the study area.

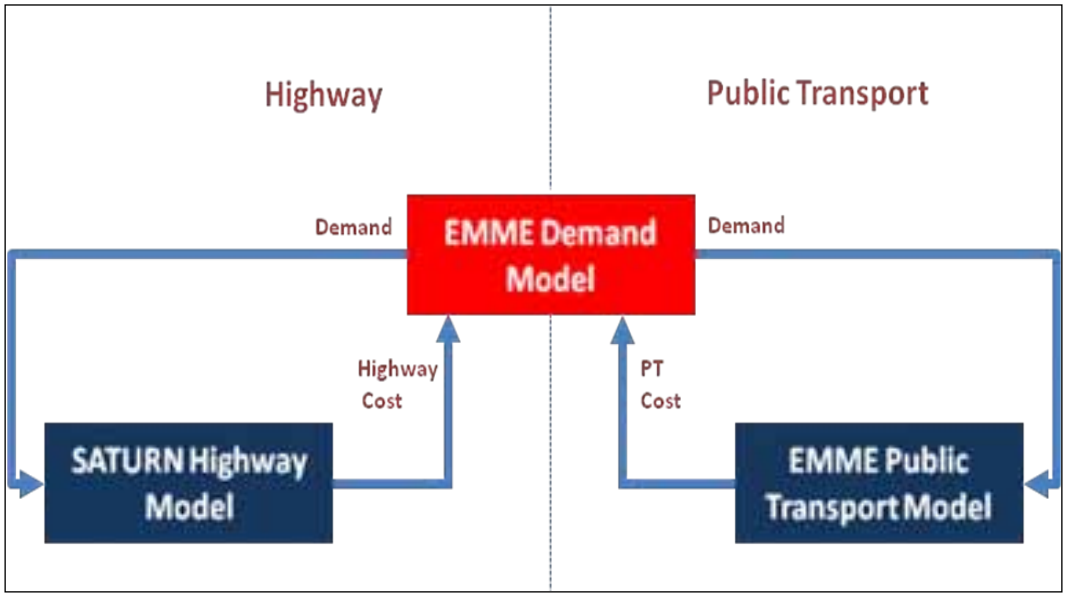
3.3 The overall model, completed in mid-2009, is fully compliant with the necessary WebTAG guidance, and has been designed specifically to be used in the preparation of a Major Scheme Business Case. It has three principal components:

- a five-stage multi-modal incremental demand model that considers the impact on transport demand of changes to frequency choice, main mode choice, time period choice, destination choice and sub-mode choice in response to changes in generalised costs across the 24-hour period (0700 – 0700);
- a highway model representing vehicle-based movements across the sub-region for a typical morning peak hour (0800 – 0900), an average inter-peak hour (1000 – 1600) and typical evening peak hour (1700 – 1800); and
- a public transport model representing bus and rail-based movements across the same area and for the same time periods as the highway model.

3.4 Figure 3.1 displays the linkages between the components of the modelling framework. The models use standard transport modelling software packages; the highway network model is based on SATURN while the demand model and public transport model use EMME. The principal model components are described in this chapter, considering separately the zone system, the demand model, the highway assignment model, the public transport assignment model and the forecasting process. Further details are provided in the modelling reports:

- Highway Model Validation Report;
- Public Transport Model Validation Report;
- Demand Model Report; and
- Forecasting Report.

Figure 3.1 – Modelling Components and Linkages



3.5 The transport model represents in detail the transport system within the study area (Figure 1.3) with a more simplified coverage outside the study area. The zoning system for the existing South Dorset transport model, developed originally in the early 1990s, was reviewed and it was decided that a completely new zoning system should be defined to achieve increased disaggregation and maintain consistency with National Trip End Model (NTEM) zone boundaries. In order to split NTEM zones into more detail to suit the modelling, the ward zoning system from the 2001 UK Census was adopted (i.e. Output Area). The SEDMMTS zoning system consists of 527 zones (including 30 dummy zones for future developments) and is shown in Figure D.1 to D.3 in Appendix D.

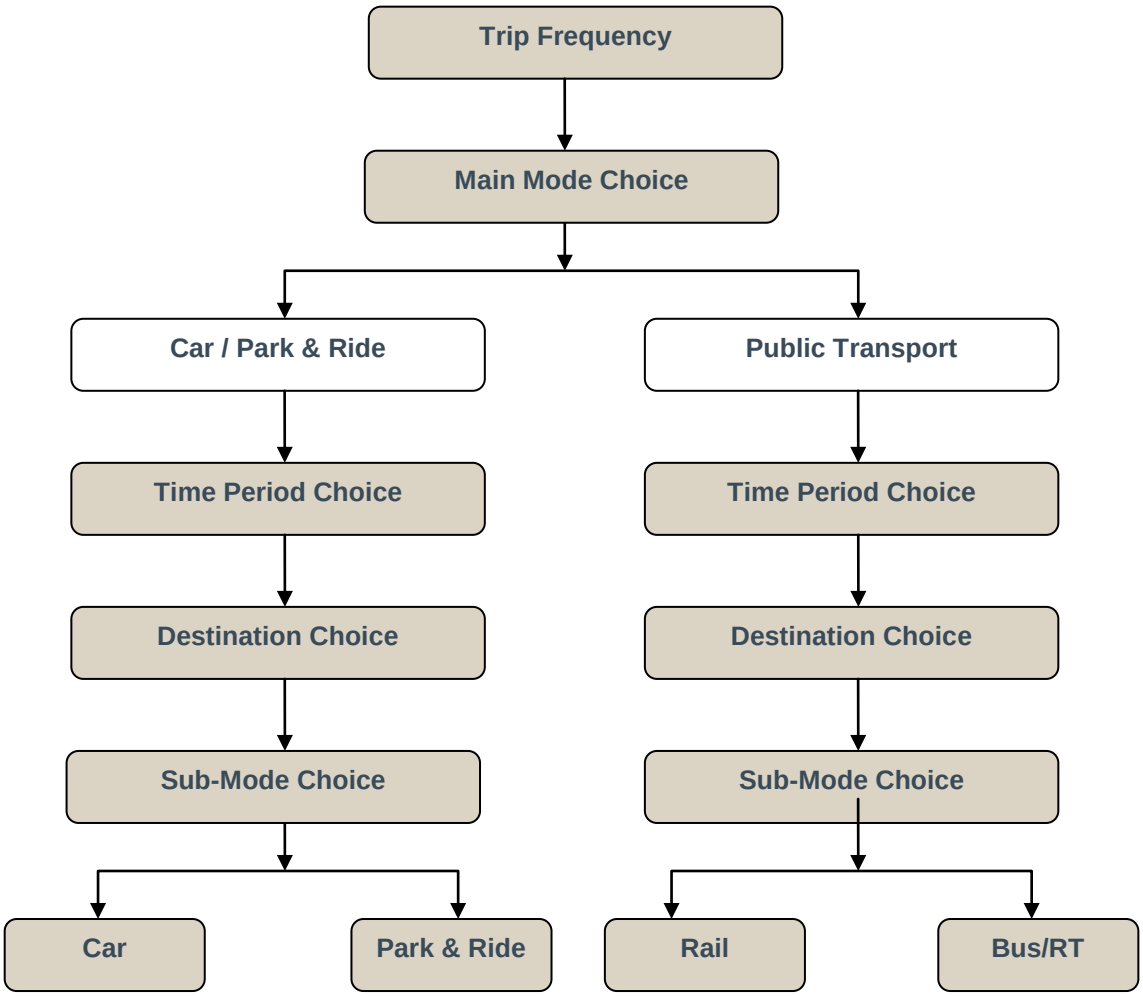
Demand Model Development

3.6 The demand model was developed in full compliance with WebTAG guidance for use in assessing the transport impacts of a range of potential transport interventions in the South East Dorset sub-region. These potential interventions include demand management as well as Major Scheme Business Cases for public transport and highway schemes. In particular, the development of the demand model is in full compliance with:

- TAG Unit 3.10 – Variable Demand Modelling;
- TAG Unit 3.11 – Modelling of Public Transport Schemes; and
- TAG Unit 3.12 – Design, Modelling and Appraisal of Road Pricing Schemes.

3.7 The demand model is a five-stage multi-modal incremental model (summarised in Figure 3.2), which considers the impact on frequency choice, main mode choice, time period choice, destination choice, and sub-mode choice of changes in generalised costs.

Figure 3.2 – Demand Model Choice Structure



Temporal Scope

3.8 The demand model is a 24-hour all-day model (starting from 0700 and concluding at 0700 the following day) representing four time periods: the morning peak (AM), the inter-peak (IP), the evening peak (PM) and the off-peak (OP) periods.

3.9 The relationships between the various peak periods and peak hours are defined as follows[1]:

- AM peak period: 0700 - 1000;
- AM peak hour (for assignment modelling only): 0800 - 0900;
- Inter-peak period: 1000 - 1600;
- Inter-peak hour (for assignment modelling only): 1/6th of 1000 - 1600;
- PM peak period: 1600 - 1900;
- PM peak hour (for assignment modelling only): 1700 - 1800; and

[1] The definition of the modelled time periods is based on TAG Unit 3.10.2 with macro time period choice (within the demand model) undertaken at the peak period level whilst a specific AM peak hour, inter-peak (IP) hour and PM peak hour is used in the assignment.

- Off Peak period: 1900 - 0700 (but without assignment).

3.10 Note that the AM and PM peak hours are not the average of the AM and PM peak periods, but represent travel during the specific hours identified above.

Segmentation

3.11 Travel demands in the demand model were segmented by car availability and journey purpose. Journey purpose is segmented into:

- Home based work (HBW);
- Home based other (HBO);
- Non-home based other (NHBO);
- Home based employer's business (HBEB); and
- Non-home based employer's business (NHBEB).

Demand Model Output

3.12 The output from the demand model after the sub-mode choice stage comprises two sets of updated origin-destination (OD) matrices for use in the highway and public transport assignments:

- **Highway** – AM peak hour OD matrices (0800 – 0900), Inter-Peak average hour OD matrices (1000 – 1600), and PM peak hour OD matrices (1700 – 1800), segmented by user class and vehicle type; and
- **Public Transport** – AM peak hour OD matrices (0800 – 0900), Inter-Peak average hour OD matrices (1000 – 1600), and PM peak hour OD matrices (1700 – 1800), disaggregated by person type, journey purpose and public transport mode.

Highway Model Development

Network

3.13 The highway network from the existing Dorset model formed the starting point for defining the network for the SEDMMTS highway model. The network simulation area is shown in Figure D.5 in Appendix D. Within this area, congestion is represented through junction delay with the detailed representation of junction operation. The use of speed flow curves was kept to a minimum and was limited to strategic and non-urban routes outside the main study area and some local residential roads (to avoid unrealistic rat-run routes). The buffer network is shown in Figure D.4 in Appendix D. Along with the simulation coding of junctions across the study area, the network provides for the representation of existing bus priority measures.

3.14 The density of network detail was compatible with the zoning system. It was not necessary to include all roads within the study area, merely the main arterial and distributor roads. Some local access roads tend to be combined and represented by the centroid connector, although local access roads that carry bus routes are included in the model. The definition of the junction type was confirmed using aerial photography during the network inventory stage supplemented by site visits, and link lengths were calculated using GIS. Observed traffic signal times were added to the model to enable the accurate replication of capacity at junctions, and thus to model patterns of delay and queues associated with traffic signals.

3.15 Journey time surveys were undertaken to capture the time taken to travel along key routes in the study area. Fifteen separate journey time routes, shown in Figure D.6 in Appendix D, were identified for assessing model performance across the study area. These routes were included in

the model validation but also formed one of the criteria to assess the performance of the strategies in the future.

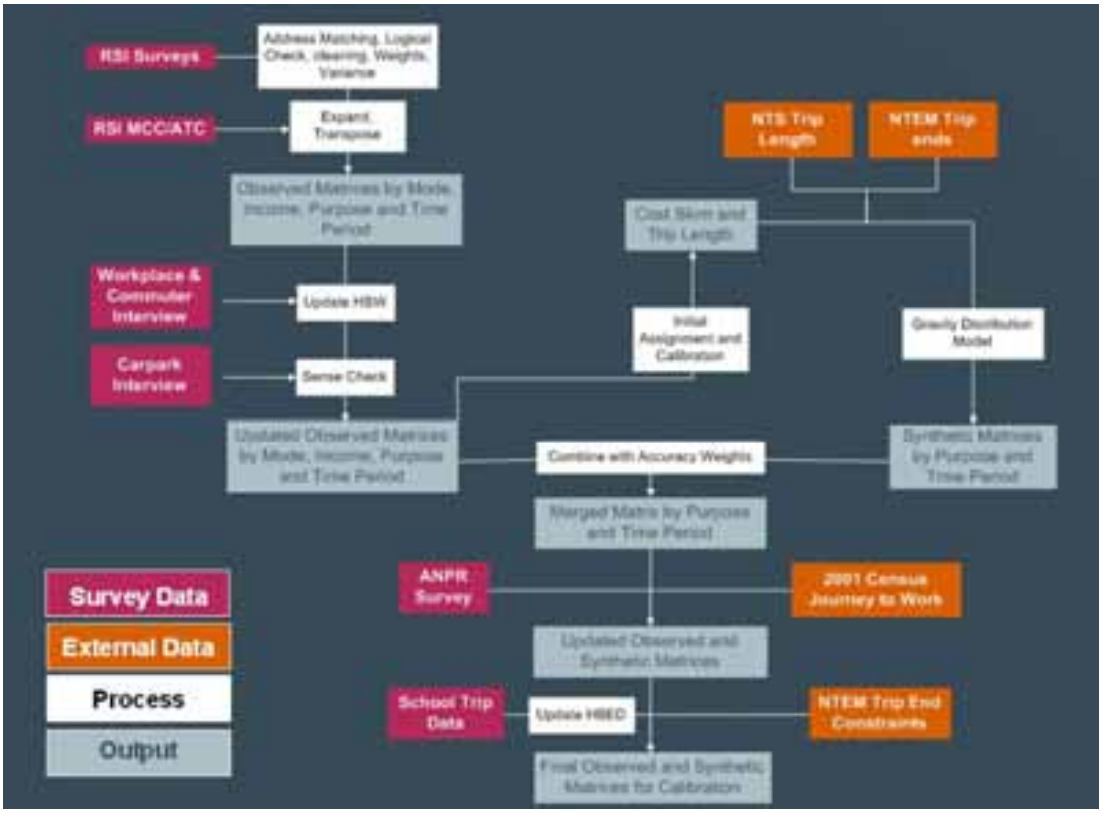
3.16 The model development took into account a number of specific issues including the closure, at the time of the traffic surveys, of Canford Bridge to the south of Wimborne Minster which affected the routeing of traffic to the south of Wimborne. In addition, attention was given to the accurate representation of the operation of the Poole Lifting Bridge and the Sandbanks Ferry and the implications for the capacity of the highway network in these areas.

Demand

3.17 The travel demand trip matrices were based on new data collection within the study framework, supplemented by existing up-to-date information where it was available (see Figure 3.3):

- **roadside interviews** (RSI) were conducted to comprehensively record a sample of origin/destination patterns within the modelled study area;
- a number of RSI sites on dual carriageway roads were cancelled due to anticipated significant traffic delays and were replaced by **Automatic Number Plate Recognition** (ANPR) surveys – this occurred on the A31, A338 and A3060 (Castle Lane East/West);
- the RSIs and ANPR surveys were supplemented by other sources including extra traffic counts and the integration of a wide range of additional surveys such of **commuters, at workplaces** and the use of an existing **school travel database**;
- a **car park survey** was used to capture the car park utilisation and duration of stay predominantly across the three main centres of Bournemouth, Christchurch and Poole;
- a large amount of **Automatic Traffic Count** (ATC) and **Manual Classified Count** (MCC) data was obtained from local councils throughout the study area, supplemented by an additional 69 MCCs undertaken for the SEDMMTS – these were used to infill any geographical gaps in the combined dataset; and
- the **Journey to Work (JtW)** database from the **2001 Census** was used to supplement movements that were wholly within the key study area.

Figure 3.3 – Highway Matrix Development



Validation

3.18 The model parameters were calculated against local data and the resulting validation complied with WebTAG guidance. The Highway Local Model Validation Report provides details of the overall validation, including flow validation across 18 screenlines/cordons and journey time validation on 15 routes.

Public Transport Model Development

Network

3.19 The development of the public transport network built on the road pattern within the highway network as the basis for the representation of the bus network, supplemented by details of the rail operations.

3.20 The frequency of bus services run by Transdev Yellow Buses and Wilts and Dorset Bus Co Ltd was coded using their bus timetables as well as journey time data for a number of their services for which the real-time passenger information system was in operation. In Appendix D, Figure D.7 shows the network coverage of bus services in the public transport model.

3.21 The bus network was created from the SATURN highway network model. This enabled a linkage to be established between highway travel times and bus travel times such that, the forecasting mode includes the representation of the impact on bus travel times of increasing congestion levels or bus priority measures, such as bus lanes or bus priority measures at junctions. At the same time, model includes the effects of capacity reduction on general traffic, and the impact, in turn, on bus journey times.

3.22 Appendix D, Figure D.8 shows the extent of the rail network in the model. Rail services running on the Weymouth-London Waterloo route were coded using the South West Trains timetable.

Cross Country trains operating on the section as far as Bournemouth were also included. The rail network also includes the rail centroid connectors and access/egress walk links from bus stops to the rail stations. All the external zones were connected using long distance centroid connectors to either Dorchester South (in the west) or Southampton Central (in the east).

3.23 Rail journey times were coded directly into the line descriptions, and were based on 2008/9 timetabled information. A number of boarding penalties were inserted to dissuade unrealistic interchanges. The values were calibrated specifically for the SEDMMTS model, to ensure a realistic assignment of trips where choices exist.

Demand

3.24 The development of the public transport travel demand trip matrices combined information from a number of sources:

- **Wayfarer ticketing data** supplied by Transdev Yellow Buses and Wilts and Dorset Bus Co Ltd for all of their services in the South East Dorset area;
- **bus passenger interviews** were conducted at 23 key bus stops;
- LENNON **rail ticketing data** was provided by South West Trains, supplemented by data from the 2005 National Rail Travel Survey (NRTS), obtained from the DfT, which also includes the London Area Travel Survey (LATS) for 2001;
- **rail passenger interviews** were conducted at nine stations which provided details of passenger origins and destinations, trip purpose, access/egress mode, etc;
- boarding and alighting **passenger counts** were undertaken at a total of 137 bus stops and 11 stations, located along key corridors or interchanges in the South East Dorset area;
- **workplace surveys** were conducted at 5 key employment sites in the study area and the **commuter survey** focussed on the general commuters at four important interchanges in the study area; and
- the local authorities provided records from the **school travel database** for the study area which included the origin and destination of all school trips in the area and the modes used.

3.25 As summarised in Figure 3.4, bus travel demand matrices were developed initially from ticketing data from the bus operators. The bus interview, workplace and commuter interview surveys, and school travel data were used to derive the trip purpose factors by time period. The resulting bus matrix for each time period was assigned to the bus network.

3.26 Rail demand matrices were developed from the NRTS, rail interview, workplace and commuter interview surveys, and school data. Rail passenger ticketing data (via the LENNON database) was converted to represent the full station-to-station movements (see Figure 3.5).

3.27 The Public Transport Local Model Validation Report provides details of the overall model validation.

Figure 3.4 – Bus Data Processing

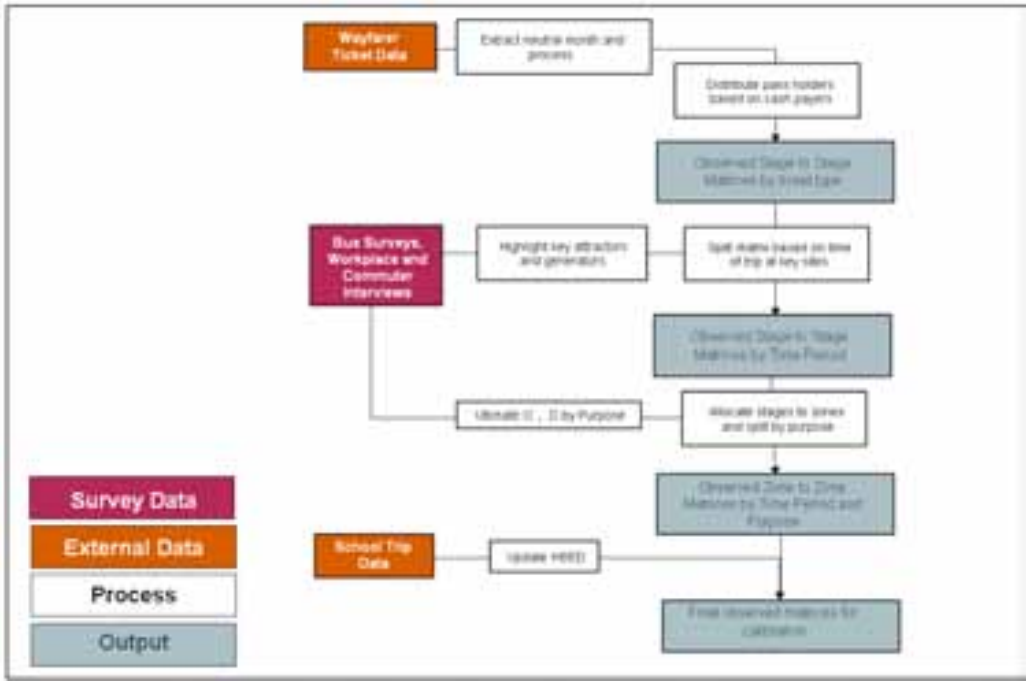
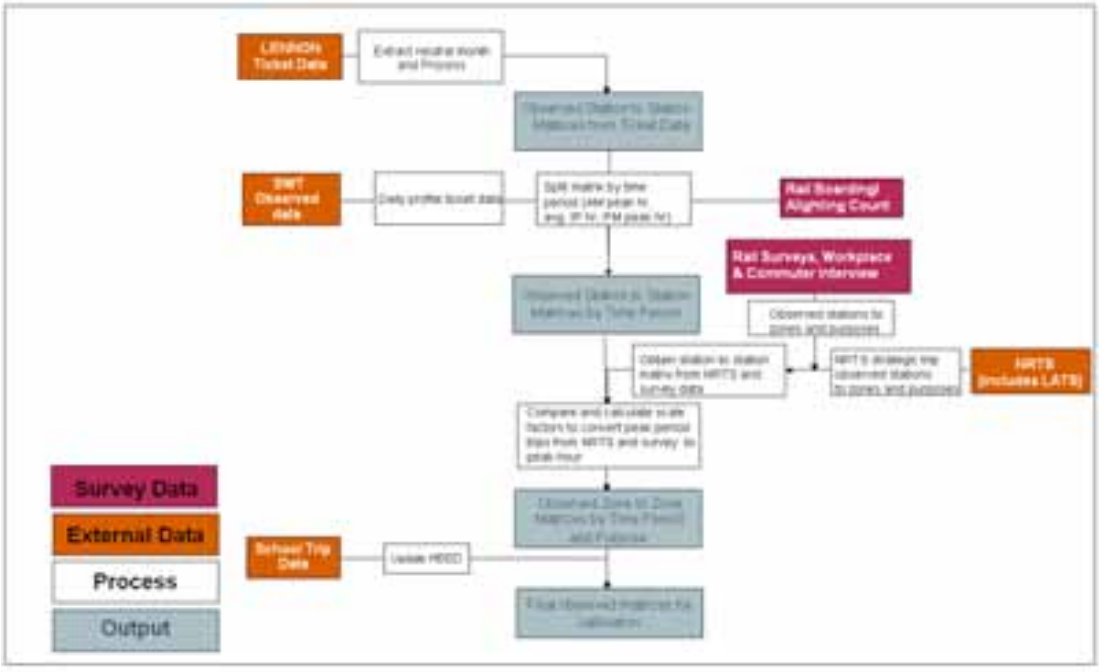


Figure 3.5 – Rail Data Processing



Forecasting Travel to 2026

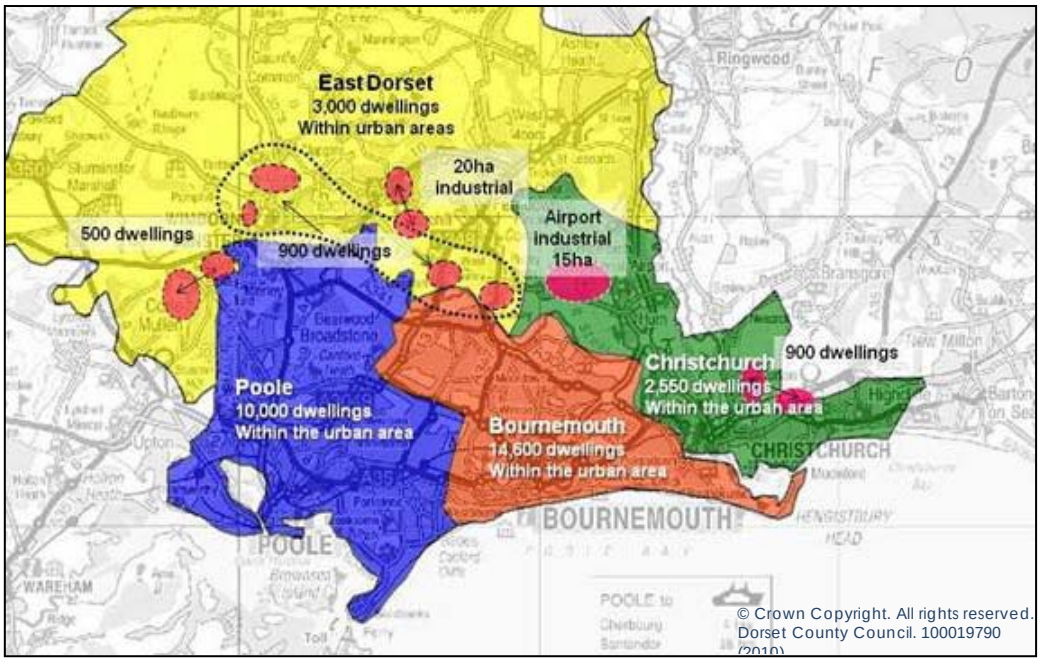
Land Use Assumptions

3.28 There are close links between changes in the volume and location of population and employment across the study area, and the impacts of the associated developments on the transport system. In addition, the content of the transport system, and changes to it, can play an important role in influencing the form, scale and timing of the population and employment changes. Hence, there

is the potential for iterations between changes to the transport system and population/employment developments in order to achieve a balance between the two elements. However, the consideration of such interaction was outside the scope of SEDMMTS. From the outset of the study, the attention was directed at the preparation of transport strategies designed to serve a single spatial development forecast prepared by the local authorities.

3.29 The 2008 base year models were forecast forward to the future year of 2026 based on forecasts of the change in population and employment in South East Dorset, as described in the Forecasting Report. Originally the study used the Secretary of State's Proposed Changes to the draft RSS as the foundation for the forecasts of population, dwellings and employment in the study area to 2026, with the original draft RSS development proposals as a sensitivity test. These forecasts formed the basis of the initial modelling including the scenario tests undertaken in Stage 3. However, following the abolition of the RSS by the coalition government, the forecasts were revised to reflect the changed priorities of the local authorities. These forecasts were used for the strategy development process and the modelling of the preferred strategy.

Figure 3.6 – Growth in Dwellings and Employment to 2026



3.30 The demand model needs the set of future year trip ends as an input. WebTAG requires trip end growth to be based on TEMPRO, i.e. the trip ends should be controlled to the benchmark provided by the TEMPRO data. Information relating to future land use was provided by local authorities including committed developments and the assumptions for other future developments. TEMPRO (v5.4) was used to create the initial future year trip ends for South East Dorset while v6.1 formed the basis for the revised forecasts, used in the modelling of the strategy development and the preferred strategy.

3.31 Table 3.1 summarises the overall population and employment figures for Dorset authorities within TEMPRO, for the base year 2008, and future year 2026.

Table 3.1 – TEMPRO Population, Household and Employment Growth

Authority	Population		Household		Employment	
	2008	2026	2008	2026	2008	2026
Bournemouth	169,710	191,730	80,000	96,070	81,140	81,980
Poole	141,230	151,840	63,240	72,670	76,010	77,580
Christchurch	46,310	50,050	22,010	25,270	20,670	21,140
Purbeck	45,240	51,960	20,110	25,050	20,190	21,270
East Dorset	86,530	93,110	38,350	44,240	35,140	37,080

3.32 The increase in personal trips (by private car and public transport) was based on the change in land use. In line with WebTAG, light and heavy goods vehicle growth factors were derived from the DfT's 2007 Road Forecasts for England; these showed an increased between 2008 and 2026 of 4.8% and 14% for light and heavy goods, respectively.

Do Minimum Network

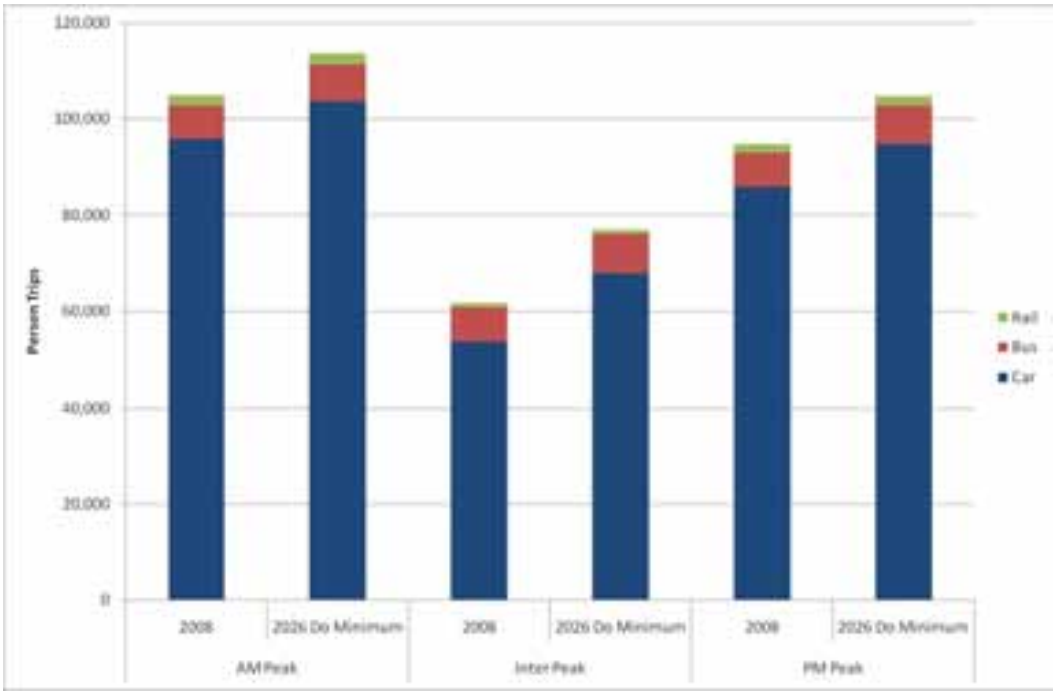
3.33 When forecasting, it was necessary to include all committed highway and public transport schemes in the forecast transport networks. A Do Minimum transport scenario was defined to examine the effects on the transport system if no new transport measures are put in place.

3.34 The list of committed transport schemes for the South East Dorset area was supplied by the respective local authorities along with scheme drawings. It contained those measures which had been introduced since the 2008 base year for the model, together with a limited number of committed future schemes scheduled for completion in the immediate future. The majority of these schemes were relatively minor in scope – redesigns of junctions, introductions of 20 mile/hr zones, banned turns, changes to signal settings, etc. The principal significant scheme was the Poole Twin Sails Bridge, which is currently under construction

Growth in Travel between 2008 and 2026

3.35 Figure 3.7 shows that there is an increase in the number of bus trips (9% in the morning peak, 16% in the inter-peak and 12% in the evening peak) followed by rail trips (10% in the morning peak, 14% in the inter-peak and 8% in the evening peak). The absolute proportion of bus trips in the mode split has slightly increased between 2008 and 2026 by 0.1% in the morning and evening peaks, and decreased by 0.6% in the inter-peak.

Figure 3.7 – Mode Split 2008 and 2026



Network Performance

3.36 Table 3.2 summarises the network performance for the key study area of Bournemouth, Poole, Christchurch and the hinterland in terms of the following:

- total distance travelled (pcu kilometres)
- total travel time (pcu hours);
- average network speed (km/hr); and
- total delay (pcu hours).

3.37 The figures show that there is an increase in flow or delay in the key study area between 2008 and 2026 but that most of the increase in traffic and congestion is in the key study area. The resultant increase in traffic and congestion in the study area has the effect of reducing speeds. This pattern matches the location of development, which is mainly within the key study area. There is also a considerable increase in traffic and congestion in the hinterland areas of the South East Dorset. Again, this reflects the development at Purbeck and East Dorset, and the sparser road network in the areas. The figures also reflect the additional traffic on the A31, A338, A347/A348, A3049, and the A35.

Table 3.2 – Comparison of Highway Network Statistics for 2008 & 2026

Sector	AM Peak		Inter Peak		PM Peak	
	2008	2026 Do Minimum	2008	2026 Do Minimum	2008	2026 Do Minimum
PCU Kilometres						
Bournemouth	163,400	205,900	112,100	145,900	156,600	200,400
Poole	174,000	216,900	121,900	159,600	169,900	215,800
Christchurch	64,800	78,800	46,100	61,900	61,100	76,000
Dorset County	286,300	370,300	196,800	272,500	260,100	350,800
PCU Hours						
Bournemouth	4,890	7,280	3,020	4,160	4,540	6,890
Poole	5,000	7,220	3,140	4,330	4,800	7,220
Christchurch	1,300	2,140	880	1,230	1,240	2,040
Dorset County	5,150	8,470	3,110	4,490	4,270	7,300
Average Vehicle Speed (kph)						
Bournemouth	33	28	37	35	35	29
Poole	35	30	39	37	35	30
Christchurch	50	37	53	50	49	37
Dorset County	42	35	47	45	44	36
Total PCU Delay (Hours)						
Bournemouth	1,680	3,110	840	1,270	1,470	2,850
Poole	1,790	3,180	910	1,420	1,660	3,150
Christchurch	350	980	200	330	340	920
Dorset County	1,310	3,440	470	880	800	2,590

Highway Link Flows

3.38 Changes in highway flow from 2008 to 2026 across the key study area is shown in Appendix D, Figures D.9 to Figure D.11, for the AM Peak, Inter peak and PM peak respectively.

3.39 There are a number of congestion hotspots in the forecast year as shown in Figure 3.8:

- A – A31/B3073 roundabout (Canford Bottom roundabout);
- B – B3073 Christchurch Rd/A347 New Road junction (Parley Cross);
- C – A348 Ringwood Rd/B3073 Ham Lane/B3073 Christchurch Road roundabouts;
- D – A349 Gravel Hill/A341 Queen Anne Drive junction;
- E – A31/A338 roundabout;
- F – Old Wareham Road/A350 Blandford Road junction;
- G – B3072 Three Legged Cross;

- H – Holdenhurst Road /A3049 junction;
- I – B3073 Parley Lane/Christchurch Rd/Avon Causeway junction;
- J – Bridge Street/Purewell/Stony Lane junction;
- K – Western Rd/B3065 The Avenue;
- L – A347 Boundary Rd/Talbot Avenue/A3049 Wallisdown Road junction;
- M – A348 Ringwood/Church Rd/Dudsbury Avenue junction;
- N – A347 Redhill Avenue/Redhill Drive/A3060 Castle Lane West/A3060 Whitelegg Way roundabout;
- O – Christchurch – Somerford Roundabout (A35, A337 and B3059 junction); and
- P – Poole – B3068 Ringwood Road/Longfleet Rd/A35 Fernside Road junction.

3.40 The effects of these delays can be observed by re-routing across the network. For example, some traffic from places east of Ringwood, which was using the A31 in the base year, uses the A338 in 2026. This is mainly due to the delay observed at A31/B3073 Roundabout (Canford Bottom roundabout).

Figure 3.8 – Congestion Hotspots in Forecast Year 2026

Public Transport Model Performance

3.41 The overall public transport network performance for the whole of the modelled area is summarised in terms of the following:

- total travel time (passenger hours) (Figure 3.9);
- total distance travelled (passenger kilometres) (Figure 3.10); and
- passenger boardings (Figure 3.11).

3.42 There is an increase in passenger boardings, passenger kilometres and passenger hours. This is mainly due to the congestion on the highway network, as identified earlier.

Figure 3.9 – Passenger Hours

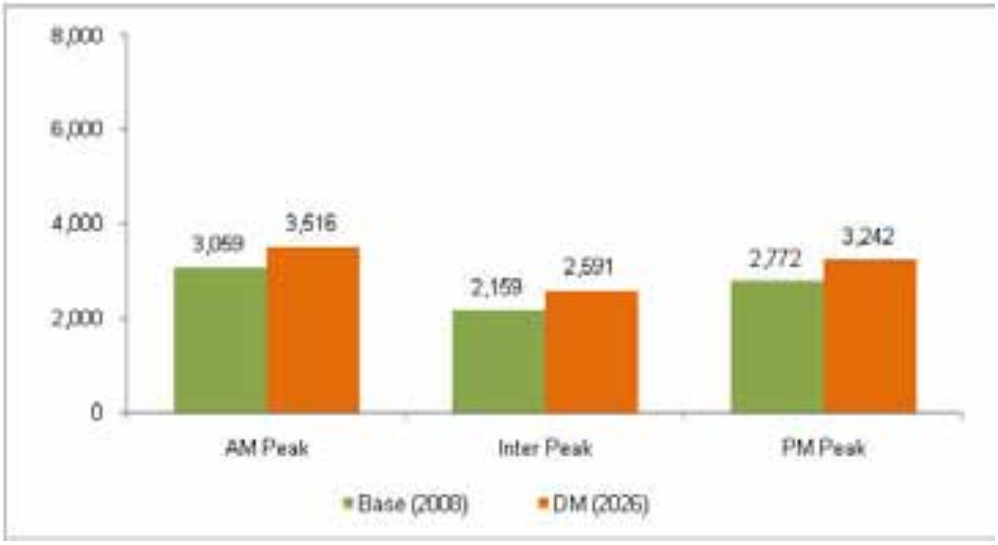


Figure 3.10 – Passenger Km

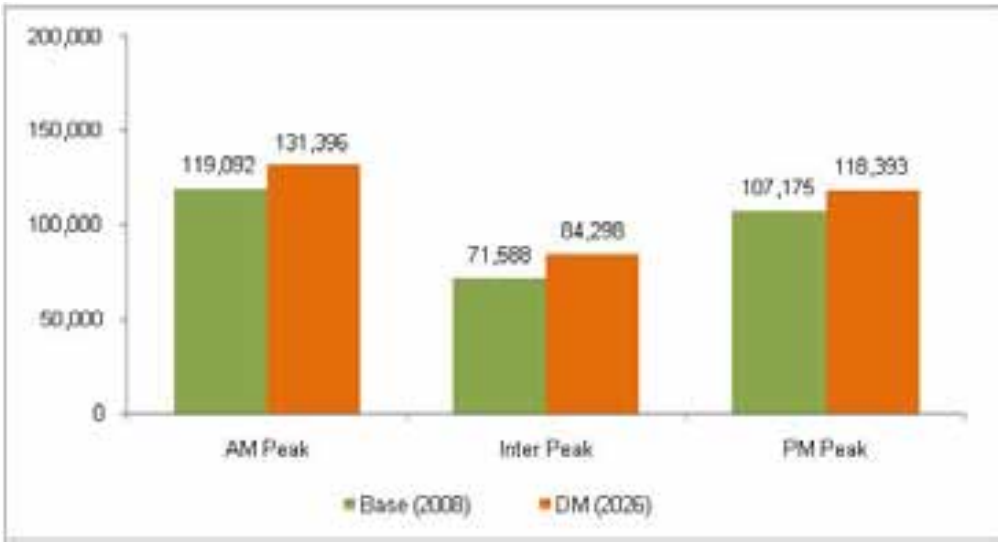
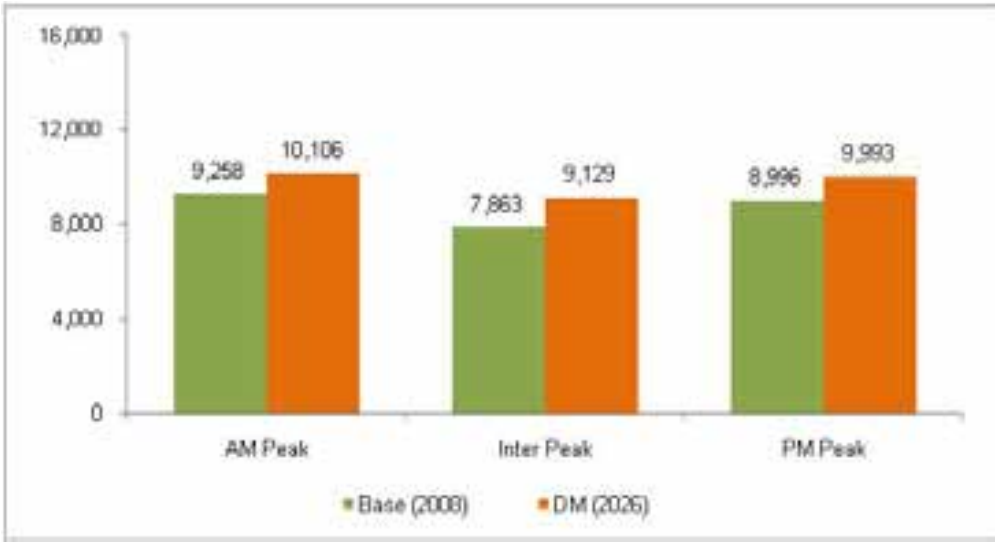


Figure 3.11 – Passenger Boardings



3.43 These changes, especially the increase in car use and associated worsening of congestion, would have a considerable impact on the environment of the South East Dorset area. The environmental effects would include increased levels of traffic noise. However, improvements in vehicle efficiency between 2008 and 2026 are forecast to lead to a reduction in emissions of CO_2 and substantial reductions in local pollutants such as NO_x and PM10 despite the increase in traffic volumes.

3.44 Thus, if no transport measures were to be put in place, growth by 2026 would have the following impacts on the transport system in the South East Dorset area:

- an increase in the overall level of congestion on the road network, lengthening journey times and reducing journey time reliability; and
- a reduction in the attractiveness of bus services through increased congestion in urban areas, thereby strengthening the dominance of the car for travel in South East Dorset.

3.45 The growth in travel demand resulting from the increased population and employment would be significant. However, the growth is constrained by the limited capacity on the transport system which results in the suppression of some journeys. Nevertheless, even with some suppression, the additional demand creates severe problems for the operation of the transport network. There is a forecast 26% rise in the number of vehicle trips on the road system in the morning peak but the limited capacity results in an 18% drop in speeds from 42 km/hour and an increase in delay of 109%, indicating a large scale growth in congestion. Growth in traffic occurs particularly on the A31, A338, A347/A348, A3049, and the A35.

4. Strategy Development Process

Introduction

4.1 Chapter 2 contained an outline of the approach adopted during Phase 3 of the study, introducing each of the seven stages into which the phase was divided. In this chapter, further details are provided of steps in the process of developing and appraising the preferred strategy, highlighting the way in which each element contributed to the emerging strategy, with particular attention to how the components of the strategy were identified, including the role that consultation played in the process.

Stage 1 – Current and Future Problems

Introduction

4.2 In order to ensure that the transport strategy developed for South East Dorset was firmly grounded in reality, with its components clearly linked with tangible problems and issues in the transport system in the study area, considerable work was undertaken at the outset in order to identify the location and magnitude of problems. To achieve this, the first major element in the development process involved the problem identification, through a combination of consultation, research and the application of the transport model to establish how the content, location and magnitude of the problems might change into the future.

Consultation on Current Problems and Issues

4.3 The consultation strategy was designed at the start of the study, with particular emphasis at three key points within the strategy development process – current problems and issues; strategy options; and preferred strategy. The first stage of consultation concentrated on identifying the views of stakeholders' and the general public on the current problems and issues for the transport system in the study area.

General Public

4.4 Five thousand copies of the questionnaire were printed and distributed around the study area. A copy of the consultation leaflet is included in Appendix E. A total of 284 completed questionnaires were received. The questionnaire was also available on the project website (www.sedorsetmms.com). A total of 327 questionnaires were completed on line. The most significant responses to the questionnaire are described below, including quotations recorded in the freeform part of the questionnaire.

4.5 "Quality of life" was the most popular transport-related issue with over 70% of the respondents selecting it as 'very important'. "Road safety and security" and "air quality" were also very important with 57% and 48% of the responses respectively.

4.6 Respondents were asked to select which transport-related problems they had experienced in certain locations in the study area. Congestion featured highly in almost every location, particularly in central Poole, central Bournemouth, Christchurch and Wallisdown. The A31 and the A338 Spur Road were also considered to be heavily congested.

"Commuting across Dorset is a nightmare, but particularly bad in the summer. The 35 mile journey takes me up to 4 hours a day some days"

"Car travel is already grinding to a congested halt during busy times, and is horrifically environmentally damaging as well as dangerous"

"Poor management and road infrastructure are the main issues that affect residents in Dorset"

4.7 Parking was also considered to be a significant problem in central Bournemouth, indicated by 42% of the respondents, and in central Poole, Christchurch and Wimborne Minster.

"Parking in the town centre (Bournemouth) is inadequate and expensive which is why places like Castle Point remain busy"

4.8 The consensus was that the A31 cannot cope with the current volume of traffic, particularly through Ferndown, Wimborne and Ringwood. Other perceived problem locations included Christchurch which was highlighted as suffering from congestion along key traffic routes with the A350 requiring maintenance work.

4.9 With regard to public transport, comments largely focused on the high costs, along with the perceived poor service coverage.

4.10 Young people, as a sub-group of the general population, were under-represented by the public consultation exercise. Feedback from this demographic group was obtained from other sources which highlighted that, in the context of transport, public transport was the most prominent issue.

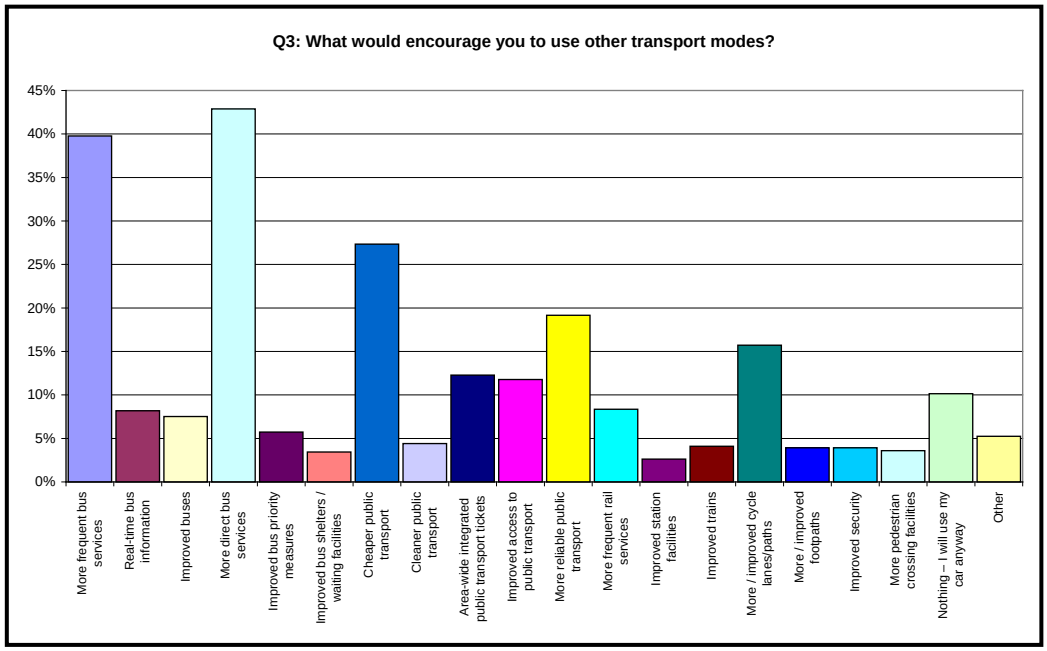
4.11 In terms of the development of the future strategy, the *Balanced Approach*, as opposed to *Established* or *Radical* was supported by 57% of the respondents.

4.12 The most effective measure to encourage people away from using their car was felt to be "more direct bus services" (43% of the respondents) (Figure 4.1). Locations in which this was popular were Wimborne and Colehill, Verwood, Ferndown, Ashley Heath and West Moors, as well as central and western Poole and Christchurch/Highcliffe. The second most popular measure was "more frequent bus services", selected by 40% of the respondents. These responses were clustered in Wimborne and Merley, West Moors, as well as western Poole and Highcliffe.

"Poor public transport services and poor road infrastructure from North to South of the County"

"The local bus service is almost non-existent….Sometimes four connections may be necessary to reach a destination"

Figure 4.1 – Incentives to use transport modes other than car



Wider Reference Group

4.13 A workshop was held to discuss a range of transport-related subjects and the main outcomes were:

- key locations that were identified as needing bus service improvements included Verwood, Wimborne, Horton, Ferndown, access to Bournemouth Airport, and St Leonards;
- a series of congestion hotspots was identified, mostly at junctions within the main urban area (Figure 4.2). Wider congestion issues included the lack of a through-route between Poole and Bournemouth, inadequate north-south transport routes, and the knock-on effects caused by accidents on the A338 Spur Road;
- attention was drawn to issues on the use, implementation, and safety of cycle lanes, the use of the sea front promenade as a cycle route, cycle storage and theft, and road safety, walking safety, as well as the use of roads/footpaths by equestrians and mobility scooters;
- freight issues included congestion hotspots (Figure 4.3), connectivity, lorry routes, and the concept of a freight consolidation centre;
- accessibility to both the Port of Poole and Bournemouth Airport were highlighted, taking into account the anticipated impact of the Poole Twin Sails Bridge and the proposed expansion of the airport;
- the group discussions felt that the proposed future population and employment development within the study area would be excessive, the transport plan must be sustainable but should not necessarily discount road building as an option;
- key environmentally sensitive areas were confirmed as being the Stour Valley, the Avon Valley, Poole Harbour, Christchurch Harbour, the Dorset heathlands, and existing green infrastructure e.g. the Castleman Trailway; and
- social exclusion was not perceived to be an issue, with the exception of the Boscombe area.

Figure 4.2 – Congestion Hotspots in South East Dorset

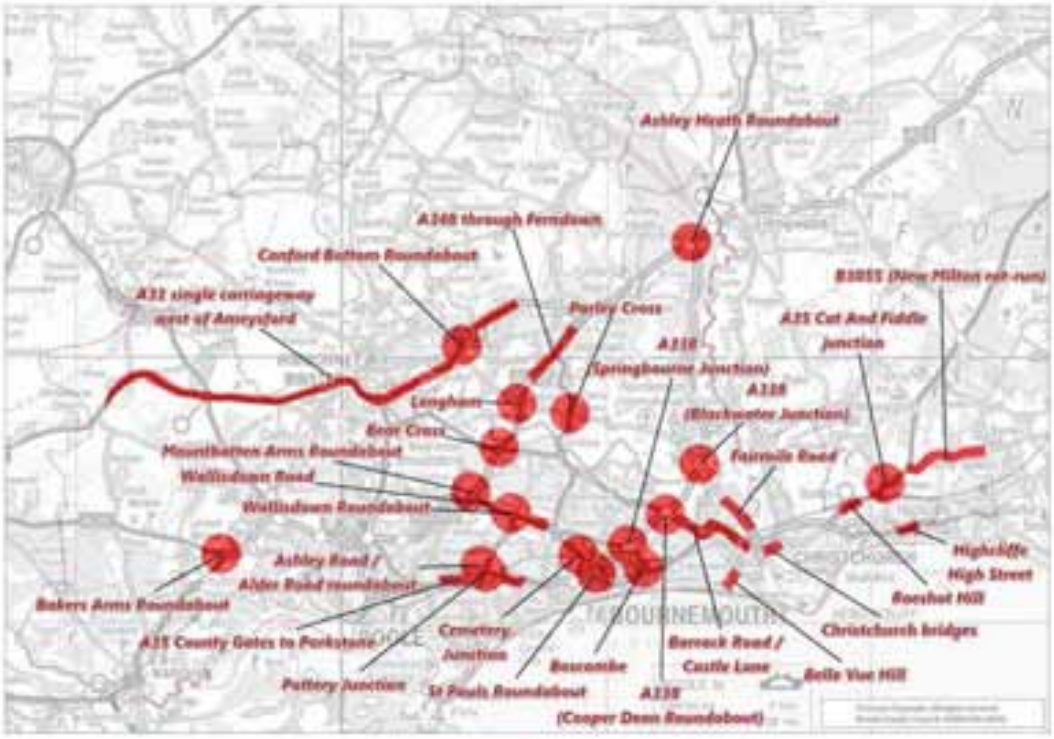
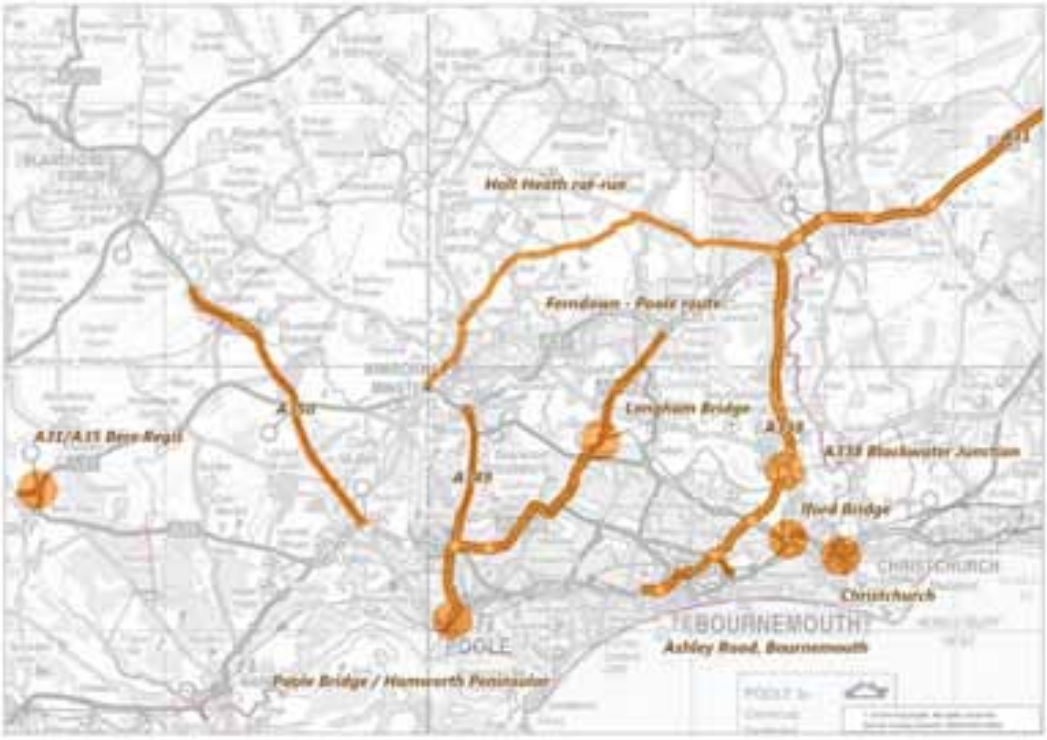


Figure 4.3 – Freight Hotspots in South East Dorset



Strategic Advisory Group

4.14 The main problems and issues which emerged from discussions about public transport related to accessibility/interchanges, competition between operators and the associated issues with ticketing, public acceptability of bus priority measures, and subsidy requirements.

4.15 Highway and congestion issues were centred on the A31 and in Christchurch. It was suggested that a relief road for Christchurch should be considered, while concerns were raised about the rat-running that could follow any restrictions imposed on the A31.

4.16 Other topics that were discussed covered inequalities for walking and cycling, the impact of smarter choices, new developments, and the cost of technological solutions.

Identification of Priority Challenges

4.17 The transport strategy developed by the study should fit within national transport policy, and as such the identification of the challenges for the strategy should fit within the DfT goals which, at the outset of the study, were:

- to **support** national **economic** competitiveness and **growth**, by delivering reliable and efficient transport networks;
- to reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of **tackling climate change**;
- 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;
- to **promote** greater **equality of opportunity** for all citizens, with the desired outcome of achieving a fairer society; and
- to **improve quality of life** for transport users and non-transport users, and to promote a **healthy natural environment**.

4.18 Although the emphasis has shifted with the change in government, the broad overall goals remain.

4.19 The Baseline Report (May 2010) identified a number of 'priority challenges' in relation to each of the five DfT goals. Account has been taken of these priority challenges in the process of developing the strategy.

4.20 There would be a strong synergy between the different DfT goals. For example, measures that encourage modal shift to public transport, cycling and walking are likely to make a positive contribution to economic growth (by tackling congestion), reducing greenhouse gas emissions and enhancing the local environment, as well as improving public and personal health.

4.21 Many transport related problems and issues cut across two or more goals – for example congestion on the A31 (a key issue in the study consultation) contributes to climate change, has an impact on the local economy, and causes quality of life and air quality issues. One or more of the goals are relevant to the current main transport related problems and issues in South East Dorset, based on the study consultation:

- congestion;
- parking at specific locations and times of the day/year;
- road capacity and maintenance;
- public transport services; and
- cycling/walking facilities.

4.22 The vision of the Multi-Area Agreement for Bournemouth, Dorset and Poole is to develop a strongly performing economy, characterised by a greater concentration of higher skilled and higher paid jobs than at present and to do this while respecting and protecting the area's unique environmental assets.

4.23 The public consultation produced a robust evidence base identifying the main problems and issues, which guided the analysis of the information assembled during the baseline review study. Key diagrams from the Baseline Report are used below to highlight the main challenges.

4.24 The priority challenges associated with tackling climate change are outlined below:

- Making sustainable modes more attractive is critical to reducing transport's emissions of CO_2.
- Congestion problems need to be addressed when tackling climate change (e.g. A31, A338, A35, A348, and A3049). The consensus in the consultation was that the A31 cannot cope with the current volume of traffic, particularly around Ferndown, Wimborne and Ringwood. This is demonstrated by the average driving speeds on the A31 between World's End and Ringwood in Figure 4.4, with speeds of less than 20mph on the eastbound and westbound approaches to Canford Bottom roundabout, and the eastbound approach to Merley roundabout.
- A large area of South East Dorset has at least 40% of households owning two or more cars, rising to more than 60% outside the Bournemouth/Poole conurbation at Broadstone, Lytchett Matravers, Wimborne Minster and Ringwood (see Figure 4.5).
- Bus patronage has seen recent increases but this is concentrated on the conurbation and services to the rural areas, particularly to the north, are poor and are perceived to be getting worse (see accessibility maps in Figure 4.6).
- The most popular option raised by consultation respondents for encouraging people out of their cars was "more direct bus services" (see Figure 4.1), particularly in Wimborne and Colehill, Verwood, Ferndown, Ashley Heath and West Moors, central and western Poole and Christchurch/Highcliffe.
- Satisfaction with local bus services has remained below the target trajectory for LTP2 monitoring with 57% in 2006/07 (see Figure 4.7).
- In the consultation, 40% of respondents indicated that "more frequent bus services" would encourage them to switch modes (see Figure 4.1) particularly those living in Wimborne and Merley, West Moors, western Poole and Highcliffe.
- About 20% of consultation respondents said they would travel by bus if buses were more reliable (see Figure 4.1). Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08.
- Although cycle provision has improved, it tends to be concentrated on-street; the consultation highlighted a strong desire for off-road facilities (see Figure 4.1). It was highlighted that there are often gaps in the cycle lanes, especially at pinch-points in the road network.
- Rail problems include service conflicts between long distance and local services; irregular service patterns; access to rail stations; interchange between rail and other modes; affordability; journey times compared with the car; and availability of parking at rail stations (especially Poole).

Figure 4.4 – Morning Peak Average Driving Speed Between World's End and Ringwood

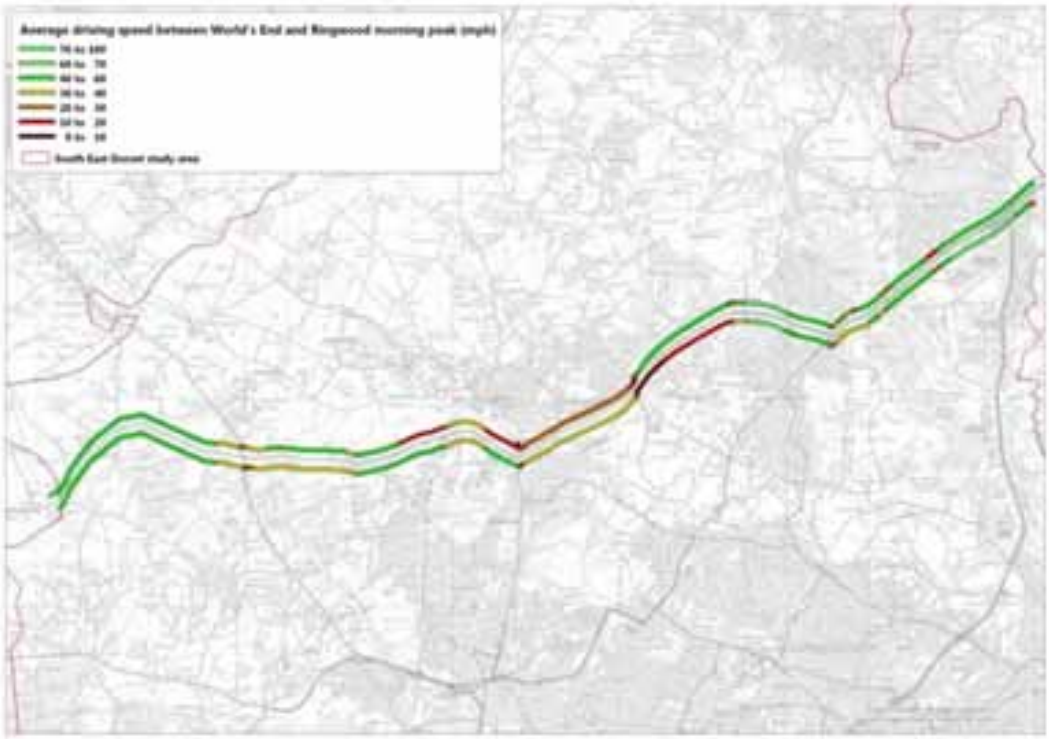


Figure 4.5 – Car Ownership in South East Dorset (Two or More Cars)

Figure 4.6 – Access to Poole (Left) and Bournemouth (Right) Town Centres[2]

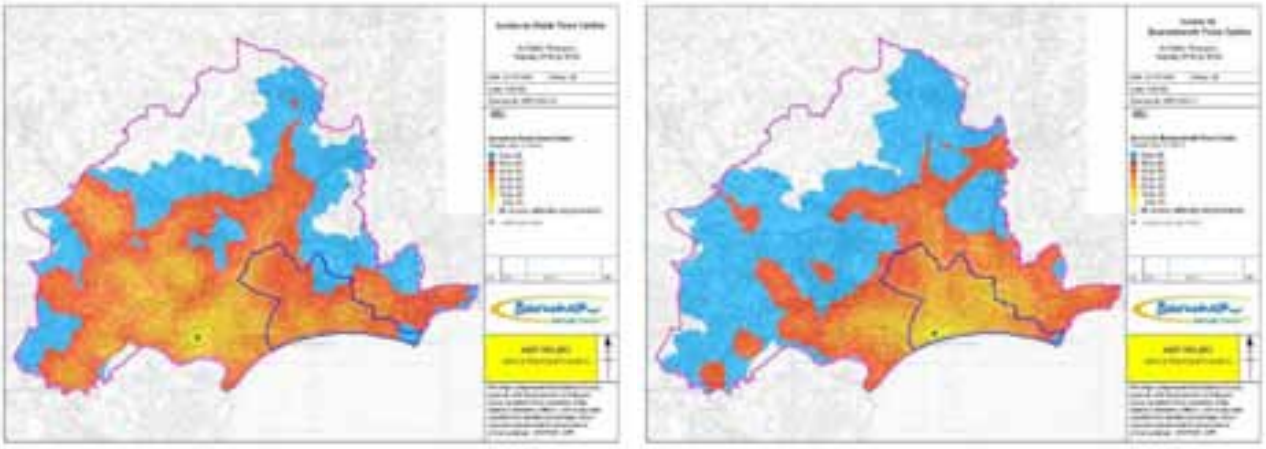
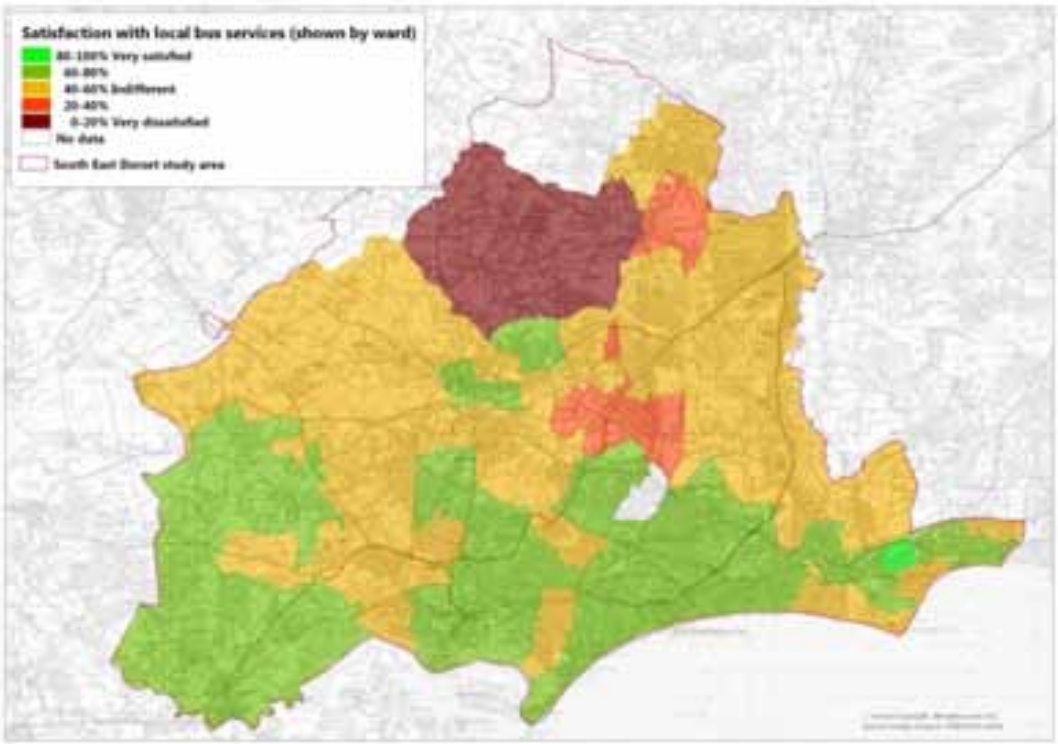


Figure 4.7 – Satisfaction with Local Bus Services



4.25 For the goal of supporting national economic competitiveness and growth, the following priority challenges were identified:

- 33,300 new houses and 14,150 jobs are proposed for South East Dorset area between 2008 and 2026.
- Congestion problems already occur on the area's road network –
- Figure 4.8 shows morning peak inbound drive times, comparing Poole, Bournemouth, Christchurch and Wimborne. Red is a 40-60 minute drive time, green is 0-10 minutes.
- The WRG raised issues with highway access to Bournemouth Airport.

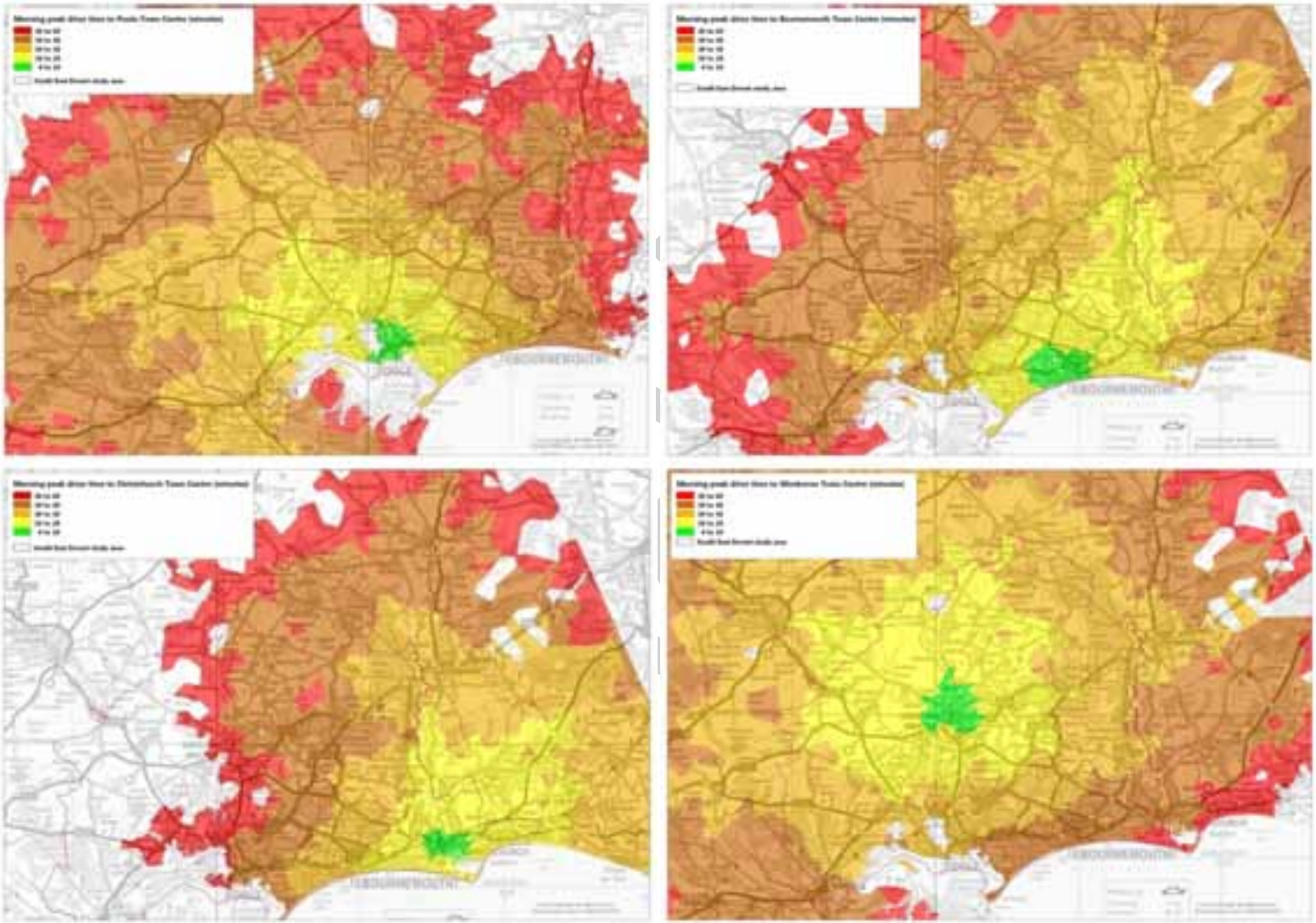
[2] See Baseline Report (May 2010) for full size versions of accessibility maps.

- The volume of additional holiday traffic was raised as an issue in the consultation.
- Accessibility to the Port of Poole was highlighted, with high levels of congestion on many of the links serving the port and inadequate public transport access for passengers.
- The withdrawal of the Barfleur ferry service from the Port of Poole would have a potential impact on the economic competitiveness of the port for freight traffic (e.g. compared with Portsmouth). *Note that since the Baseline Report was produced, Brittany Ferries has announced the reinstatement of the service - during 2011 it is operating from the end of February to the beginning of October.*
- Inadequate north-south transport routes were raised by the WRG, with problems of journey time reliability on the A350.

4.26 The following priority challenges relate specifically to regional connectivity:

- Congestion problems on the A31 (Figure 4.4).
- The knock-on effects caused by accidents on the A338 Spur Road were raised in the consultation.
- Inadequate north-south transport routes were raised by the WRG (although this issue lies beyond the study area boundary and outside the scope of the study), with journey time reliability problems on the A350.
- The A350 and A37 provide important links to cross-channel ports and yet sever a number of villages.
- Freight was identified in the consultation as being problematic throughout the whole region with HGVs using local roads; Ferndown was mentioned as having a particular problem with a large volume of HGV activity.
- The Port of Poole has a rail branch which is only lightly used by rail freight services and, according to the WRG, greater use should be made of this.
- The future use and capacity of Waterloo station constrains the expansion of rail services on the South West Trains network. Infrastructure constraints (e.g. at Woking) restrict the number of trains that can operate through South East Dorset.
- There are constraints on expanding rail capacity to accommodate demand; for example, the interactions between freight and passenger services at locations such as the mainline between Basingstoke and Southampton which has few passing loops to accommodate freight services.

Figure 4.8 – Morning Peak Drive Time to Poole (top left), Bournemouth (top right), Christchurch (bottom left) and Wimborne (bottom right)[3]

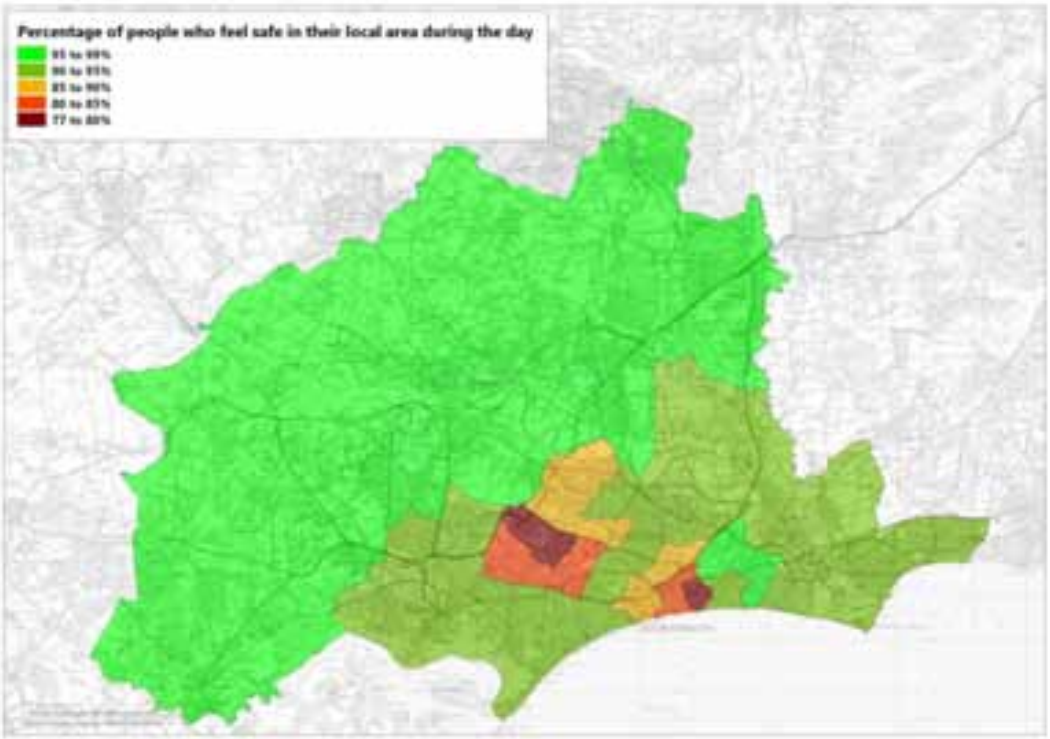


[3] Larger versions are in Appendix D, Figure D.14 to Figure D.17.

4.27 The priority challenges relating to the contribution to better safety, security and health and longer life expectancy include the following issues:

- "Road safety and security" (57%), and "air quality" (48%) were highlighted as very important transport-related issues in the consultation.
- Between 2006 and 2008, there were 48 fatalities and 683 serious injuries in the area.
- In Boscombe West and Rossmore/Alderney Wards, a low proportion of residents feel safe outside their homes (77% and 78% respectively) – whereas for a large part of the area over 90% feel safe (Figure 4.9).
- Boscombe West also scored lowest for how safe respondents felt outside their homes at night (15%) followed by the Bournemouth Central Ward (29%) compared with 60% across the area.
- The cost of obesity to the Primary Care Trust (PCT) in 2007 has been estimated at £46.4 million and this is expected to rise to £57.7 million by 2015.
- There is high potential for walking and cycling, with over 50% of residents commuting less than 5km. For commuting journeys of less than 2 km, 48% of trips in Bournemouth and 56% in Poole are made by car.

Figure 4.9 – Percentage of People who Feel Safe in their Local Area during the Day



4.28 The following priority challenges were identified for improving the quality of life and promoting a healthy natural environment:

- Biodiversity and Geodiversity: Protection of designated areas and other areas of ecological and geological value. Where this is not possible, there should be mitigation and compensation for losses. Opportunities for new habitat creation and enhancement associated with transport schemes should be explored in their design.
- Historic Environment: Protection of designated and non-designated heritage assets and their settings. Opportunities should be explored for improving settings and ensuring that good

accessibility to the historic environment is provided and that new transport schemes improve the settings of cultural heritage assets.

- Landscape character and Open Space: Preserve and enhance the character of the area's landscape by ensuring that its integrity and valuable natural spaces are not lost and by minimising development in areas of valued landscape character and ensure that transport schemes avoid sensitive areas. Explore opportunities for landscape enhancement.
- Land Resources: Ensure that land is used efficiently and that no inappropriate transport development should be undertaken on high quality agricultural land.
- Flood Risk: Ensure that transport infrastructure minimises any negative effect arising from flooding. Reduce land-take in areas which act as floodplains and deliver a reduction in drainage from roads.
- Air Quality: Ensure that transport infrastructure schemes minimise any negative effects on local air quality. Explore options for improving local air quality.
- Traffic-related noise: Ensure that new transport schemes minimise noise generation as much as practicable, especially noise generated by traffic.

Development of Strategy Objectives

4.29 The development of transport strategies during the SEDMMTS was guided by a series of objectives which the strategies would aim to satisfy; these objectives were based on a number of relevant documents:

- Delivering a Sustainable Transport System (DaSTS);
- South West Regional Transport Strategy (part of the draft RSS); and
- South East Dorset LTP.

4.30 Whilst the RSS has since been abolished, the objectives were still considered to be relevant to the SEDMMTS.

4.31 Based on these documents, the transport strategy for the study should aim to satisfy core objectives which sit within the overarching DfT goals. The objectives focus on the contents of a sustainable transport system; the strategy should also satisfy the following broader objectives in relation to the contents of the strategy: affordability and capable of being implemented.

4.32 The affordability objective takes into account the potential funding constraints at the time of strategy development, taking into account the funding of individual items or the strategy as a whole. The implementability objective represents a range of sub-criteria including: technical aspects of construction or implementation, public acceptability, and political support.

Strategy Objectives

The following objectives were identified to guide the strategy development:

- to support national economic competitiveness and growth, by delivering reliable and efficient transport networks:
    - support existing and forecast sustainable economic activity and regeneration;
    - help create a modern, efficient and integrated transport system;
    - improve journey time reliability;
    - enhance connectivity and help to overcome regional peripherality;
- to reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change:
    - promote alternatives to the car and encourage behavioural change;
- 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:
    - enhance the safety of users of the transport system;
- to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society:
    - improve accessibility to work, education, shopping, leisure and healthcare services;
- to improve quality of life for transport users and non-transport users, and to promote a healthy natural environment:
    - reduce the impact of transport on the environment and enhance the quality of life of residents;
- the contents of the strategy should also be:
    - affordable;
    - capable of being implemented.

Stage 2 – Option Generation

Introduction

4.33 The identification and assessment of options within the SEDMMTS followed a systematic process involving the following series of specific steps designed to ensure that the full range of potential measures was identified and considered:

- review of potential instruments;
- identification of previously considered measures and derivation of a long list of measures;
- examination of forecast problems and issues;
- assessment of the long list of measures; and
- identification and assessment of broad transport scenarios.

Review of Potential Instruments

Introduction

4.34 A list of possible measures of potential relevance to the SEDMMTS was reviewed to identify the suitability of each measure for inclusion in the strategy development process. In this, an attempt was made to identify the particular relevance of the measure for SEDMMTS, taking into account the strategic nature of the study and the characteristics of the area. As appropriate, the individual instruments were identified as having primary [P] or secondary [S] relevance to the study. In some cases, the instrument could be part of a strategy, although in a supplementary role (e.g. cycling provision at stations).

4.35 The range of instruments is summarised in Table 4.1.

Integration of Policy Measures

4.36 No single measure on its own would be likely to provide a solution to the transport problems within the study area. Whilst all the instruments could contribute to the achievement of DfT goals, it was anticipated that the most effective solutions would consist of packages of measures. Packaging measures could:

- reinforce, extend or complement the impact of a particular measure – for example, the use of traffic calming to reinforce the benefits of building a bypass;
- mitigate potential adverse impacts of a particular measure – for example using revenue from parking charges to finance new infrastructure; and
- increase public acceptability of a particular measure – for example road pricing may be more acceptable if the revenue raised is used to invest in better public transport.

Table 4.1 – Potential Instruments Reviewed

Mode/|Topic	Infrastructure	Management of the Infrastructure	Information	Pricing
Cyclists, Pedestrians and Smarter Choices	• Cycle routes [S] • Pedestrian areas [S]	• Cycle lanes and priorities [S] • Cycle parking [S] • Pedestrian crossing facilities [S] • Company Travel Plans [S] • School Travel Plans [S] • Residential Travel Plans [S] • Flexible or staggered working hours [S] • Telecommunications – teleworking, teleshopping and teleconferencing. [S]	• Static direction signs [S]	
Public Transport	• Conventional rail provision [P] • Light rail [P] • Guided bus [P] • Park and ride [P] • Terminals and interchanges [P]	• Bus priorities [P] • High occupancy vehicle lanes [P] • New (inter-urban) bus services [P] • Public transport service levels [P] • Bus service management measures [S] • Quality Bus Partnerships [P] • New forms of public transport [S]	• Timetable and other service information [S] • Real time passenger information [S] • Operation information systems [S]	• Fare levels [P] • Fare structure [S] • Concessionary fares [S]
Car/Highway	• New road construction [P] • New off-street car parks [S]	• Conventional traffic management [S] • Urban traffic control (UTC) systems [S] • Intelligent Transport Systems (ITS) [P] • Accident remedial measures [S] • Traffic restraint measures [S] • Other physical restrictions on car use [S] • Regulatory restrictions on car use [S] • Parking controls [P] • Car sharing [S]	• Conventional direction signing [S] • Variable message signs [S] • Real-time driver information systems and route guidance [S] • Parking guidance and information systems [S] • Public awareness campaigns [S]	• Parking [P] • Workplace Parking [P] • Urban and Inter-urban Charging [P]
Freight	• Lorry parks [S] • Trans-shipment facilities [S] • Encouragement of other modes (e.g. rail-borne freight or water) [S]	• Lorry routes and bans [S]	• Static direction signs [S] • Fleet management systems [S]	-
Land Use Measures	• Developments within transport corridors and near to transport nodes [P] • Development mix [P] • Development densities [P] • Parking standards [P]			

Identification of Previously Considered Measures

4.37 Over time, the South East Dorset study area has been the subject of a number of studies, which have identified and assessed a variety of potential measures spread across a range of modes. In the Inception Report for Phase 3, the Appendix included summaries of the key studies.

4.38 Schemes were also identified from the consultation and further meetings including:

- SAG problems and issues and strategy scenarios consultation;
- WRG problems and issues consultation;
- meetings with officers of local authorities; and
- individual meetings with key transport organisations in the study area including the HA, bus operators (Wilts and Dorset and Yellow Bus), South West Trains, Network Rail, Port of Poole, Bournemouth Airport and LA21.

4.39 The potential measures from the different sources were combined into a long list, which formed the basis for the strategy development process. The long list was treated as a 'live' document, with measures being added to it, as they were identified. At the same time, the list represented an audit trail for how each of the measures had been considered during the study. In this way, the long list forms a record of the assessment of each measure during the study.

4.40 The list of measures in the long list is summarised in the following tables within Appendix B:

- cycling, walking and smarter choices – Table B.1;
- public transport – Table B.2
- highways – Table B.3;
- demand management – Table B.4;
- freight – Table B.5;
- land use and urban design – Table B.6; and
- non-transport interventions – Table B.7.

4.41 Each component in the long list was assessed against the study objectives – the DfT goals plus affordability and 'implementability'. A scoring system was used to denote positive (✓✓) or negative (**xx**) significant contribution to the objective with (✓) or (**x**) denoting a small impact. Attractive measures were then allocated to four initial scenarios, as part of Stage 3 of the strategy development process.

Stage 3 – Initial Strategy Development

Initial Scenario Testing

4.42 An important step in the development of the overall transport strategy was the identification and assessment of alternative transport scenarios, which were designed to satisfy the objectives:

- to explore the impact of 'high level' potential strategy components before developing schemes to a more detailed level;
- to understand the relative impacts of alternative measures, in relation to strategy objectives such as changes to mode split or congestion relief;
- to examine the effects of major new developments on the adjacent transport network;
- to explore the sensitivity of the transport model to a variety of changes to the transport system; and

- to guide the direction of the strategy development process.

4.43 In this way, the transport strategy development process is focussed on elements which would be likely to play a more significant role in influencing future travel behaviour across the study area.

4.44 In designing the scenarios, a number of criteria were followed:

- a limited number of scenarios, to enable a detailed review of their impacts to be undertaken;
- distinctive scenarios to contrast their performance and to understand the magnitude of their impacts;
- scenarios with individual identities;
- each scenario with an emphasis on a specific transport mode; and
- scenarios restricted to measures that can be accurately represented in the transport model.

4.45 On the basis of these criteria, and following discussions with the study's Strategy Advisory Group, four broad scenarios were identified:

- **smarter choices** – introduction of a range of travel plan and wider initiatives;
- **public transport measures** - improvements to existing public transport operations together with new facilities;
- **improvements to the highway network** - a set of significant additions and extensions to the highway network across the study area; and
- **travel demand management** – includes measures designed to influence the decision to travel, the choice of mode, and the time of travel.

4.46 Finally, as part of def**ining the scenarios**, the role of non-transport interventions was reviewed.

4.47 The contents of each scenario are summarised in Figure 4.10.

Figure 4.10 – Initial Scenario Testing

Smarter Choices	Public Transport Scenario	Highway Network Improvements Scenario	Travel Demand Management Scenario

• Targeted walking and cycling schemes
• Workplace, residential, school/colleage and personalised travel plans
• Public transport promotion
• Tele-working ('digital connectivity') and teleconferencing
• Internet shopping
• Car clubs and car share schemes
	• Bus showcase corridors with headway improved by 25%-30% and journey times reduced by up to 25%:
	  • A35 Bournemouth to Christchurch.
	  • A35/B3061 Bournemouth to Poole.
	  • A3049 Wallisdown Road/Talbot Avenue/Talbot Road.
	  • A341/A3060 Wimborne Road/Whitelegg Road/Castle Lane
	  • Wimborne Road
	  • B3063 Charminster Road
	  • A348 Ringwood Road
	• Park and Ride Sites: Creekmoor, Mannings Heath, Turbary Park, Merley, Bournemouth Airport, Northbourne, Riverside Avenue
	• Rapid transit based on Dorset Area Rapid Transit from Christchurch to Poole
	• Limited stop express bus services to Bounrmouth and Poole
		• A31 duallingfrom Merley to Ameysford
		• A31 Westbound Widening at Ringwood
		• A31 to Poole link road along A349 Gravel Hill corridor
		• Christchurch bypass/relief road
		• Castle Lane relief road
		• A338 widening
		• A339 to Bournemouth Airport Link road extended to Bear Cross and Mannings Heath
		• A31 (Trickett's Cross) to Bournemouth Airport Link Road
		• A31 to Bear Cross Link Road
		• Wallisdown to Branksome Relief Road
		• West Moors bypass and Three Legged Cross link road
			• Increased parking charges by 50%
			• Introduce congestion charge of 10p per kilometre across the Poole and Bournemouth conurbation within an area south of the River Stour and a western boundary including Corfe Mullen and Creekmoor but not Upton and Hamworthy

Strategic Appraisal of Scenarios

4.48 In parallel with the development and assessment of the long list, the scenarios were assessed using the transport model and the emerging DfT Strategic Appraisal assessment tool. The Strategic Appraisal Tool, released in draft by the DfT on 28th January 2010, had been developed for:

- developing and refining options;
- identifying gaps and aspects of analysis that require further effort; and
- ruling out "non-runners".

4.49 The Strategic Appraisal Tool comprises seven headings:

1. Summary of Option

4.50 The contents of the scenarios as summarised in Figure 4.10.

2. Costs and Likely Value for Money

4.51 These cover:

- capital and revenue costs;
- income generated;
- affordability; and
- likely Value for Money.

4.52 **Capital costs** include all costs involved in preparing and implementing the option. The highway scenario has the highest capital cost (£100m-£250m), followed by the public transport scenario (£50m-£100m), demand management (£10m-£25m), then smarter choices (£5m-£10m). In each case, the costs were an 'order of magnitude' and would be refined as the study progresses.

4.53 **Revenue costs** include all running costs:

- highway – no revenue costs included;
- smarter choices scenario – revenue funding would be required for travel plans;
- public transport scenario – require revenue funding to start up new bus services; and
- demand management scenario – initial revenue funding, but with the road user charge being set at a level such that more revenue is generated than the ongoing operating costs. The scheme would therefore need to be self-financing within a relatively short period.

4.54 The anticipated **Value for Money** is estimated to vary as follows:

- Smarter choices – deliver very high value for money, with the associated cost risk dependent on availability of revenue funding within the local authorities;
- Highway schemes – can achieve high value for money where the road network is congested, but cost risks are high with large environmental impacts associated with many of the highway schemes, posing deliverability risks and mitigation costs;
- Public transport – medium value for money, with many smaller schemes being funded out of LTP allocations and significant funding required for larger schemes. Revenue funding to be required to help start up new services; and
- Demand management – low value for money but could be higher if the scenario included the use of funds to support public transport measures. High cost risk that the revenue forecasts are not realised.

3. Deliverability

4.55 Questions relating to deliverability for each of the scenarios cover:

- implementation timetable from inception to delivery;
- public acceptability; and
- practical feasibility.

Practical Feasibility and Public Acceptability

4.56 All of the scenarios score relatively high for practical feasibility. The key differences are in public acceptability. Demand management is expected to have low acceptability, public transport and smarter choices are medium. Highway measures are scored low-medium due to known opposition to a number of highway schemes.

4.57 Smarter choices (which scored medium for public acceptability) would be more acceptable in conjunction with public transport improvements. Otherwise, there is the risk that people will complain that there are no alternatives available to them. There could be objections from car drivers with WTP (e.g. from restricted parking levels).

Implementation Timescales

4.58 The highway and demand management scenarios have the longest implementation timescales – over ten years. Larger highway schemes would require major scheme funding – and such schemes in the study area are currently not in the DfT's major scheme programme. Some proposals have already existed for a long time and not yet been delivered. Long delivery timescales are assumed for demand management due to potential opposition. The lead time for smarter choices is very short – potentially limited to the time required for mobilisation (e.g. extra staff at the local authority or increased use of consultants).

4. Performance against DfT goals

5. Tackling identified transport challenges

4.59 These two headings are considered together.

4.60 A series of 'Decision Tree' flow charts was used in conjunction with the Strategic Appraisal Tool to generate an assessment against the DfT goals based on a six point scale. An overall assessment of the impact on each goal was made in Table 4.3 based on the assessments for the challenges underlying each DfT goal. Overall assessments against the DfT goals were made against the scale in Table 4.2.

Table 4.2 – Assessments against DfT Goals

Colour	Description
Green	Option is likely to contribute positively towards the goal.
Amber/Green	Option may contribute positively towards the goal.
Amber	Option has an uncertain impact on the goal.
Amber/Red	Option may have a negative impact on the goal.
Red	Option is likely to have a negative impact on the goal.
Blue	Option has no impact on this goal.

4.61 The highway scenario scored well against the economic competitiveness and growth goal; however, it is expected to have negative impacts on the tackle climate change, safety security and health, and quality of life and healthy natural environment goals. Highway schemes alone are

assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car – highway schemes on their own are more likely to encourage further car use.

4.62 The public transport scenario scored highest in terms of performance against the DfT goals, followed by the smarter choices. Whilst the highway scenario scored well against the economic competitiveness and growth goal, it scored poorly against other goals including carbon dioxide emissions and quality of life.

4.63 Smarter choices score green for tackling climate change and green/amber for safety, security and health, with no impact on the other three goals. However, smarter choices alone are unlikely to have a large impact due to the need to provide a viable public transport alternative to supplement the smarter choices measures, and potentially some form of demand management (i.e. carrot and stick) – therefore, the measures scored medium impact.

4.64 Demand management scored highly in terms of tackling climate change, but scored low for equality of opportunity due to its lack of contribution towards social inclusion and its impacts on regeneration. This is due to the lack of a public transport alternative in the current version of this scenario.

Table 4.3 – Strategic Appraisal Results

	Smarter Choices Scenario	Public Transport Scenario	Highway Scenario	Demand Management Scenario
Support economic competitiveness and growth:	**No Impact**	**Amber/Green**	**Amber/Green**	**Amber**
• *Improve connectivity*	*No Impact*	*Green*	*Green*	*Amber/green*
• *Improve reliability*	*No Impact*	*Amber/green*	*Amber/green*	*Green*
• *Wider impacts*	*Green*	*Green*	*Green*	*Red/amber*
• *Delivery of housing*	*Amber*	*Amber/green*	*Amber/green*	*Red*
• *Resilience*	*No Impact*	*Amber*	*Amber/green*	*No Impact*
Tackle climate change:	**Green**	**Green**	**Red**	**Green**
• *Reduce carbon emissions*	*Green*	*Green*	*Red*	*Green*
Better safety, security and health:	**Amber/Green**	**Amber/Green**	**Red/Amber**	**Green/Amber**
• *Air quality*	*Green*	*Green*	*Red/amber*	*Green*
• *Improve health through physical activity*	*Amber/green*	*Amber/green*	*Red*	*Amber/green*
• *Reduce the risk of death or injury*	*Amber/green*	*Green*	*Amber*	*Amber/green*
• *Reduce vulnerability to terrorism*	*No Impact*	*No Impact*	*No Impact*	*No Impact*
• *Reduce crime*	*No Impact*	*Green*	*No Impact*	*No Impact*
Promote equality of opportunity:	**No impact**	**Green**	**No impact**	**Red**
• *Social Inclusion*	*No Impact*	*Green*	*No Impact*	*Red*
• *Regeneration*	*No Impact*	*Green*	*Green*	*Red*
• *Sub-regional imbalance*	*N/A*	*N/A*	*N/A*	*N/A*

	Smarter Choices Scenario	Public Transport Scenario	Highway Scenario	Demand Management Scenario
Improve quality of life and natural environment:	**No impact**	**Amber/Green**	**Red/Amber**	**Amber**
• *Noise*	*Amber/green*	*Amber/green*	*Red/amber*	*Amber/green*
• *Natural Environment, Heritage, Landscape*	*No Impact*	*Amber*	*Red*	*No Impact*
• *Experience of travel*	*No Impact*	*Green*	*Amber/green*	*Amber/green*
• *Urban environment*	*No Impact*	*Amber/green*	*No Impact*	*Amber/green*
• *Accessibility*	*Amber*	*Green*	*Red*	*Red*
Affordability	**Amber**	**Amber/Green**	**Red/Amber**	**Amber**
Implementability	**Green**	**Amber**	**Red/Amber**	**Red**
Scale of Impact (1 = small impact, 5 = significant impact)	**3**	**4**	**1**	**1**

6. Strategic/Network fit and Social Distributional Impacts (SDIs)

Level of Strategic/Network Fit

4.65 The public transport and smarter choices scenarios have the highest strategic fit against the DaSTS goals.

4.66 The highway scenario has a low strategic fit, due to poor performance against all DaSTS goals with the exception of economic competitiveness and growth. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car – highway schemes are more likely to encourage further car use.

4.67 The public transport scenario addresses all of the DaSTS goals, as well as the specific South East Dorset objective of implementability. It is classed as network specific as many of the schemes focus on access within South East Dorset.

4.68 Smarter choices also meet wider central government objectives, for example those relating to health and travel to school – and is therefore defined as 'cross-cutting'.

4.69 Demand management mainly addresses the tackling climate change goal – the scores against other objectives are mixed.

Innovation and Encouraging Better Use

4.70 Smarter choices and demand management measures are classed as innovative and would make better use of the existing network – whereas highway and public transport schemes are well established measures.

Social and Distributional Impacts

4.71 Social and Distributional Impacts (SDIs) refer to the intended and unintended social and distributional impacts of a scheme on individuals, groups and communities. The strategic appraisal tool requires the consideration of whether the proposals will lead to positive or negative impacts on low income and/or vulnerable groups – and whether the impacts can be mitigated through design and/or the incorporation of complementary measures.

4.72 The public transport scenario should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as employment deprivation, by linking deprived areas to employment opportunities, with improved accessibility overall.

4.73 The demand management scenario is expected to have negative impacts on low income and/or vulnerable groups – e.g. for those who cannot afford the charges and/or who do not have a public transport alternative (or cannot afford to use public transport if there is an alternative).

7. Quality of evidence and uncertainties

Quality of Supporting Evidence

4.74 The levels of supporting evidence for each scenario is based on the stage of scheme development, the prior evidence about the transport challenge in question, and how it should be tackled.

4.75 The highest quality of supporting evidence is for highway and public transport schemes where the strategic model can be used to assess impacts. Studies have also been undertaken on some of the proposals in the highway scenario. Demand management can also be assessed using the strategic model, although assumptions made regarding people's response to urban area road user charging schemes are largely untested in the UK outside London.

4.76 However, the quality of evidence for smarter choices depends on the smarter choices intervention being assessed. It is not possible to directly test smarter choices in the strategic model – the impact of smarter choices can be tested via modifications to the trip matrix.

Degree of Consensus over Outcomes

4.77 The question about the consensus over outcomes seeks to probe further into the degree of consultation that has taken place and to establish whether there are any fundamental disagreements about the likely or intended outcomes of the proposed scheme.

4.78 There is consensus about the likely impacts that highway, public transport and demand management schemes can have. Whilst there is also a consensus that smarter choices interventions can work, despite some research there is yet to be agreement on the level of benefits that can be achieved. It is therefore important to review best practice and monitor the experience of demonstration towns.

4.79 There is a majority consensus in the transport planning community about the impacts of highway schemes. It should be noted however, that some members of the public want more highway schemes (e.g. relief roads) to improve traffic conditions.

4.80 There is a consensus about the outcomes that RUC can have, but this should not be inferred as a high level of support.

Flexibility

4.81 Flexibility (ranging from static to dynamic) relates to:

- how easy it would be to scale the proposed option up or down depending on the level of funding available;
- how easy it would be to stop the scheme once it has been put into operation if that became necessary; and
- how easily the scheme could be amended to fit with changing circumstances.

4.82 Highway schemes are the least scaleable type of intervention. It is possible to phase some public transport schemes e.g. by altering the level of segregation. Smarter choices are easily scaleable depending on the level of available funding (e.g. the number of people to be targeted through personalised travel planning). The coverage of demand management can also be varied accordingly.

Table 4.4 – Value for Money, Deliverability, Strategic/Network Fit, Quality of Evidence & Uncertainties

	Smarter Choices Scenario	Public Transport Scenario	Highway Scenario	Demand Management Scenario
Value for Money				
Capital cost	£5m to £10m	£50m to £100m	£100m to £250m	£10m to £25m
Revenue cost (to 2026)	£10m to £25m	£5m to £10m	-	£0 to £5m
Funding source(s)	Revenue funding, DfT grant (e.g. demonstration projects).LTP funding for targeted walking and cycling schemes.	Major scheme funding, LTP allocation. Potential developer funding. Revenue funding for supporting new bus services.	Major scheme funding, LTP allocation, developer funding.	The possibility of future TIF funding has now been withdrawn by DfT. The scheme would therefore need to be self-financing within a relatively short period.
Income generated (to 2026)	None	£0 to £5m	None	£25m to £50m
Overall cost risk (1 = high risk, 5 = low risk)	2. Medium-high risk	3. Medium risk	1. High risk	1. High risk
Affordability (1 = not affordable, 5 = affordable)	3	4	2	5. Affordable
Likely Value for Money (BCR)	Very High (>4)	Medium (1.5-2)	High (2-4)	Low (1-1.5)
Deliverability				
Implementation timetable from inception to delivery	6-12 months	2-5 years	10+ years	10+ years
Public acceptability (1 = low, 5 = high)	3. Medium	3. Medium	2. Low-medium	1. Low
Practical feasibility (1 = low, 5 = high)	5. High	4. Medium-high	4. Medium-high	5. High
Strategic/Network Fit				
Objectives your proposal will achieve	Cross-Cutting	Network-Specific	Network-Specific	Strategic Transport
Is the option innovative and/or encourage better use?	Innovative	Well-established	Well-established	Innovative
Scale of impact (1 = low, 5 = high)	5. High	5. High	1. Low	3
Quality of Evidence & Key Uncertainties/Risks				
What is the quality of the supporting evidence? (1 = low, 5 = high)	3	5. High	5. High	4. Medium-high
Degree of consensus over outcomes? (1= little, 5 = majority) - *evidence rather than support*	2	5. Majority	5. Majority	4
Key Uncertainties/risks (external factors)	Key risk is availability of funding as smarter choices require revenue funding now and into the future - and the councils have competing pressures on the revenue budget.	Opposition to schemes which take out capacity for cars. Environmental risks associated with schemes that are outside the highway boundary.	The key risk is potential opposition to schemes such as the bypasses and known environmental issues, which would pose problems at the planning application stage.	Key risk is deliverability due to potential opposition against the implementation of demand management with no supporting public transport measures.
Flexibility (1 = static, 5 = dynamic)	5. Dynamic	5. Dynamic	2	5. Dynamic

Stage 4 – Strategy Options

Introduction

4.83 Following the initial scenario testing work in Stage 3 and the Stage B consultation, schemes and interventions were then packaged for strategy testing.

4.84 The strategy options have been modelled with increasing levels of investment.

Consultation on Themes

4.85 The consultation on Strategy Options was undertaken during summer 2010 and, as with the earlier consultation, involved meetings with the SAG and WRG and the preparation of a leaflet and questionnaire, which was distributed widely to the general public across the study area. The consultation was closely linked with a parallel exercise for LTP3 and the leaflets were also distributed to members of the Dorset Citizens' Panel and the Poole Opinion Panel.

4.86 The themes were based on the problems and issues established in the first round of consultation, covered a full range of measures and were designed to generate discussion and feedback.

4.87 For the purposes of the public consultation, the initial scenarios were developed into a series of themes, each reflecting a different emphasis on the content of the strategy.

- **Theme A: 'Do Minimum'** – continuing with current policies and the types of transport measure that have been delivered over the last few years.
- **Theme B: Significant public transport improvements and 'greener' choices** – Theme A plus more investment in public transport and measures to promote 'greener' travel choices. This theme is consistent with the current Local Transport Plan vision.
- **Theme C: More ambitious public transport and 'greener' choices, while discouraging car-based commuting** – Themes A and B plus major investment in all public transport modes and measures to promote 'greener' travel choices, with a charge on workplace parking spaces and increased long-stay parking charges to fund the measures.
- **Theme D: Highway and public transport improvements and controls on demand for travel by car** – Themes A and B along with an emphasis on increasing road capacity. Road pricing was included to control traffic levels and to provide additional funding but with a note that it is not currently part of the councils' policy, and was included to ensure that a full range of measures was considered.

4.88 The contents of the themes were presented in two different ways within the consultation leaflet. Firstly, a table summarised the contents of the theme, with an indication of how it would perform against the study objectives. Secondly, a map identified the broad location of measures.

Table 4.5 – Consultation Theme A

THEME A – 'Do Minimum'	
"Continuing with current policies and the type of transport measures that have been delivered over the last few years. This includes delivering measures that are already approved"	
Greener Choices: • Promoting 'greener' travel options in workplaces and schools • Some new cycle lanes and improvements for pedestrians • Expanding / promoting the role of car clubs and cost-effective community travel options • Facilitate more sustainable access to visitor attractions	*Roads:* • Twin Sails Bridge (Poole Harbour) and supporting schemes • No other significant increase in road capacity • Improve traffic signal timings to help traffic flow • Local road safety schemes on routes with highest accident rates

	• Moderate annual increases in parking charges
Public Transport: • Small-scale measures to improve bus reliability, such as new bus lanes / bus gates • Improved bus frequencies to support new development areas and encourage bus usage in those areas from the outset • Continue with community transport schemes and create a Joint Community Transport Service • Better information for passengers	*How well might this theme perform?* Supporting the economy  Reducing carbon emissions  Improving safety, security and health  Helping to achieve a fairer society  Improving everyone's quality of life  How easy would this be to deliver?  How affordable is this theme? 

Table 4.6 – Consultation Theme B

<table>
<tr><th colspan="2">THEME B – Significant public transport improvements and ‘greener’ choices</th></tr>
<tr><td colspan="2">“Everything from Theme A, plus more investment in public transport and measures to promote ‘greener’ travel choices. This theme is consistent with the current Local Transport Plan vision”</td></tr>
<tr><td>Greener Choices:
Developing a more comprehensive walking and cycling network than in Theme A
Better walking and cycling access to rail stations
Personalised travel planning to help individuals travel more sustainably
More active roll-out of car-sharing schemes and car clubs</td><td>Roads:
A31 widening at Ringwood (westbound) and junction improvements at Canford Bottom
Parley Lane / Christchurch Road (B3073) improvements and road widening near the airport
Local junction improvements along the main bus corridors
Create a new joint Traffic Control Centre
Real terms increase in parking charges (with exemptions for low emissions vehicles)
Reduced long stay parking availability in town centres. Some long stay parking would be provided instead by the Park and Ride sites</td></tr>
<tr><td>Public Transport:
Improve bus reliability, reduce journey times and improve bus stops along entire ‘Bus Showcase’ corridors (A35 Poole to Christchurch, Wallisdown Road, Bear Cross to Christchurch, Bear Cross to Poole along Ringwood Road, Charminster Road)
Park and Ride sites at Creekmoor, Mannings Heath and Riverside Avenue (near Bournemouth Hospital with a link to the Bournemouth Spur Road)
Network of faster express bus services, particularly to rural areas
More frequent rail services across the area (between Wareham and Brockenhurst)
Smartcard ticketing for all public transport services (similar to London’s Oyster card)
Create a single Public Transport Authority to serve South East Dorset</td><td>How well might this theme perform?
Supporting the economy ↔
Reducing carbon emissions ↑
Improving safety, security and health ↑
Helping to achieve a fairer society ↑
Improving everyone’s quality of life ↔
How easy would this be to deliver? ↑
How affordable is this theme? ↔</td></tr>
<tr><td colspan="2">Note that this Theme includes <u>everything</u> from Theme A in addition to the above measures.</td></tr>
</table>

Figure 4.11 – Theme B Diagram

Table 4.7 – Consultation Theme C

THEME C – More ambitious public transport and 'greener' choices, while discouraging car-based commuting	
*"**Everything from Themes A and B**, plus major investment in all public transport modes and measures to promote 'greener' travel choices. A charge on workplace parking spaces and increased long-stay parking charges would be needed to fund these measures"*	
Greener Choices: • Large-scale promotion / marketing of greener and healthier travel choices such as walking and cycling • Incentives to encourage 'low carbon travel' • Cycle hire scheme • Encourage / educate on more environmentally friendly driving styles (eco-driving) Infrastructure for alternative fuel vehicles (such as electric car charging points)	*Roads:* • Charges on workplace parking spaces (with exemptions for low emission vehicles) • Further reductions in long term parking availability in town centres • Further increases in parking charges (with exemptions for low emission vehicles) • Controlled parking zones to reduce on-street parking by non-residents
Public Transport: • Dorset Area Rapid Transit System (DARTS) – a light rail service between Wareham and New Milton using the existing rail line and running on-street through Bournemouth. Vehicles would operate at least every 12 minutes • More Park and Ride sites, at Christchurch (rail), New Road Kinson, Holton Heath (rail) and Bournemouth Airport • Improved express bus connections to Bournemouth Airport • Through-trains to Swanage • Increase the proportion of freight carried by rail • Water taxis within Christchurch Harbour and waterborne links between Bournemouth, Poole and the Jurassic Coast	*How well might this theme perform?* Supporting the economy ↑ Reducing carbon emissions ↑ Improving safety, security and health ↑ Helping to achieve a fairer society ↔ Improving everyone's quality of life ↑ How easy would this be to deliver? ↓ How affordable is this theme? ↓
Note that this Theme includes <u>everything</u> from Theme A and Theme B in addition to the above measures.	

Figure 4.12 – Theme C Diagram

Table 4.8 – Consultation Theme D

THEME D – Highway and public transport improvements and controlling demand for travel by car	
*"**Everything from Themes A and B** along with an emphasis on increasing road capacity. Road pricing* would probably be needed to control traffic levels and to provide additional funding" ** the inclusion of road pricing in this consultation Theme in no way reflects any change in the current policies of the Local Authorities. However it is recognised that it needs to be considered in the Transport Study process to ensure the final strategy has considered all options.	
Greener Choices: Measures from Themes A and B	*Roads:* • Measures from Themes A and B
Public Transport: • Turning the A31 into a dual-carriageway between Ameysford and Merley • Major junction improvements at Canford Bottom • New link road between Canford Bottom and Mannings Heath (A31 to Poole) • Relief road for Castle Lane West and improvements from Riverside to Iford • Improvements to the A338 Blackwater Junction near Bournemouth Airport • New East-West road link between Parley and Mannings Heath • Widening the A338 Bournemouth Spur Road between the Blackwater and Cooper Dean junctions • Improvements to St Paul's Roundabout and Cambridge Road junction (Bournemouth), Fountain Roundabout and Stony Lane (Christchurch) • A congestion charge (per km) across the built-up area of Poole, Bournemouth and Christchurch • Charges on workplace parking spaces (with exemptions for low emission vehicles) • Further increases in parking charges (with exemptions for low emission vehicles)	*How well might this theme perform?* Supporting the economy Reducing carbon emissions Improving safety, security and health Helping to achieve a fairer society Improving everyone's quality of life How easy would this be to deliver? How affordable is this theme?
Note that this Theme includes <u>everything</u> from Theme A and Theme B in addition to the above measures.	

Figure 4.13 – Theme D Diagram

4.89 The headline results from the questionnaire are summarised below, including specific quotes made by the general public. Responses from the general public (553), Poole Opinion Panel (672) and the Dorset Citizens' Panel (817) have been combined, totalling 2,042.

Inclusion of different types of measures in the preferred strategy

4.90 Most respondents agreed/strongly agreed with 'public transport – bus' (85%), 'improving existing roads' (76%), 'walking and cycling routes' (75%), and 'initiatives to encourage greener travel' (71%). The least popular types of measure, with the most 'disagree'/'strongly disagree' responses, were 'to reduce private car use' (30%) and 'building new road links' (22%). This is interesting as they are seemingly opposing measures, one restricting use of the private car and the other supporting it.

Importance of public transport measures

4.91 The two public transport measures receiving the highest number of combined 'very important'/'important' ratings from the general public were 'more frequent and reliable buses' (73%) and 'improved passenger information at bus stops' (66%).

4.92 The three Park and Rides measures, serving Poole, Bournemouth, and Christchurch, were amongst the lowest 'very important'/'important' ratings (46%, 43% and 32% respectively). These measures, in addition to 're-opening the Swanage' line and 'DARTS', all received the highest number of combined 'not at all important/not important' ratings (between 22% and 28%). This indicates a relative lack of general public support, although there was a tendency for support to be given to measures that would directly benefit the residents' areas, so that many of the respondents giving the measure a low importance score lived outside the catchment area of the measure and hence would not benefit from it.

4.93 Analysis of general public results showed that 'through-trains to Swanage' received a relative lack of support in Christchurch compared to Poole or Bournemouth. DARTS received the most support in the urban areas of Poole, Bournemouth and Christchurch, rather than the northern suburbs and outlying communities, such as Broadstone, Wimborne and Ferndown.

"Buses are not available for people who start work at 0530."

"Bus services on Sundays and bank holidays should be increased not reduced."

"All stick and no carrot. Public transport must be more attractive before penalising the car."

"Bus services and rail services need to be co-ordinated to form an integrated transport network."

"Get bus services integrated, with common ticketing and better real time and no-real time information and marketing"

"If you constructed a Park and Ride scheme as good as Winchester have then you would stand a chance of reducing congestion."

"Park and Ride is a good way to work with the motorist, not make him feel like a criminal for owning a car."

"Cost of Park and Ride must be less than parking charges in town centres."

Importance of greener/Smarter choices measures

4.94 The greener choices measures which received over 50% combined 'important/ very important' ratings were: 'new walking and cycling links in towns' and 'new walking and cycling links in the countryside' (both 56%). The measure that the general public considered to be less important was the introduction of car clubs and car sharing (30%).

"The roads are congested enough without handing over vast tracts to cyclists and other non paying road users."

"Proper provisions for pedestrians….on all routes."

"Off road cycle routes needed."

"Cycle lanes are a waste of money unless they are done properly. We need Boris style cycle superhighways."

"Agree with new cycle lanes but need to be segregated from main road."

"Cycle lanes are a waste of money. Cyclists should be forced to use them."

Attitudes to road measures

4.95 The measures which achieved a combined 'agree/strongly agree' rating of 50% or greater were 'junction alterations to reduce congestion' (78%), 'road improvements around Bournemouth Airport' (56%), 'widening the A31' (55%), 'new link road between Poole and the A31' (55%), and 'new roads to relieve congestion around Castle Lane and Christchurch' (51%).

4.96 The measures that received the lowest combined 'agree'/'strongly agree' ratings for the question were widening the A338 Bournemouth Spur Road (41%) and New East-West link road between Parley and Mannings Heath (33%).

"Lots of low-cost measures that could be carried out to ease congestion at junctions."

"Road improvements are too costly."

"Better road links would bring more employment to the area."

"A road between the M4 and Poole would be handy."

"Don't need to build new roads."

"A31 is problematic."

Attitudes to measures to reduce private car use

4.97 The two measures that received the highest levels of combined 'agree'/ 'strongly agree' ratings were 'allocate more road space to public transport/cycling/walking' (51%), and 'controlled parking zones to prevent parking by non-residents' (43%).

4.98 The measures which received over 50% combined 'disagree'/ 'strongly disagree' ratings were congestion charging in Bournemouth and Poole (68%) and increased parking charges (perhaps doubled) in town centres (68%), a charge on workplace parking spaces (57%), and 'fewer long-stay parking spaces in town centres' (53%).

"I travel the country a fair bit in my job and have to say that the congestion between Parley and Blackwater is close to being the worst I have experienced anywhere in the country."

".....congestion charging is a ridiculous idea for this area, completely out of proportion with the size of the problem to be solved. I used to live in London and by comparison Poole/ Bournemouth really doesn't have a traffic problem."

"Any road toll would kill the tourist industry stone dead."

"Workplace parking levy ok after public transport improved."

4.99 The WRG and SAG groups considered the contents of the strategy options within the four themes.

Theme A: 'Do Minimum'

WRG

4.100 The WRG agreed that:

- the construction of the Twin Sails Bridge will have a positive impact for the area;

- school travel plays a significant part in creating congestion on the network and measures to encourage less car use should include car sharing, cycle routes, cycle storage, parking restrictions, and information on safe walking routes; and
- public transport information is paramount for encouraging people to use public transport but there must be a reliable service in place.

4.101 The discussion on key cycle and pedestrian improvements was one of the most heated, with very different opinions on the type of cycle and pedestrian improvements that would generate the most benefits. Some felt that cycling is not safe unless it is off-street whereas others argued that cycling is acceptable on the roads as long as the surface is good quality.

SAG

4.102 As the current funding constraints are likely to remain for several years, the SAG agreed that Theme A is likely to be a feasible approach at least in the short term. Beyond the next five years, the strategy should include a more optimistic view of transport investment.

4.103 The SAG agreed that the Twin Sails Bridge is an important scheme which supports local regeneration and will have a large impact on the local economy.

4.104 Many of the attendees agreed that the strategy should be focused on active travel due to the health and environmental benefits but that there also needs to be sufficient public transport for those people who are unable to walk and/or cycle.

4.105 With limited funding, there is a need to look at more cost effective ways of obtaining results and this can be achieved by involving the community in the process. Non-transport interventions may be more appropriate in some cases. Whether solutions are transport or non-transport based, the scheme prioritisation should emphasise value for money.

Theme B: Significant Public Transport and 'Greener Choices'

WRG

4.106 Participants agreed that there is a need for better pedestrian and cycle access to stations at Bournemouth (particularly from the west), Christchurch and Poole.

4.107 Participants were generally supportive of car sharing. It was agreed that having infrastructure in place, such as high occupancy lanes, would be a great benefit.

4.108 Participants stated that public transport investment is needed, particularly for the long term, and whatever investment is available for transport, it should be focused on public transport.

SAG

4.109 The SAG noted that pedestrian and cycling access to rail stations should be improved specifically at Bournemouth station, between Pokesdown and Boscombe and at Hinton Admiral. Routes should also be linked to the Green Infrastructure Corridors (being developed for LTP3 in the South East Dorset area).

4.110 Car clubs and car sharing are rated as important although there are some concerns about personal safety with the latter.

4.111 All public transport measures were considered to be crucial to the long term strategy for the area. The SAG members responded positively to the showcase corridor proposals for Bournemouth and Poole but were concerned that they might be to the detriment of public transport in rural areas. The need for good bus connection between Verwood and Ringwood was identified.

4.112 There were concerns that, if parking is readily available in town centres, Park and Ride will not be successful (regardless of its location).

4.113 The SAG agreed with the rail service frequency proposal between Wareham and Brockenhurst but identified the need for a Park and Ride site at Wareham to make the operation more viable.

Theme C: More Ambitious Public Transport and 'Greener Choices' whilst Discouraging Car-Based Commuting

WRG

4.114 There were very strong views on the role that Dorset Area Rapid Transit System (DARTS) could play in encouraging reduced car use. Participants felt that, if it was economically viable and not subsidised, DARTS would be a very good scheme for the area. However, the majority of participants did not agree that it would be financially viable and that investment would be better suited elsewhere (e.g. on a north-south corridor) using the main road routes and/or low cost alternatives such as guided bus.

4.115 Most respondents were in favour of providing through trains to Swanage but they did not think that the scheme should be highly prioritised because other schemes would be of more benefit for the residents in the study area.

SAG

4.116 The SAG had mixed views on the importance of DARTS ranging from important to neutral. Attendees commented that it would be better to see heavy rail use maximised; it was felt that a scheme similar to DARTS could be delivered using high frequency bus services. An improved bus network would cover more residents and might therefore be a more equitable solution than rail.

4.117 Rail-based Park and Ride was identified as a good idea for both Holton Heath and Christchurch. Hinton Admiral would be a possible location for additional parking given the land requirement for housing nearer to Christchurch town centre.

4.118 Integrating the airport into the local public transport system was felt to be key to encourage modal shift. Express bus services need to link the airport parking areas with major employment locations and town centres.

4.119 Reconnecting the rail line to Swanage would have to be introduced in parallel with other measures which would encourage use of the service. It is likely that users would have to change trains at Wareham, which would be a disincentive. It would be better if the Swanage service continued through to Bournemouth via Poole which would then remove tourist-related traffic from the highway network.

4.120 The SAG noted that, as other funding sources are decreasing, the workplace parking levy should be considered in the long term, especially as a funding source for substantial transport network improvements. If it was to go ahead, there must be a consistent approach, covering the whole area, to avoid businesses relocating from the town centre to the edge of urban areas. A number of attendees were concerned that a workplace parking levy would not raise enough money to invest in public transport measures and offset the 'pain' of an extra charge on employed motorists.

Theme D: More Roads with Some Public Transport Improvements and Controls on the Demand for Travel by Car

WRG

4.121 Participants agreed that road building needs to be limited and that the only potential major road improvements should be along the A31.

4.122 Many attendees commented that building more roads will not solve the problems in the study area. Highway improvements to junctions and at targeted pinch points accompanied by public transport improvements and behavioural change would be better answers.

4.123 Road management would be key to managing congestion in the future. Many participants agreed that the current network needs to be managed more effectively.

4.124 The discussion on congestion charging had wide-ranging opinions. Some felt that charging is the way forward, although it would need to be implemented on a wider scale, at the regional or national level. Some attendees stated that it would only become accepted once it had been implemented but this should not stop authorities from taking forward such schemes.

4.125 Participants were concerned with equity issues and felt that charging may impact more on vulnerable groups. Nearly all participants were against a charge if it did not fund a transport project.

SAG

4.126 There was support for improving the A31, although there were concerns that dualling could be unaffordable. Other favoured schemes included Canford Bottom junction improvements; improved connections to the Port of Poole and to Bournemouth Airport; and structural maintenance of the A338 and A349.

4.127 It was noted that some element of road building in the strategy is necessary to help gain public support but more road construction could simply move traffic problems around the local network and society would become even more car-orientated.

4.128 The SAG commented that congestion charging in the local area will not get public or political support. People would be dubious about how the money is spent and are likely to see it as an added tax. If the charge was ring fenced for spending on public transport schemes, this would be seen as more acceptable. It was felt likely that a congestion charge applied at the national level would achieve more as everyone would then be on an even playing field.

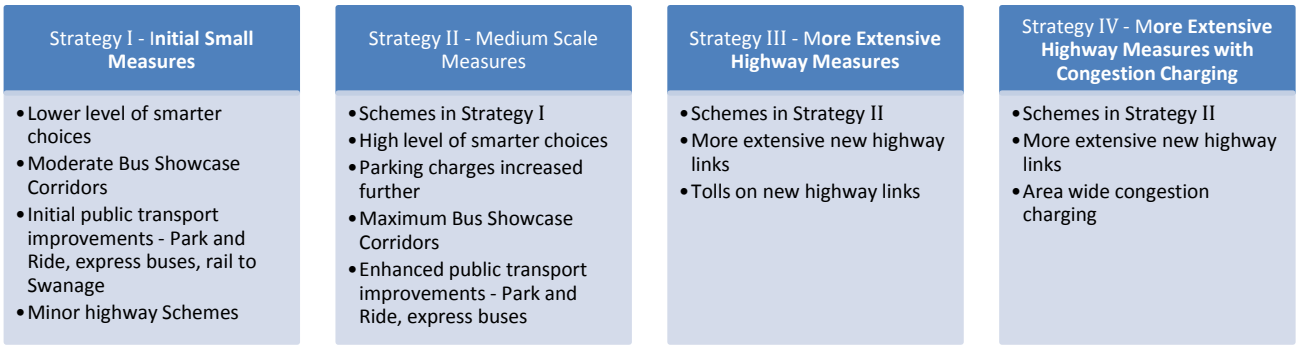
4.129 The issue of tolls on new roads was discussed, with many SAG members preferring the option of tolls on new roads to the congestion charge.

Strategy Options Modelling (Strategies I to IV)

4.130 This section sets out the contents of the initial tests included in the testing of strategies for 2026. This built on the measures tested previously in the strategy scenario development stage (see section on Stage 3). The testing concentrated on the measures that can be readily included in the model, although the full strategies would also include further components which cannot be reflected in the transport model.

4.131 Following consultation and assessment of the themes using the model, four strategies for 2026 (I, II, III and IV) with increasing levels of investment were developed, combining measures across all modes. The main 'headline' contents of strategies are summarised in Figure 4.14.

Figure 4.14 – Outline Contents of the Strategy Options



4.132 The strategies were initially assessed as a whole.

Strategy I

4.133 Strategy I – Initial Small Measures – combines the following components.

Smarter Choices – low level of impact

4.134 The smarter choices measures are considered in detail in Chapter Five and, based on the research reported there, the expected results are:

- AM and PM Peak – 5% reduction in commuter and business trips (4% outside of Bournemouth, Poole and Christchurch), and 3% reduction in other car trips; and
- Inter-peak – 1% reduction in commuter and business trips (across all South East Dorset), and 3% reduction in other car trips.

Park and Ride

4.135 Introduction of Park and Ride at the following locations, with further details in Chapter Six. The headway for bus services to each site was assessed at 20 mins for each service in peak periods, 30 mins in the inter-peak.

- Mannings Heath – with bus services to Poole and Bournemouth;
- Riverside Avenue – with bus services to Bournemouth; and
- New Road (Kinson) – with bus services to Poole and Bournemouth.

Bus Showcase Corridors

4.136 Following the assessment of the Bus Showcase Corridors, the following corridors were identified for the initial programme, with further details in Chapter Six:

- A35 Poole to Christchurch; and
- North Bournemouth – Whitelegg Way, Wimborne Road, Charminster Road, Alma Road.

4.137 There are changes to bus journey times due to improved priorities for buses, but no changes to the existing frequencies. The modelling included signal optimisation at key junctions.

Express Bus Services

4.138 Limited stop express bus services at 30 minute headway introduced to Bournemouth and Poole from the following locations, with further details in Chapter Six. The services would follow the most direct routes, stopping at key locations along the route.

- Wimborne Minster to:
  - Poole via A349, stopping at Merley, Darby Corner (B3074), Fleet's Corner (A35) and Poole,
  - Bournemouth via B3073 and Wimborne Road, stopping at east Wimborne, Parley Cross, Redhill Roundabout (A3060) and Cemetery Junction (B3064).
- Ringwood to:
  - Poole via A31, A348, B3068, stopping at Ferndown (A347), Bear Cross (A341), Wallisdown Road (A3049), and Foxholes (B3061).
- Ferndown to:
  - Poole via A348 and B3068 following Ringwood route;
  - Bournemouth via Wimborne Road, following Wimborne route.
- Verwood to:
  - Poole via B3072 to A348 at Ferndown then following Ferndown route;
  - Bournemouth via B3072 and A347 to Parley Cross then following Wimborne route.
- Wareham to:

- Poole and Bournemouth on single route via A351, A35, A350 to Poole (no stops) and then B3068, B3061, A35 and A338 to Bournemouth stopping at Upper Parkstone (B3068/B3061), Pottery Junction (A3040) and Castle Gates (A35/A338).

- Bournemouth Airport to:
  - Poole via B3073 to A348 (stopping at Parley Cross) then following Ringwood route;
  - Bournemouth via B3073 to A338 and then to Bournemouth Square stopping at Castle Lane East (A3060).

Rail

- Cross-conurbation rail – 4 trains/hour in total between Wareham and Brockenhurst. Currently there are 2 tph between Weymouth and Brockenhurst/London and 1 tph between Poole and Brockenhurst/London. The Poole to Brockenhurst/London was changed in the strategy to run from Wareham to Brockenhurst/London and increased from 1 tph to 2 tph.
- Swanage Rail connected to the mainline – Swanage to Wareham service – 1 train/hour.

Highway Improvements

- Hamburger junction on A31 at Canford Bottom, with further details in Chapter Eight.

Demand Management

- Increase parking charges by 50% in real terms, with further details in Chapter Seven.

Strategy II

4.139 This contained a single test combining Strategy I with all of the following components.

Smarter Choice – high level of impact

4.140 The smarter choices measures are considered in detail in Chapter Five and, based on the research reported there, the expected results are:

- AM and PM Peak – 10% reduction (8% outside Bournemouth, Poole and Christchurch) in commuter and business trips, and 10% reduction (all South East Dorset) in other car trips; and
- Inter-peak – 3% reduction (all of South East Dorset) in commuter and business trips, and 10% reduction (all South East Dorset) in other car trips.

Park and Ride

4.141 Introduce Park and Ride at the following locations, in addition to those in Strategy I:

- Creekmoor – with bus services to Poole;
- Bournemouth Airport – with bus services to Poole and Bournemouth;

4.142 As in Strategy I, the headways would be 20 mins for each service in peak periods, 30 mins in the inter-peak.

Bus Showcase Corridors

4.143 In addition to those in Strategy I, further Bus Showcase Corridors were identified on Castle Lane East/West, Wallisdown Road, Ringwood Road (Poole) and in the longer term serving Bournemouth Airport, Ferndown Business Park and towards Wimborne and Highcliffe.

Express Bus services

4.144 The Express Bus Service proposals for Strategy II are the same as for Strategy I.

Dorset Area Rapid Transit System (DARTS)

4.145 The long term proposals include the introduction of a new rapid transit service centred on Bournemouth in line with the former principles of the DARTS scheme, with the scheme extending from Hamworthy to Christchurch via central Bournemouth. The alignment would have the following sections:

- along the existing rail alignment Hamworthy – Poole – Parkstone – Branksome with speed of 30 mph;
- along new alignment through old rail sidings, and then on the north side of A338 Wessex Way to Queen's Road, Suffolk Road, Avenue Road, The Square, Gervis Place, St Peters Road, Fir Vale Road, Madeira Road, Lansdowne Road, Coach House Place to Bournemouth station, with an average speed of 20 mph and stops at:
  - Westbourne (Prince of Wales Road),
  - Suffolk Road/Queens Road (new stop),
  - Triangle (Suffolk Road/Avenue Road),
  - The Square,
  - Fir Vale Road,
  - Lansdowne Road/Madeira Road (new stop), and
  - Bournemouth station/travel interchange.
- along the existing rail line with stations at Boscombe (new station at Ashley Road) – Pokesdown – Iford (new station at Clingan Road) – Christchurch – Christchurch North (new stop at Hawthorn Road serving a new development) with speed of 30 mph.
- Service to operate on two overlapping sections with following intervals:
  - Hamworthy to Boscombe – 12 minutes (5 vehicles/hour);
  - Branksome to Christchurch – 12 minutes (5 vehicles/hour).
- Fares – as existing bus services.

Rail

4.146 Building on the rail improvements in Strategy I containing the increased frequency for cross-conurbation rail and the reconnection of the Swanage Railway to the mainline but with enhancements to the frequency of Swanage to Wareham rail to 2 trains/hour.

Highway Improvements

4.147 As with Strategy I, construction of a hamburger junction on the A31 at Canford Bottom.

Demand Management

4.148 Increase in parking charges by 100% in real terms.

Strategy III

4.149 There would be a single test combining Strategy II with the following additional components, with the emphasis on improvements/extensions to the highway network.

Highway Improvements

4.150 Major highway schemes have been developed and included in Strategy III:

- Parley Lane (B3073) improvements/widening between Chapel Gate and Blackwater junction;
- improvements to A338/B3073 Blackwater junction;

- A338 widening between Blackwater junction and Cooper Dean roundabout;
- A31 dualling between Ameysford and Merley with grade separation at Canford Bottom junction;
- new link road between Mannings Heath and Canford Bottom; and
- new east – west link road between Mannings Heath and Chapel Gate, Parley.

Demand Management

4.151 Creation a toll scheme so that traffic using the following two highway schemes in Strategy III (which are new rather than improvements to existing alignments) would pay a toll. The toll would only be a paid once, if the traffic uses one or both of the roads.

- link road between Mannings Heath and Canford Bottom; and
- east – west link road between Mannings Heath and Chapel Gate, Parley.

4.152 The size of the toll would be £2 (for all vehicle types and all time periods), with sensitivity tests of £1 and £1.50.

Strategy IV

4.153 Strategy IV is a single test, combining the components of Strategy II with all of the individual highway schemes in Strategy III.

Demand Management

4.154 Creation of an area-wide congestion charge covering an area south of a boundary following the River Stour between Christchurch and Wimborne and then running to the west of the Poole urban area to Poole Harbour. An initial charge of 10 pence/km was modelled (for all vehicle types and all time periods) with sensitivity tests using charges of 20 p/km, 30 p/km, 40 p/km and 50 p/km.

Table 4.9 – Summary of Strategy Components

Mode/|Topic	Strategy I	Strategy II	Strategy III	Strategy IV
Smarter Choices	• Low impact level of Smarter Choices	• High impact level of Smarter Choices	• As Strategy II.	As Strategy II.
Park and Ride	• Mannings Heath – with bus services to Poole and Bournemouth; • Riverside Avenue – with bus services to Bournemouth: • New Road (Kinson) – with bus services to Poole and Bournemouth; Headway – 20 mins for each service in peak periods, 30 mins in the inter-peak.	• Park and Ride sites in Strategy I. • Creekmoor – with bus services to Poole; • Airport – with bus services to Poole and Bournemouth; Headway – 20 mins for each service in peak periods, 30 mins in the inter-peak.	• As Strategy II.	As Strategy II.
Bus Showcase Corridors	• A35 Poole to Christchurch; • North Bournemouth – Whitelegg Way, Wimborne Road, Charminster Road, Alma Road.	• Additional corridors to Strategy I: • Castle Lane East/West, • Wallisdown Road, • Ringwood Road (Poole), • Bournemouth Airport, • Ferndown Business Park, • towards Wimborne and Highcliffe	• As Strategy II.	• As Strategy II.

Mode/|Topic	Strategy I	Strategy II	Strategy III	Strategy IV
Rapid Transit	• N/A	• New rapid transit service centred on with a route from Hamworthy to Christchurch via central Bournemouth. • Service to operate on two overlapping sections with following intervals: • Hamworthy to Boscombe – 12 minutes. • Branksome to Christchurch – 12 minutes.	• As Strategy II.	• As Strategy II.
Express Bus Services – limited stop	• Wimborne Minster to Poole • Wimborne Minster to Bournemouth • Ringwood to Poole • Ferndown to Poole • Ferndown to Bournemouth • Verwood to Poole • Verwood to Bournemouth • Wareham to Poole and Bournemouth • Bournemouth Airport to Poole • Bournemouth Airport to Bournemouth Headway – 30 mins	• As for Strategy I.	• As Strategy II.	• As Strategy II.
Rail	• Cross-conurbation rail – 4 trains/hour between Wareham and Brockenhurst. • Reconnect Swanage Railway to the mainline – Swanage to Wareham service – 1 train/hour.	• Cross-conurbation rail as Strategy I • Swanage to Wareham – 2 trains/hour.	• As Strategy II.	• As Strategy II.

Mode/|Topic	Strategy I	Strategy II	Strategy III	Strategy IV
Highway	• Hamburger junction on the A31 at Canford Bottom.	• Hamburger junction on the A31 at Canford Bottom	• Parley Lane (B3073) Improvements; • Improvements to Blackwater Junction; • A338 widening between Blackwater and Cooper Dean; and • A31 dualling between Ameysford and Merley with grade separation at Canford Bottom junction; • Link Road between Manning Heath and Canford Bottom; and • East – West Link Road between Mannings Heath and Parley.	• As Strategy II.
Demand Management	• Increase parking charges by 50%.	• Increase parking charges by 100%.	Toll highway schemes with charges between £1.00 and £2.00 on new roads: • Link Road between Manning Heath and Canford Bottom; and • East – West Link Road between Mannings Heath and Parley.	• Distance based charge on all roads in conurbation with charges between 10p/km and 50p/km.

Stage 6 – Preferred Strategy

4.155 The preferred strategy was developed from the outcome of the appraisal of the strategies with consultation representing a key additional input into the process.

Draft Strategy Consultation

4.156 The public consultation ran from 6 January to 28 February 2011 and was promoted in the council publications delivered to every household across the study area during January 2011, as well as through online links from each council's website. All those individuals and organisations that had previously expressed an interest in the transport study consultations were contacted together with relevant Local Strategic Partnership (LSP) contacts. Additionally, press releases, the website (www.sedorsetmms.com) and the use of social media (e.g. Facebook) were used to generate public interest as far as possible in the consultation.

4.157 A consultation event with the Wider Reference Group (WRG) was held on the 20 January 2011. The WRG included key stakeholders with a responsibility for, or an interest in, the transport system in the study area – for example, transport operators, emergency services, health organisations, education groups, business/tourism organisations, transport interest groups, sustainability groups and social inclusion forums. The purpose of the session was to provide an update on the study progress and to understand views and opinions on the various measures for the short/medium term (up to 2020) and the long term (beyond 2020) that would form the Recommended Strategy. A series of presentations were given, followed by a question and answer session.

4.158 In addition to the consultation with the Wider Reference Group and the general public, presentations on the strategy were given to members of the local authorities covered by the study, with a general member briefing on 3 March 2011 and a meeting of the Joint Committee for Planning and Transport on 7 March 2011. In each of these meetings, there was a joint presentation with the team preparing LTP3.

Questionnaire Responses

4.159 As with previous consultations during the study, the consultation methodology included a questionnaire available in a newsletter format for the public to complete and return. Similar information with an online questionnaire was also available on the website. Respondents were encouraged to express their level of support for, or opposition to, the short/ medium term and long term strategy, and to identify their three favourite and three least favoured specific schemes and/or policies.

4.160 The response from the general public was 499 completed questionnaires (333 returned paper versions and 166 online). The headline results from the questionnaire are summarised below, concentrating on the views on the overall strategy and attitudes to the individual components.

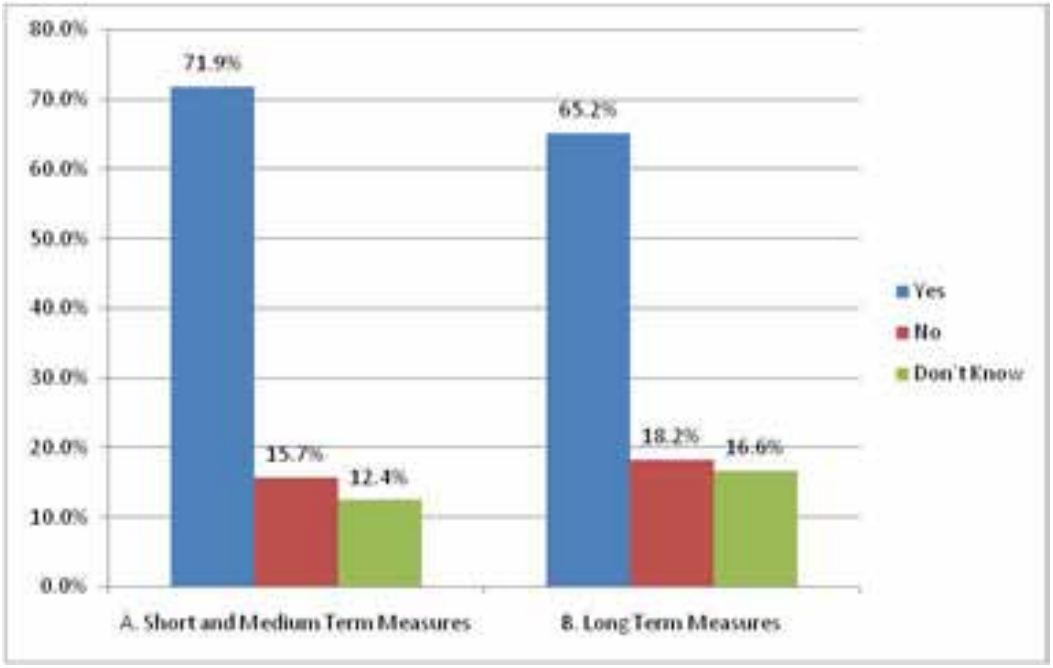
Views on the Draft Preferred Strategy

4.161 The questionnaire contained four questions through which the respondents were asked to give their views on the strategy; these firstly considered the overall strategy before looking at the individual components. In each case, the wording of the question precedes the analysis of the responses.

Do you support the strategies outlined in this leaflet?

4.162 Figure 4.15 shows that the majority of respondents support both the proposed short/medium term (71.9%) and the long term strategies (65.2%). For those who do not support the strategies, there is a fairly even split between the categories of 'no support' and 'don't know'.

Figure 4.15 – Do you support the strategies outlined in the leaflet?



What three proposals do you think are most important in order to improve transport in the study area in the short/medium term?

4.163 Each respondent was asked to identify the three measures that they preferred. The distribution of preferences is shown in Table 4.10. 'Improved walking and cycling' (12.0%) and 'Bus Showcase Corridors' (10.7%) are felt to be the most important. When ranked, the measures that respondents do not consider to be the most important in the short/medium term are 'Better driver information through improved communications and Variable Message Signs' (3.4%) and 'Increased parking charges' (2.1%).

Table 4.10 – What three proposals do you think are most important in the short/medium term?

Measure	Total	%
Improved walking and cycling	173	12.0
Bus Showcase Corridors	154	10.7
Junction improvements	141	9.8
Providing through trains to Swanage	122	8.5
Park and Ride	115	8.0
Widening A31 between Ameysford and Merley	112	7.8
Smartcards ticketing on buses and trains	101	7.0
Improvements to B3073 Chapel Gate, Airport, A338	79	5.5
New highways link west of airport to Ringwood Road and Canford Bottom	78	5.4
Smartcard ticketing on buses and trains	77	5.4
Dorset Area Rapid Transit System (DARTS)	74	5.1
Greener travel options – travel plans, car clubs, car sharing, travel awareness campaigns	71	4.9
Increased rail frequency between Wareham and Brockenhurst	63	4.4

Measure	Total	%
Better driver information through improved communications and Variable Message Signs	49	3.4
Increased parking charges	30	2.1

What three proposals do you think are most important in order to improve transport in the study area in the long term?

4.164 Table 4.11 shows that respondents give the long term measure 'Dorset Area Rapid Transit System (DARTS)' (15.8%) strong support, with 'New highways link west of airport to Ringwood Road and Canford Bottom' (9.3%) and 'Improved walking and cycling' (9.1%) receiving good levels of support. When ranked, the measures that respondents do not consider to be the most important in the long term are 'Increased parking charges' (2.9%) and 'Smartcard ticketing on buses and trains' (3.2%).

Table 4.11 – What three proposals do you think are most important in long term?

Measure	Total	%
Dorset Area Rapid Transit System (DARTS)	200	15.8
New highways link west of airport to Ringwood Road and Canford Bottom	118	9.3
Improved walking and cycling	116	9.1
Bus Showcase Corridors	103	8.1
Widening A31 between Ameysford and Merley	101	8.0
Junction improvements	91	7.2
Improvements to B3073 Chapel Gate, Airport, A338	90	7.1
Park and Ride	75	5.9
Providing through trains to Swanage	72	5.7
Smartcards ticketing on buses and trains	59	4.6
Better driver information through improved communications and Variable Message Signs	59	4.6
Increased rail frequency between Wareham and Brockenhurst	55	4.3
Greener travel options – travel plans, car clubs, car sharing, travel awareness campaigns	52	4.1
Smartcard ticketing on buses and trains	41	3.2
Increased parking charges	37	2.9

What three proposals do you think are the least suitable for the South East Dorset area?

4.165 Table 4.12 shows that the respondents consider the measure 'Increased parking charges' (21.4%) would be the least suitable transport measure for the study area; this is the only demand management measure in the strategy and hence the sole element that might be expected to create a negative response. The next measure gaining least support was 'Greener travel options - travel plans, car clubs, car sharing, travel awareness campaigns' (9.2%) followed by Park and ride. Conversely the measures that respondents do not consider to be the least suitable are 'Smartcard ticketing on buses and trains (2.1%) and 'Junction improvements' (2.2%). There is an interesting polarisation in the views on the scheme for a 'New highways link west of airport to Ringwood Road and Canford Bottom' with it receiving a high score for both the most favoured (9.3%) and least suitable (7.3%) measures.

Table 4.12 – What three proposals do you think are least suitable?

Measure	Total	%
Increased parking charges	255	21.4
Greener travel options - travel plans, car clubs, car sharing, travel awareness campaigns	109	9.2
Park and Ride	102	8.6
New highways link west of airport to Ringwood Road and Canford Bottom	87	7.3
Bus showcase corridors	77	6.5
Improved walking and cycling network	76	6.4
Better driver information through improved communications and Variable Message Signs	76	6.4
Dorset Area Rapid Transit System (DARTS)	71	6.0
Providing through trains to Swanage	67	5.6
Widening A31 between Ameysford and Merley	66	5.6
Improvements to B3073 Chapel Gate - Airport - A338	53	4.5
Smartcards ticketing on buses and trains	50	4.2
Increased rail frequency between Wareham and Brockenhurst	49	4.1
Junction improvements	26	2.2
Smartcard ticketing on buses and trains	25	2.1

4.166 The comments received from the WRG, general public and local authority members contributed to a further review into the contents of the strategy to be recommended by the study, the contents of which are outlined in the following section.

Recommended Strategy

4.167 In addition to consultation, the development of the recommended strategy has also involved:

- analysis of strategy options for the future year 2026 to assess their performance against a range of factors including value for money, carbon consumption and operational feasibility using output from the transport model;
- investigating potential measures and their deliverability, including:
  - consideration of the availability of finance/funding;
  - environmental impact; and
  - engineering feasibility.

Refinement of the Draft Strategy and Implementation Plan

4.168 The refinement of the strategy was based on a balanced consideration of the availability of funding, the consultation findings, and the costs, benefits and deliverability of the major strategy components. Further commentary on the main amendments to the recommended strategy and implementation plan, including those areas highlighted in the consultation, is included below.

Bus-Based Park and Ride

4.169 The concept of providing bus-based Park and Ride sites on the periphery of the conurbation has been the existing policy in the first two Local Transport Plans. Within the study, a number of sites

identified from previous studies were tested using the up-to-date transport model. The concept of Park and Ride and the specific sites were included in the draft strategy for consultation.

4.170 Concerns were raised in the consultation about both the general principle of Park and Ride for South East Dorset and the merit of specific sites, in terms of the operation, funding and local impacts.

4.171 The concept of Park and Ride is to provide a high quality alternative for car drivers who currently drive into the town centres, adding to congestion in peak hours, and who park all day either at their place of work, on street or in public town centre car parks. Park and Ride also offers an opportunity to intercept those residents in the wider, more rural, 'travel to work area' who currently have poor public transport and hence little alternative but to use their car for at least part of their journey to work.

4.172 In transport planning terms, the justification for Park and Ride relies on a number of factors, principally the need to balance overall parking supply against demand, in the town centres and at the peripheral Park and Ride sites combined. Where Park and Ride schemes work well, there is a large demand for parking that is not met in congested city/ town centres. Additional Park and Ride capacity on the periphery can also help enable the release of town centre car parks for redevelopment.

4.173 Park and Ride, if implemented correctly, can be an effective tool to reduce the impacts of car-based commuting into the built up area. Key attributes of a successful Park and Ride scheme are:

- at a location which can intercept car commuters and provide an effective bus service to the town centre(s); and
- introduction in tandem with town centre parking policies with pricing designed to encourage all day commuter parking in the Park and Ride sites on the periphery, thus freeing up short term capacity in the town centres for visitors and shoppers.

4.174 However, the technical analysis in the study indicates that bus-based Park and Ride operated at the potential sites identified on the periphery of the conurbation would not succeed as a stand alone scheme. In the modelled future year scenario, the levels of predicted patronage would not justify the capital investment and anticipated ongoing revenue requirements for the operation of the Park and Ride scheme. However, it is worth noting that the business case for Park and Ride would be stronger in the event of significant additional town centre developments in Bournemouth or Poole that may come forward over the medium/long term.

4.175 In light of the technical analysis, the uncertainty around future town centre developments and feedback from the consultation, the recommendation of the study was that bus-based Park and Ride should be brought forward if and when the conditions would necessitate it. This would be dependent on future parking policy, specifically in relation to the cost and availability of town centre parking, and the success of the other public transport elements of the strategy.

4.176 This recommendation does not apply to rail based Park and Ride. The study has identified increased parking capacity and facilities at smaller rail stations to the east and west of the conurbation, which in tandem with increased local rail frequency, would provide worthwhile benefits, without significant impacts and be more financially viable.

4.177 Bus-based Park and Ride should be retained as an option which the local authorities should consider bringing forward in the long term. It is also recommended that, if Park and Ride is brought forward, then sites to the north, west and east of the conurbation would be considered as a single package to be delivered together within a relatively short period, to ensure that a future Park and Ride scheme can fully serve the polycentric nature of the conurbation. Further work would be required to determine the exact site locations, requirements, costs and impacts as part of a future business case submission for funding.

Demand Management – Parking Policy

4.178 Improvements to public transport, cycling and walking, and the expansion of smarter choices measures are unlikely on their own to achieve the full desired change in the use of more sustainable modes. With the introduction of congestion charging and/or a workplace levy discounted earlier in the SEDMMTS process, the ability to set parking charges to influence driver behaviour and mode choice is the main demand management tool available to the local authorities.

4.179 Currently, town centre parking charges are set to balance parking demand and revenue against the need to retain the vitality of the various town centres and to support the local economies. This includes competing with private sector car parks, free workplace parking and the spread of free on-street all-day parking by commuters in residential areas.

4.180 The recommendation of the SEDMMTS is that **long stay** town centre parking charges for commuters are increased in real terms by 2026. This would encourage commuters who currently drive into town centres in peak periods to consider alternative sustainable modes such as public transport, walking or cycling in which the local authorities would be investing within the LTP3 process. The level of town centre long stay parking charge increases would need to be balanced against future demand, including the consideration of possible additional capacity at Park and Ride sites on the periphery of the conurbation, and the prevailing local economic conditions. Complementary measures should also be implemented in tandem to introduce self-financing resident permit schemes to discourage on-street parking by non residents, with the roll out of travel planning initiatives to counter single occupancy car commuting.

4.181 The intention is that the attractiveness of long-stay all-day parking for commuters would be reduced, thus freeing up short term capacity in the town centres for visitors and shoppers. It would be necessary to implement this recommendation in such a manner as to ensure a positive net impact on parking revenues as well as balancing the wider economic benefits.

East West Road Link

4.182 An indicative alignment for a single carriageway road link from west of the airport (Chapel Gate Roundabout), bypassing Parley and linking with Bearwood and A31 at Canford Bottom has been assessed and was included in the draft strategy for consultation. This would provide a strategic East West link between the A31 and A338 Spur Road and serve the identified areas of future employment at the airport and Ferndown.

4.183 Whilst this road link has merits in relieving predicted congestion across the conurbation, especially along the Castle Lane corridor, the overall cost and likely difficulties in delivering a new road across the flood plain of the River Stour mean that this section of the east west link could not be implemented until after 2026. A future review of the strategy will need to consider if and when this link comes forward in the longer term, which would be dependent upon future circumstances and the success of other elements of the strategy. Significant additional work would be required to determine the preferred alignment for this road and to mitigate against the environmental impacts.

DARTS (Dorset Area Rapid Transit System)

4.184 The concept of a tram-train rapid transit system operating on a combination of the existing heavy rail system and a new on-street running section through Bournemouth town centre was included within the consultation on the draft strategy.

4.185 Initial investigations by study team have established that such a scheme is broadly feasible in engineering terms and analysis from the transport model illustrates that DARTS would attract significant patronage. Evidence from other tram schemes suggests that DARTS would also provide a high profile public transport attraction for the area, and have wider economic benefits. The findings of the UK tram-train trial currently underway in the Rotherham/ Sheffield area will help inform future investigations into the more detailed feasibility and operation of such a scheme.

4.186 Based on the technical analysis and indicative costs, the recommendation of the study is that the DARTS scheme has merit and is worthy of further detailed investigation. However due to the current funding situation, and the situation that the DARTS as a concept is still in its infancy as far as the UK is concerned, it is recognised that this scheme would not be implemented until after 2026.

Conclusions

4.187 The various measures identified above comprise the 'recommended' transport policies and infrastructure priorities up to 2026, and beyond, that will be required to facilitate the projected population growth and economic development in the conurbation, whilst meeting the demands of tackling climate change and maintaining the quality of life of residents.

4.188 From the scale of the measures outlined in the recommended strategy above, it is clear that ongoing investment in staff and scheme development resources will be required by the local authorities and the Highways Agency to progress the measures, if the predicted benefits of the strategy are to be achieved. Initially, this would involve a reallocation of local authority staff resources to progress the smarter choices initiatives in the short to medium term.

4.189 For major schemes, successful bids to the DfT/central government for funding typically involve 10-15% of total project costs being incurred in scheme development and business case appraisal. Further consideration of how the local authorities can best work together to deliver these strategic measures is required. The recommendation of the SEDMMTS is that a joint team should be established to progress strategic projects with the preparation of funding applications in the medium to long term, overseen by an Integrated Transport Authority (or similar joint strategic body with decision making powers).

4.190 The performance of the recommended strategy up to 2026 has been appraised in line with DfT guidance against the existing objectives using current forecasts and the backdrop of transport trends. It may need to be refined if the overarching objectives are revised, or if there is a dramatic change in travel behaviour as result of (say) a significant rise in fuel costs due to 'peak oil'. Also the strategy will need to reflect any changes to the guidance issued by the DfT on the evidence required to support future funding applications. Therefore, it is essential to maintain an up-to-date transport model to help review the strategy regularly throughout the Local Transport Plan period and to support future bids for funding towards the interventions identified.

Appraisal of the Preferred Strategy

4.191 The performance of the recommended strategy up to 2026 has been appraised against the existing objectives using current forecasts and the backdrop of transport trends in line with DfT guidance with details in Chapter Ten.

Stage 7 – Implementation Plan

4.192 An implementation plan was produced identifying funding sources and timescales for the proposed programme, taking into account refinements to the Preferred Strategy as part of Stage 6. This involved prioritisation of the proposed initiatives, according to the funding streams available, with some initiatives being delayed to later in the programme or post 2026. This is covered in more detail in Chapter 11.

4.193 The Implementation Plan is broken down into short, medium, long term up to 2026 and longer term measures beyond 2026.

4.194 The development of the implementation plan was an iterative process, taking into account the costs of the measures (disaggregated between capital and revenue costs); the available funds (from the full range of sources including LTP, DfT funds, major schemes, private developers, etc); any linkages between schemes; and preparation time. In each iteration, the timing of schemes

was adjusted to match the estimated available funds with gradual convergence between the between funds and expenditure.

4.195 From the scale of the measures in the Preferred Strategy, it is clear that significant investment in staff and scheme development resources, including smarter choices, will be required by the local authorities and the Highways Agency in order to progress the measures, if the predicted benefits of the strategy are to be achieved.

4.196 The Preferred Strategy may need to be refined if the overarching objectives are revised, or if there is a dramatic change in travel behaviour as result of, for example, a significant rise in fuel costs due to 'peak oil'. It will therefore be essential to maintain the up-to-date transport model to help review the strategy throughout the LTP3 period and to support future bids for funding towards the interventions identified.

5. Measures to Encourage the Use of Alternative Modes

Introduction

5.1 In the short to medium term, especially in the light of limited funding from central government, the emphasis in the transport strategy should be directed at making best use, or better use, of existing transport resources. As a result, in developing the strategy, particular attention has been paid to measures designed to make better use of existing infrastructure and services.

5.2 The first group of measures within the study's transport strategy is designed to encourage the use of alternative modes or to influence either the need to make a journey or the choice of destination. These are examined under the headings of:

- walking;
- cycling;
- 'smarter choices';
- land use/development factors; and
- non-transport measures, which could have an impact on transport.

5.3 With each of these measures, there is the opportunity of making a significant change in the modes used for journeys, by influencing:

- the need to travel;
- the choice of destination (e.g. to more local facilities);
- the mode used; or
- the frequency of journeys.

5.4 However, there must also be awareness that, for the measures to be fully successful, they need to form part of a package which considers alternatives for the complete journey, for example, providing facilities at both the origin and destination ends of the journey. Furthermore, not all of the travelling public may be able to take advantage of the measures; for example, the disabled, elderly or unfit might be unable to take advantage of improvements to pedestrian and cycling facilities. In addition, there may be further issues, e.g. personal security, which have a significant impact on the take-up and success of initiatives within this heading. Finally, where the measures are successful in achieving a significant change in travel behaviour, thereby reducing the volume of car travel, there is the potential impact of generated or induced traffic which is encouraged by the newly increased availability of spare highway capacity.

5.5 Despite these potential effects, if introduced with care and skill and if sufficient resources are allocated to them, the measures outlined below have the capability of significantly influencing and altering travel behaviour to the extent that they could obviate the need for new infrastructure, particularly improvements to the highway network.

Walking

5.6 There is considerable scope for walking to provide an alternative to the car for short trips and (with high quality connections to, and between, public transport services) it can represent a significant part of longer distance journeys. Walking schemes offer the opportunity to provide better access

5. Measures to Encourage the Use of Alternative Modes

Introduction

5.1 In the short to medium term, especially in the light of limited funding from central government, the emphasis in the transport strategy should be directed at making best use, or better use, of existing transport resources. As a result, in developing the strategy, particular attention has been paid to measures designed to make better use of existing infrastructure and services.

5.2 The first group of measures within the study's transport strategy is designed to encourage the use of alternative modes or to influence either the need to make a journey or the choice of destination. These are examined under the headings of:

- walking;
- cycling;
- 'smarter choices';
- land use/development factors; and
- non-transport measures, which could have an impact on transport.

5.3 With each of these measures, there is the opportunity of making a significant change in the modes used for journeys, by influencing:

- the need to travel;
- the choice of destination (e.g. to more local facilities);
- the mode used; or
- the frequency of journeys.

5.4 However, there must also be awareness that, for the measures to be fully successful, they need to form part of a package which considers alternatives for the complete journey, for example, providing facilities at both the origin and destination ends of the journey. Furthermore, not all of the travelling public may be able to take advantage of the measures; for example, the disabled, elderly or unfit might be unable to take advantage of improvements to pedestrian and cycling facilities. In addition, there may be further issues, e.g. personal security, which have a significant impact on the take-up and success of initiatives within this heading. Finally, where the measures are successful in achieving a significant change in travel behaviour, thereby reducing the volume of car travel, there is the potential impact of generated or induced traffic which is encouraged by the newly increased availability of spare highway capacity.

5.5 Despite these potential effects, if introduced with care and skill and if sufficient resources are allocated to them, the measures outlined below have the capability of significantly influencing and altering travel behaviour to the extent that they could obviate the need for new infrastructure, particularly improvements to the highway network.

Walking

5.6 There is considerable scope for walking to provide an alternative to the car for short trips and (with high quality connections to, and between, public transport services) it can represent a significant part of longer distance journeys. Walking schemes offer the opportunity to provide better access

to local services, and also to enhance health, improve air quality and reduce congestion. Improvements to street environments can create vibrant and prosperous urban areas, and contribute to crime reduction. However, safety concerns were highlighted during the WRG discussion as a deterrent to walking. In Boscombe West and Rossmore/Alderney wards, a lower proportion of residents felt safe outside their homes (77% and 78% respectively) – whereas for a large part of the area over 90% felt safe[4]. Increased walking can help to increase the level of fitness across the resident population. The cost of obesity to the PCT was estimated at £46.4 million in 2007 and this is expected to rise to £57.7 million by 2015.

5.7 Walking is ideally suited to journeys of up to about 2 km, and integration with public transport can make this a wider catchment area, opening up employment and recreational opportunities across all local authority areas. Of journeys less than 2 km, 48% of commuting trips in Bournemouth and 56% of such trips in Poole are made by private car, thus highlighting the potential for increased walking[5]. The use of planning policies and Section 106 agreements can help to achieve both improved pedestrian and cycling facilities and enhanced patterns of development which encourage walking and cycling.

5.8 The pedestrian environment has a direct impact on the ease and attractiveness of walking activities, and infrastructure should be of high quality and accessible to all. Better design and maintenance of public spaces, the removal of obstructive street furniture and the provision of high quality signing and lighting can create public spaces that are conducive to walking. With the likelihood that there will be extensive levels of new development across the study area in the period to 2026, it will be vital that the urban design of these developments should encourage pedestrian activity and aid walking access to the main facilities.

5.9 Improving lighting and the general ambience of footpaths and walkways can make an important contribution to the level of walking, by increasing pedestrian confidence. There is scope to increase the walking network by localised lighting measures. Often the best way of identifying the areas which would benefit most in this way is by consulting the residents of key areas. In its personalised travel planning initiative, Brighton and Hove City Council used the suggestions of local residents to identify walking routes, in some cases informal routes, which would be used more often if better lit, were signed, or benefitted from other improvements. In some cases, these made better use of alleys and back lanes which were opened up for increased pedestrian use. The important aspect to note was that the small-scale improvements were suggested by local residents during the personalised travel planning process.

5.10 The aims of the local authorities' Rights of Way Improvement Plan are to help promote walking throughout the South East Dorset area, providing safe and attractive sustainable transport and recreational opportunities in each local authority area.

5.11 Due to the strategic nature of SEDMMTS, the transport strategy does not contain specific individual measures to promote increased walking, although a number of the strategy components (e.g. 'Smarter Choices' and demand management measures) are likely to encourage more walking. The study would, however, support measures designed to promote a higher proportion of trips being made by pedestrians and, where specific transport measures are proposed (e.g. public transport enhancements, highway schemes), the needs of the pedestrian should be incorporated actively in the design.

Cycling

5.12 There is considerable scope for cycling to provide an alternative to the car for short trips. It is a healthy, emission-free and fairly cheap mode of transport which can provide access to local facilities and services, as well as links to the public transport network, especially rail.

[4] Source: NHT Survey 2009
[5] Source: 2001 Census

Furthermore, making the key destinations accessible to non-motorised modes is vital for creating an inclusive society.

5.13 The number of cycling trips in South East Dorset increased by 87% over the LTP2 period; this exceeds the LTP target which was to increase the number of cycle trips by 10% from an annualised index of 100 (6,500 trips) in 2003/04 to 110 (7,150) in 2010/11. Satisfaction with cycle facilities, based on the 2009 NHT survey, is higher in the Borough of Poole (61.1%) than Bournemouth Borough (52.4%). The Borough of Poole ranked very highly for Overall Satisfaction with Cycle Routes and Facilities (2nd) and Satisfaction with Specific Aspects of Cycle Routes and Facilities (1st)

5.14 With a careful targeting of resources, the South East Dorset area has great potential to achieve considerably higher levels of cycling. The key strengths of the area are the existing infrastructure, the recent successes in increasing cycling, and the relatively high level of satisfaction with cycle routes and facilities. The key challenges will be the need to target new measures in carefully selected areas, to ensure that cycle parking is available at the destination, and to strike the right balance in the use of resources between infrastructure and other 'softer measures'.

Cycle Parking

5.15 Cycle parking is arguably the most important of all cycle facilities. Without adequate, secure cycle parking at both ends of the journey, people are often reluctant to cycle. Cycle parking facilities should be encouraged at all major trip attractors (workplaces, shops, schools/colleges, leisure activities, rail stations, etc). Secure medium and long stay public cycle parking in town centres is particularly important (but often overlooked), see Figure 5.1.

Figure 5.1 – Cycle Parking in Gervis Place, Bournemouth

5.16 All new high density residential developments should include resident (and, where possible, visitor) cycle parking facilities. Appropriate cycle parking standards (specifying quantity and quality) should be incorporated into Local Development Frameworks and development control policies. Main urban centres should be audited to assess the need for improved or additional cycle parking/lockers.

Strategic Cycle Network

5.17 Whilst the strategic nature of SEDMMTS means that specific small-scale cycling measures are not included in the strategy, the study does support the network of strategic cycle links shown in Figure 5.3. Attention should therefore be directed at filling gaps in the network, improving permeability, and removing severance. This will encourage people to make short, everyday journeys on foot and by cycle.

Figure 5.2 – Cycle Restrictions on the Promenade

5.18 A set of continuous, convenient, and safe cycle routes should be developed and promoted linking significant trip generators and key destinations such as transport hubs, employment and residential areas, retail, education and leisure centres. Priorities should include developing and expanding the strategic cycle routes defined in Figure 5.3, overcoming physical barriers such as rivers and junctions on key routes, for example Tuckton Bridge and Pigshoot Bridge.

5.19 The potential strategic network contains a number of key hubs, including:

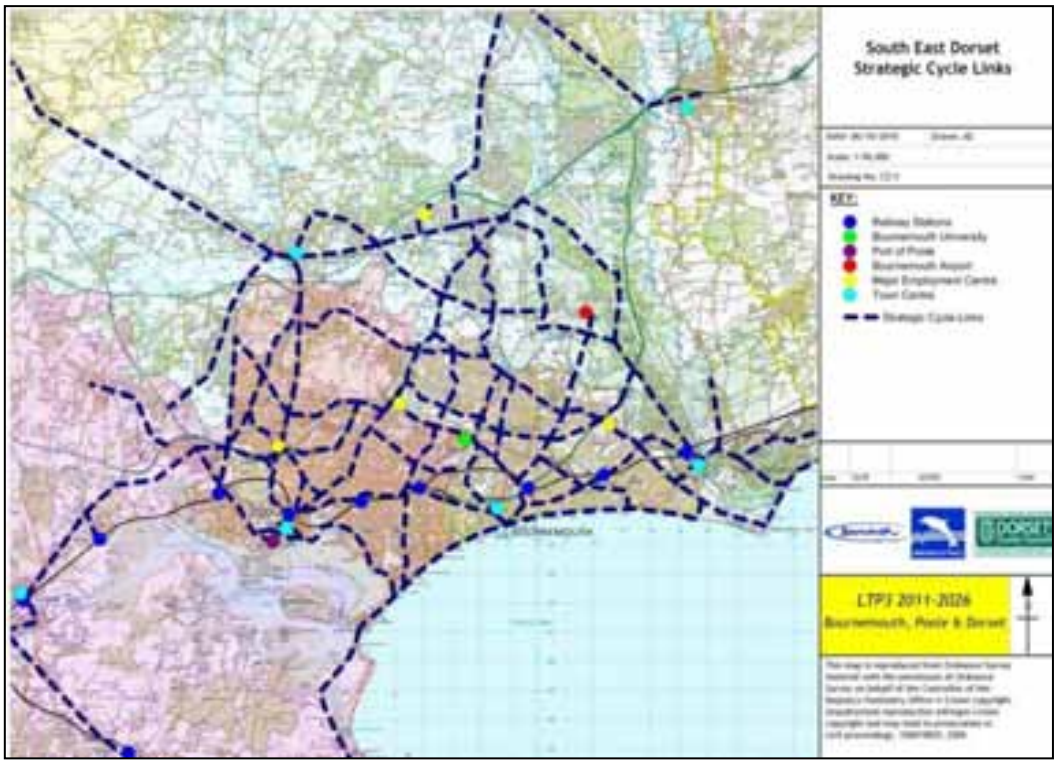
- railway stations;
- Bournemouth University;
- Port of Poole;
- Bournemouth Airport;
- major employment centres; and
- town centres.

5.20 The councils should:

- determine feasibility and estimated cost of necessary improvements for each route to create a final prioritised list of cycle routes – develop priority groups of routes for phased introduction;
- audit existing signage and update signing and branding of key strategic cycle routes; and
- implement schemes from the prioritised cycle scheme ranking lists.

5.21 The land required for the potential cycle routes in Figure 5.3 should be safeguarded from future development, at least until the routes are finalised.

Figure 5.3 – South East Dorset Strategic Cycle Network Proposal



5.22 The Strategic Cycle Network would form part of the Healthy Sustainable Travel Network linking the main commuting destinations within Poole, Bournemouth, Christchurch, Wimborne, Bournemouth Airport and Ferndown.

5.23 As part of the Green Infrastructure Strategy, cycling permeability of highways, parks and green spaces would be improved. In the longer term, links should be improved between the strategic cycle routes and the recreational routes, including links to green spaces and corridors, as part of the Green Infrastructure Strategy.

5.24 The design of cycle facilities should be based on the latest and most appropriate technical advice such as cycle-friendly infrastructure, local transport notes, traffic advisory leaflets, and the Cycling England Cycle Design Checklist. It should also reflect the hierarchy of measures as described in recently published guidance with reductions in the traffic volumes and speed coming before the re-allocation of road space and the introduction of dedicated cycle facilities. Cycle audits should be carried out for all significant transport and development infrastructure proposals. Stakeholders should be involved at an early stage in the development of new cycle schemes. The councils should continue to work with cycling forums and liaison groups as a mechanism to receive feedback and suggestions. Creation of an overarching South East Dorset conurbation Cycle Forum would allow strategic cycling issues to be considered. Where appropriate, junction

improvements may include cycle priority phases at traffic signals, if it is justified by the volume of cyclists.

Figure 5.4 – Lansdowne Road Cycle Lane

5.25 In the design of new housing and employment developments, it will be important to integrate cycle facilities within the urban environment, with cycle paths incorporated within other transport infrastructure, and linked to the strategic cycle network. It will be vital that cycle measures are included from the outset and due allowance is made in the design so that the cycle measures are fully integrated and not treated as an afterthought.

Integration with Public Transport

5.26 When cycling is combined with public transport for longer trips, journey times can compete with those achieved by car. Traditionally, heavy rail is the mode which best complements cycling. Catchment areas for cycle trips around train stations are likely to be in the order of 3 kms to 5 kms and attention should therefore be directed to developing cycle routes within this radius of principal stations. The facilities should include designated routes from significant developments and local centres with facilities where they cross major roads and at key junctions, together with sufficient signposting to highlight the available routes.

5.27 Heavy rail in the study area offers good opportunities for both cycle parking (at stations) and cycle facilities on trains (although current provision varies considerably between train operators). Bus travel does not offer the same opportunities as rail for integration with cycling. However, cycle parking should be provided at bus stations, especially if served by longer distance or limited stop bus or coach services.

5.28 Cycle links to, and facilities provided at, rail and bus stations, and where appropriate, bus stops in local centres, should be improved including provision of secure cycle parking and storage. There is a need for the local authorities to encourage train, bus and ferry operators to permit cycles to be carried on services and that appropriate facilities are provided. Where capacity on rail and bus

services to carry conventional bikes is constrained, the authorities should look to raise awareness of the potential benefits from the use of folding bikes to achieve seamless integration.

Smarter Choices and Cycling

5.29 The effectiveness and value for money of 'soft' measures has only been realised in recent years. Examples of such measures include improving the quality and information/maps on cycling (which have been shown to be effective in increasing the number of cycle trips), personalised travel planning techniques (outlined later) and cycle training. Local authorities should maintain, and make widely available, up to date cycling maps showing cycle routes, cycle parking, cycle hire, cycle repair, cycle shops and key destinations. Joining the national Cycle Journey Planner at www.transportdirect.info would assist people to plan journeys by bicycle in South East Dorset. This should include information about taking bikes on trains.

5.30 Cycling should be promoted as part of a wider branded marketing strategy for smarter choices and active travel, and as part of Personalised Travel Planning (PTP). It should be integrated into publicity/marketing strategies for wider policy areas such as health, education and leisure.

Cycle Training

5.31 A programme of targeted cycle education and training to groups of cyclists based on age and ability, including lapsed or returning cyclists, would help encourage people into cycling. This could build on existing practical training courses for adults who are starting or returning to use cycles. Guided cycle rides would help familiarise people with local cycle routes.

Cycle Hire

5.32 The local authorities could consider the implementation of Cycle Hire Schemes in the main urban centres, transport interchanges and tourist areas, where appropriate and cost effective, and explore the feasibility of establishing cycle hire / folding bike hire schemes at rail stations. The authorities could encourage and facilitate the creation of locally run hire schemes.

Cycle Repair, e.g. Dr Bike

5.33 'Dr Bike' sessions are used by a variety of organisations and employers to promote regular cycling. The 'Doctors' check any bike brought to them, undertake minor repairs and give advice on more major work that may need to be done and on general maintenance. This service could be subsidised (at least initially) by local authorities, and employers could be encouraged to provide it as part of their WTP. Where a bike cannot be repaired at the Dr Bike session, advice is given about where it can be fixed. 'Dr. Bike' sessions can be held in public places (e.g. town centres and rail stations), schools and workplaces.

5.34 The study also supports the introduction by the local authorities of the range of potential measures outlined above, particularly those also designed to encourage greater use of public transport (e.g. cycling to rail stations). At the same time, all new transport infrastructure should be designed to facilitate and stimulate increased cycling.

'Smarter Choices'

5.35 'Smarter Choices' (also known as 'soft measures' or 'greener choices') are initiatives that seek to provide better information and opportunities to help people reduce their car use while improving the alternatives provided. Taken together, the various measures, if introduced effectively and comprehensively, have the opportunity of making a significant impact on the mode split of travel in the SEDMMTS area. Overall, a unified Smarter Travel Branded Package should be adopted, including comprehensive marketing and promotional strategy for low carbon, sustainable transport.

5.36 A common feature of the smarter choices packages developed by local authorities across the UK is that they do not involve significant levels of new infrastructure; instead they concentrate on the

dissemination of information on alternative options for a journey, primarily linked to existing transport services. However, while this is generally the case, there is also merit in linking smarter choices initiatives with other transport improvements (e.g. the introduction of bus priority measures which improve the speed or reliability of services) in order to highlight to the public that there may have been changes to the transport supply since they last sampled it.

5.37 Similarly, where the transport improvements are concentrated on a specific area or along an individual corridor, then the smarter choices activity should be increased in the same area in order to reinforce the impact.

5.38 Particularly at a time when funding is scarce, and is likely to remain so for a number of years, it is vital that measures should be designed and implemented to make better use of existing resources, for example by providing residents with better information about what bus and rail services are available, or encouraging the use of more sustainable modes. As a result, starting in the short term but extending forward into the future, the promotion of smarter choices through a range of initiatives, identified below, represents a key component of the SEDMMTS transport strategy.

5.39 However, while the level of new infrastructure required to implement smarter choices may be limited, the initiative is not without its costs, although these may be in the form of staff resources provided by the local authorities in the promotion of the different measures. Nevertheless, with cutbacks in local authority staffing levels, such resources may not be readily available at the moment and hence the authorities will need to make a conscious positive effort to increase the attention paid to smarter choices. The likely additional resources needed to give a sufficient degree of impetus to smarter choices and to achieve the benefits that would result are highlighted under each measure. Furthermore, if the benefits are to be achieved it will be vital that action is undertaken immediately, so that changes in travel behaviour are gained as soon as possible.

5.40 Central Government has conducted a programme of research designed to establish the current position with UK experience in the implementation and operation of the ‘Smarter Choices’ measures. We have reviewed the research to highlight the potential impacts for the study area of the individual measures in terms of the level of trip-making and the changes to mode choice, together with the likely costs of implementing the measures. The most effective measures are included in the transport strategy and are described in turn below. However, there are two further general aspects that need to be taken into account when assessing the overall effects on travel behaviour if the measures were to be implemented:

- the distinction between short term and long term effects of the measures on travel behaviour; and
- whether the benefits of changes in travel behaviour, in terms of reduced private car use, created by the measures would be eroded by induced traffic which takes up some of the newly released capacity.

5.41 In some cases, the local authorities within the South East Dorset area have already been pursuing some of the ‘Smarter Choices’ policies. Where this is the case, account has been made of the traffic reductions that potentially have already occurred, and the appraisal results reflect the additional benefit that could be accrued over and above that already achieved. Correspondingly, the costs of pursuing the ‘Smarter Choices’ policies are additional to any expenditure that is already taking place.

5.42 Smarter choices measures include:

- Personalised Travel Planning;
- Origin based travel plans and measures:
  - Residential Travel Plans;

- Car Clubs;
- Car Sharing.

- Destination based travel plans and measures:
  - Workplace Travel Plans (including employer led car share schemes);
  - Teleworking and teleconferencing (as part of Workplace Travel Plans);
  - School Travel Plans;
  - Leisure Travel Plans; and
  - Rail Station Travel Plans (as part of a journey).
- Information and Marketing:
  - Public transport information and marketing; and
  - Travel awareness campaigns (including promoting car sharing and home shopping).

Types of Travel Plan and Measures

5.43 Key differences between the origin-based residential travel plans and destination travel plans (e.g. workplace travel plans) are that:

- the pattern of journeys originating from home is varied, with residents having multiple destinations and different needs and travel choices over time – this is a crucial difference compared with destination-based plans which normally only deal with a single journey purpose (e.g. access to work or school); and
- for origin-based residential travel plans, there is often no single organisation to provide continuity and a common point of interest for residents and so the local authority may need to provide organisation and advice.

Personalised Travel Plans

5.44 Personal Travel Planning (PTP) is a well established method that encourages people to make more sustainable travel choices for a wide range of journeys; successful examples include projects in Brighton & Hove, Sutton, Worcester, and Darlington. The greatest success is likely to be delivered where PTPs are based in an area of discrete, self-contained communities with appropriate local facilities, good community networks and locally recognised problems of traffic congestion. PTP has not been undertaken in South East Dorset to date.

5.45 The tools and techniques differ from project to project, but typically include:

- one-to-one conversations, either at the doorstep or by telephone, between individuals and trained field officers to encourage and motivate a change in behaviour;
- the provision of information on how to travel sustainably (e.g. maps or guides);
- the offer of gifts and incentives to encourage the use of sustainable modes (e.g. free bus tickets/passes (for a limited period), vouchers for cycle shops, water bottles, pedometers); and
- application in a number of locations/contexts, for example schools, workplaces and residential communities.

5.46 The study strongly recommends that personalised travel planning should be implemented in South East Dorset as it is seen to be an effective smarter choice measure, with the following benefits:

- 'Making Personal Travel Planning Work' (2007)[6] showed that PTP can reduce car driver trips by 11% (amongst the targeted population), and similar results have been shown in the Demonstration Town (STDT) projects for Worcester and Darlington;
- it helps to overcome the habitual use of the car, enabling more journeys to be made on foot, bike, bus, train or in shared cars;
- PTP encourages individuals and businesses to consider the travel implications when they make key decisions such as moving house, starting a new job, deciding on a school or where to locate their business;
- it discourages unnecessary travel, through the provision of local or site-specific information;
- it produces a reduction in car trips - according to Brighton & Hove City Council, PTP has reduced the number of car trips by half a million per year[7]; and
- it adds value to the roll out of improved bus services (e.g. BSC) across the targeted areas, raising awareness and making a contribution to increased patronage.

5.47 It is beneficial to roll out PTP as part of a wider package of smarter choices and improvements to sustainable travel, and it is recommended that PTP is implemented alongside the BSCs. Smarter Travel Sutton was a PTP project, with a budget of £5 million (covering both PTP and some infrastructure improvements, especially for cycling and walking). All 79,500 households in the borough were invited to participate in an interview with a trained travel adviser. In addition to PTP, the STS programme included:

- STP and WTP;
- advertising, marketing, and promotion;
- car clubs;
- car sharing scheme; and
- cycle parking facilities.

5.48 As a result of this comprehensive package approach in Sutton, the mode share of trip stages by car (as driver or passenger) declined from 58% to 52% between 2005/06 and 2009. The increase in cycling in Sutton exceeded the rise in cycling recorded across the six Cycling Demonstration Towns over a five-year period[8], and there was a growth of more than 16% in bus patronage.

5.49 The following should be considered when developing a PTP programme for South East Dorset:

- Delivered PTP under a unified Smarter Travel branding, and link into the wider smarter choices programme (e.g. participating in national travel awareness campaign days) ;
- Decide the approach to delivering PTP: for example, Brighton and Hove City Council is responsible for the management of its PTP programme but has worked with Cycling England and a consultant partner on planning the work, as well as on staff recruitment. In Worcester and Darlington, the local councils work closely with their consultancy partners to deliver the PTP component of larger-scale sustainable transport projects;
- Define the scope of the PTP project – larger PTP projects are more cost effective. If limited funding is available, then areas should be targetted which have the greatest potential for modal shift to low carbon transport (e.g. along the BSC). A smaller pilot project could be undertaken initially;

[6] http://www.dft.gov.uk/pgr/sustainable/travelplans/ptp/practictionersguide.pdf
[7] http://www.dft.gov.uk/pgr/sustainable/travelplans/ptp/practictionersguide.pdf
[8] Analysis and synthesis of evidence on the effects of investment in six Cycling Demonstration Towns, November 2009.

- Identify the target population, e.g. through socio-economic analysis. The target area should ideally have good levels of accessibility (by all sustainable transport modes). Consider how to maximise the participation of 'hard to reach' groups;
- Partner with other organisations, e.g. the NHS/PCT, bus and rail operators, who could help run some of the PTP campaigns. Local cycle shops could assist by providing information and incentives for participants – e.g. Brighton and Hove City Council held a meeting with 17 local cycle shops to discuss partnership and any discounts that the traders could offer, and eventually struck a deal with one trader for a 20% discount;
- Involve local stakeholders (e.g. residents groups, cycling groups) – representatives from these groups could help champion the project;
- Develop a funding plan, including e.g. developer contributions, funds from the Local Sustainable Transport Fund. In Brighton, decriminalised parking revenue has contributed to the PTP programme budget;
- Create linkages with the wider smarter choices programme, e.g. actively promote the baseline (before) monitoring results in the media and use the interim survey results as a source of positive news stories;
- Provide gifts and incentives as an integral part of the PTP process, especially if they are appropriate to the local area. Smarter Choices Sutton offers mode related incentives to accompany the information received, e.g. a pre-loaded Oyster card with £5 of credit for households interested in making more use of public transport, or pedometers for households who wish to walk for more journeys;
- Choose appropriate materials – undertake an information audit to ascertain what literature, materials, maps, etc will need to be created afresh. Updating project materials can be one of the most time consuming aspects of any PTP project. 'Market test' materials through focus groups with local stakeholders and the general public;
- Develop a contact strategy to decide how the target group will be contacted (e.g. by post, telephone, door-to-door or a combination); and
- Produce an evaluation strategy, to enable the impact of PTP to be monitored and help to inform further phases of PTP.

5.50 The following costs assume that over a 15 year period, an attempt is made to contact all South East Dorset residents (aged over 16 years) and that, of this, 69% were successfully contacted, and 45% receive promotional materials (Table 5.1). This reflects the contact rates presented from the STDT results for Darlington (in Worcester 41% were successfully contacted and 22% received materials). Larger PTP projects are generally more cost effective.

5.51 The costs are based on using contractors to deliver the programme, although if the local authorities employed temporary staff the cost could be reduced (but the local authority staff costs would need to increase to cover staff management).

Table 5.1 – PTP Cost Assumptions

Element	Assumption	Total 15 Year Cost
Contractor costs	• £14 per head for those contacted but not given materials. • £21 per head if given materials (i.e. £7 extra).	£8.978m
Materials and related costs	• £2 per head for those contacted but not given materials. • £3 per head if given materials (i.e. £1 extra).	
Monitoring costs[9]	• £5 per head for those contacted but not given materials. • £8 per head if given materials (i.e. £3 extra).	
Local authority staff costs[10]	• 1 FTE to oversee the project (£41,250 per year)	

Origin Travel Plans and Measures

5.52 In addition to personalised travel planning, origin travel plans and measures relate to journeys originating at home, and include residential travel plans, personalised travel planning, car clubs and car sharing. There can be a significant overlap between the different elements of origin travel plans and measures, since residential travel plans may include other measures such as personalised travel planning and car clubs.

Residential Travel Plans

5.53 A residential travel plan is a package of measures designed to reduce the number and length of car trips generated by a residential development, while also supporting more sustainable forms of travel and reducing the overall need to travel. They are more likely to be secured as part of the planning process, rather than voluntary schemes, as there is a need for a main point of contact, e.g. the developer of the housing scheme.

5.54 Residential travel plans promote more sustainable travel, particularly for larger, new residential developments. While the residential travel plans could assist in achieving some of the benefits identified later in this chapter under the 'Land Use' heading, they have so far concentrated on new developments (e.g. Poole Quarter). In the future, there might be the potential to extend the measures retrospectively to existing developments. However, the introduction is likely to be limited to sizeable developments.

5.55 Three residential travel plans have been secured in Poole. For example, for the Poole Quarter development, which has over 500 residential units, the travel plan includes the following measures:

- appointment of an organisation to act as Travel Plan Coordinator;
- 5 year subsidy by the developer for an improved bus service to the development site;
- travel Information packs distributed to residents;
- car club provision;

[9] Note this is based on the STDT project and could be significantly reduced.
[10] Based on the approach used by 'full time person-months' and taking rounded averages for staff costs of £23,000 in 2004/05, rising by annual increments to £26,000 in 2008/09. This has been inflated to 2010/11, and then multiplied by 1.5 to take into account employer National Insurance, pension contributions and other overheads (accommodation, IT etc).

- subsidised travel plan "taster" offer – a flexible voucher scheme for residents providing discounted public transport, cycle purchase, free 1 year membership of a car club;
- annual surveys of household travel behaviour; and
- vehicle trip counters installed – vehicle trip targets set and payments to be made towards initiatives to reduce vehicle trips if trip rates exceed the set level.

5.56 As part of the transport strategy, the local authorities should set a requirement for active residential travel plans to be implemented for all significant development, particularly those which have been identified in Chapter 3.

5.57 It is assumed that costs (to the local authorities) associated with liaison and negotiation with the developer would be similar to costs associated with a WTP, considered below. A key issue with Residential Travel Plans is securing sufficient longer term resource to manage its ongoing implementation. There needs to be effective monitoring/enforcement of residential travel plans secured through the planning process to ensure that the benefits are realised.

Car Clubs

5.58 The key benefit of car clubs is access to a car in the neighbourhood without ownership. Providing "pay as you go" motoring by the hour, car clubs have been shown to reduce car use, since members give up their second car, defer buying a new car or give up owning one altogether. Typically, car club members pay an annual membership fee to an operator which provides and maintains a range of vehicles in their neighbourhood. Members then pay by the hour and mile to use a vehicle. The combined costs of membership and use are intended to be cheaper than personal car ownership for residents who do not make a high mileage. Car clubs can also encourage the adoption of relatively diverse personal transport strategies. With larger schemes, in which cars are distributed throughout the neighbourhood, there is the convenience of hiring a vehicle close to home, rather than through a standard car hire firm which may be located some distance away in the centre of town.

5.59 Poole has a car club at the Poole Quarter, a centrally located residential development to the east of Poole town centre, consisting of 512 homes, including flats, houses and sheltered housing. The development has been a catalyst for the delivery of the Central Poole Regeneration Strategy. Construction began in Autumn 2004 with first occupation in Summer 2005[11]. The car club currently has eight members (the development has 512 homes).

5.60 The local authorities should promote and encourage further implementation of car clubs. DCC has suggested that the potential for car clubs in South East Dorset is large, given the following factors which tend to support successful car clubs:

- good public transport, which provides an alternative for those reducing from one car to none since the car club system is not designed for regular commuting;
- high population density, with a large number of people living near car club sites;
- parking pressures in town centres; and
- the prevalence of relatively high car ownership with the potential for residents to reduce the number of cars owned from 3 to 2 cars, or from 2 to 1 car.

5.61 The membership of car clubs should not be restricted to South East Dorset residents; if temporary membership was extended to tourists visiting the area, there would be the scope to encourage more sustainable tourism in the area. Visitors would therefore be encouraged to travel to the area by rail or coach, use public transport for many of the local journeys but access the car club

[11] Source: Making residential travel plans work: guidelines for new development http://www.dft.gov.uk/pgr/sustainable/travelplans/rpt/makingresidentialtravelplans5775?page=27

facilities for longer journeys in the area, or to those destinations which cannot easily be reached by public transport.

Table 5.2 – Car Club Cost Assumptions

Element	Assumption	Total 15 Year Cost
Revenue cost per resident	• 10 Car Club Cars and administration (start-up grant of £5,000 per car)	£0.381m
Staff costs[12]	• Staffing (0.5 FTE)	

Destination Travel Plans and Measures

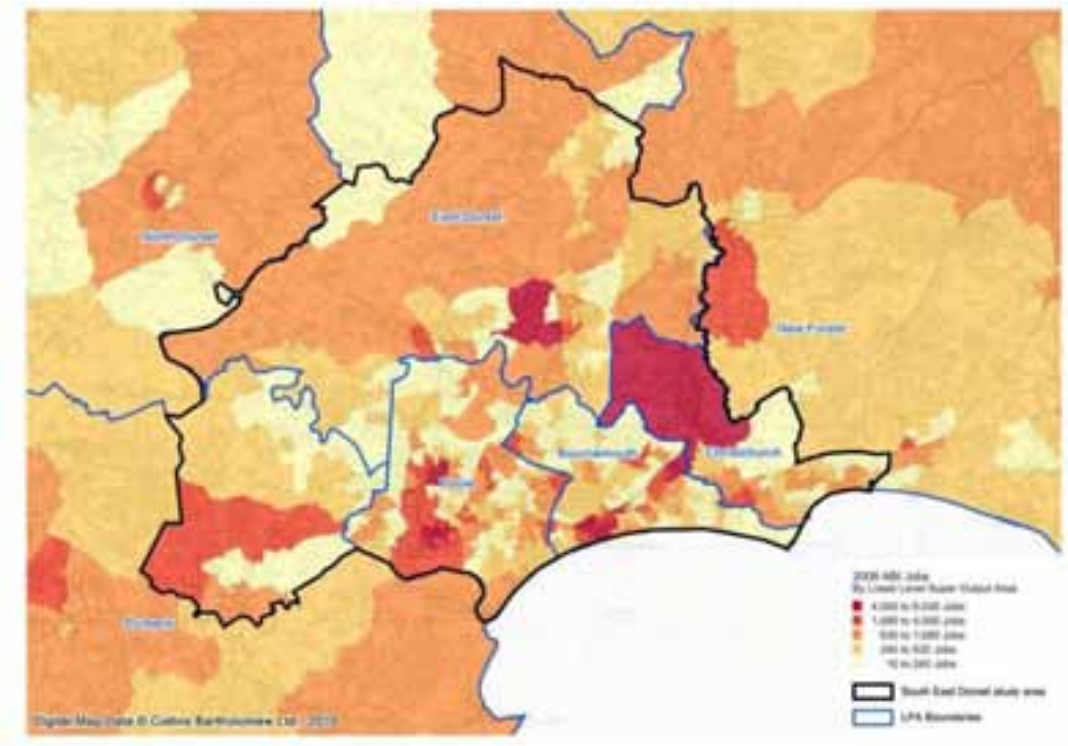
Workplace Travel Plans

5.62 Workplace travel plans (WTPs) are packages of measures put in place by an employer to encourage more sustainable travel, particularly less single-occupancy car use, amongst its employees. Usually WTPs aim primarily at addressing the commuting habits of employees, although many also incorporate measures targeted at travel during the course of work, including business travel and deliveries, and also travel by patients, students, shoppers, tourists, or other visitors to the employer's site. Local authorities are often involved in both developing a travel plan for their own employees and also encouraging other employers to develop their site-specific travel plans.

5.63 There are approximately 450,000 residents (source: 2001 census) and 202,000 jobs (source: ABI 2008) in South East Dorset. Bournemouth, with 76,000 employees, closely followed by Poole with 72,000, account for the vast majority of workplaces in the study area. As clearly shown in Figure 5.5, Christchurch also has a significant concentration of employment around the airport.

[12] The local authority staffing cost for car clubs is based on the STDT cost for travel awareness work. The STDT study took rounded averages of staff costs for the relevant officers in the three towns, of £25,000 in 2004/05, rising by annual increments to £28,000 in 2008/09. For media work, a similar approach was used, but with rounded averages starting at £26,500 in 2004/05 and rising to £30,000 in 2008/09. This has been inflated to 2010/11, and then multiplied by 1.5 to take into account employer National Insurance, pension contributions and other overheads (accommodation, IT etc).

Figure 5.5 – Map of Employee Numbers at Neighbourhood (LLSOA) Level



5.64 There are currently 47 fully developed WTPs in South East Dorset: 7 in Bournemouth (20,289 staff), 29 in Poole (14,500 staff) and 11 in Dorset (within the South East Dorset area) (9,060 staff). There are 13 WTPs under development, covering at least 10,000 employees. Therefore, when these are implemented, 21.5% of the workforce would be covered by WTPs.

5.65 The Borough of Poole estimates that WTPs are currently producing a 10% reduction in single car occupancy journeys. DCC estimates a 6% reduction, since alternatives to single occupancy vehicles are currently lacking in the wider study area, particularly in the more inaccessible rural parts.

5.66 The Poole Core Strategy presents travel plan survey results from the Arts Institute (Table 5.3) which show the reduction in staff car driver mode share.

Table 5.3 – Arts Institute Travel Plan – Change in Mode Split

	2002	2004	2006
Staff Cycling	8%	6%	14%
Staff using Public Transport	5%	9%	15%
Staff car drivers	64%	57%	47%
Walking and other	33%	28%	24%

5.67 The study recommends that the local authorities should actively promote and secure voluntary WTPs, providing advice and support to employers. WTP will continue to be secured as part of the planning process, but we believe that greater resources should be directed at monitoring existing WTPs and promoting the benefits of them to other employers in the area. Whilst the aspiration is to cover all employers, the main focus should be on existing large employers to encourage the adoption of Travel Plans through WESTNET, the Wessex Travel Network which covers Poole, Bournemouth and Dorset. WESTNET has been set up to enable organisations involved in Travel Plans to pool resources and ideas. The establishment of WESTNET during LTP1 has raised the

profile of WTPs within the business community itself. Now is the time to build on and expand the scheme to achieve both wider coverage and more effective implementation.

5.68 The councils should also work with business networks to promote the advantages of low carbon travel, particularly those seeking to develop in accordance with the philosophy of the area's Green Knowledge Economy. For example, the Business Link environmental business support programme 'Improving your Resource Efficiency Programme' is aimed at reducing the direct environmental impacts (including transport) of high growth, small and medium enterprises in Dorset.

5.69 The work of the WTP coordinators should involve contacts with current and prospective WTP companies, including facilitating the sharing of techniques and expertise between companies and providing experience of best practice from across the UK. The coordinators could arrange awards for companies which implement WTPs, or achieve success in changing the mode share of its employees, which should then be promoted in the local media to gain publicity for both the overall WTP scheme and individual employers. WTP coordinators should provide support and encouragement to businesses and large employers to implement cycle facilities and promotions, such as discounted public transport passes for their employees. Free cycle maintenance could be extended to workplaces in conjunction with local cycle shops and volunteer groups. The development of cycle user groups at major employers should be encouraged, to act as a point of contact and provider of information and promotion for cyclists in the workplace. Employers should be encouraged to allow employees to work from home all or part time (teleworking).

5.70 Whilst the South East Dorset local authorities are working to implement a coherent and consistent method of gathering data about smarter choices (e.g. the monitoring of WTPs), local smarter choices data is limited. The region is shortly to implement I-Trace, which will resolve this shortage in the long term. In particular, there needs to be effective monitoring/enforcement of WTPs secured through the planning process.

5.71 As more WTPs are developed, it is likely that it will be harder to engage with the remaining employers and therefore more resource would be required. Compared with the STDT project, the assumed future average cost per employee in South East Dorset is less than the Darlington and Worcester case studies, and similar to Peterborough. The WTP costs assumed for South East Dorset are based on the Worcester STDT example; with current WTP coverage of 21.5% of South East Dorset employees, there are around 160,000 employees not covered. The STDT study provides average costs per head for all engaged companies (£9-£14). The assumed staff resources also include promoting teleconferencing and teleworking.

5.72 Currently DCC has 1 FTE working on both WTPs and another non-smarter choices role (for the whole of Dorset). Bournemouth Borough also has 0.5 FTE. The recommendation is to increase the overall resource for WTPs to 3 FTE (for South East Dorset as a whole), supported with funding for capital grants for small projects to provide an incentive to employers to develop and implement WTPs (see Table 5.4).

Table 5.4 – WTP Cost Assumptions[13]

Element	Assumption	Total 15 Year Cost
Grants for capital projects	• £100,000 per year.	£3.372m
Staff costs[14]	• Short term: 1 FTE (£48,000 per year). • Medium-long term: 3 FTE (£144,000 per year).	

Teleworking

5.73 Teleworking is the term used to describe the situation where employers encourage employees to adopt a range of remote working practices (i.e. more flexible practices than simply commuting to a fixed workplace every day), including working at home or in a closer location than their main workplace, for some or all of the time. Initiatives like teleworking have the potential to reduce the number of home based and non home based employers business, and home based work trips (commuting).

5.74 Teleworking can be promoted by the local authorities as part of workplace travel planning for employers to allow their employees to work from home for all or part of the time. However, the growth of teleworking is likely to come about through market forces as employers seek to increase their efficiency by reducing their administrative or operating costs.

5.75 High speed broadband has significant potential to help reduce the need to travel. In order to increase the likelihood of achieving benefits from teleworking, it is expected that improvements in broadband would need to be introduced, in line with the coalition government's strategy, 'Britain's Superfast Broadband Future', published in December 2010[15], which outlines a vision for the UK to have the best superfast broadband network in Europe by 2015. The coalition government has committed £530 million in the Comprehensive Spending Review to help deliver the rollout of superfast broadband in rural and hard-to-reach areas. Where local authorities have superfast broadband as a development priority, Broadband Delivery UK[16] will work with them to source an upgrade to the data transport infrastructure. Superfast broadband can also help improve the quality and delivery of public services to people in more rural and remote areas, helping them become more skilled, productive and perhaps earn a higher wage.

5.76 The strategy proposes that teleworking should be promoted as part of WTPs, to encourage businesses to allow their staff to work from home for part or all of the time and hence reduce the volume of commuting journeys.

Teleconferencing

5.77 Teleconferencing involves the use of telecommunications to facilitate contacts that might otherwise have involved business travel – such as meetings, training sessions, interviews or

[13] Staff costs for individual smart measures in the STDT project were estimated, based on the amount of staff time allocated to WTP in 'full time person-months' and the assumption that the staff costs for project officers to deliver individual smart measures would typically be of the order of £26,000 in 2004/05, rising by annual increments of £1,000 to £30,000 in 2008/09. This has been inflated to 2010/11, and then multiplied by 1.5 to take into account employer National Insurance, pension contributions and other overheads (accommodation, IT etc).

[14] Staff costs for individual smart measures are based on the STDT study, which was estimated, based on the amount of staff time allocated to workplace travel planning in 'full time person-months' and the assumption that the staff costs for project officers to deliver individual smart measures would typically be of the order of £26,000 in 2004/05, rising by annual increments of £1,000 to £30,000 in 2008/09

[15] Britain's Superfast Broadband Future (December 2010) http://www.bis.gov.uk/assets/biscore/business-sectors/docs/b/10-1320-britains-superfast-broadband-future.pdf

[16] Broadband Delivery UK is the delivery arm for the Government's broadband programmes, part of the Department for Business, Innovation and Skills.

information provision. As with teleworking, described above, any expansion in the level of teleconferencing may be dependent on the enhancements to broadband across the study area.

5.78 Research quoted in the 'Smarter Choices' report (2004) indicates that teleconferencing is relevant to around 26% of employees who are company car drivers, in managerial occupations, who work from home or who travel on behalf of work.

5.79 The strategy proposes that teleconferencing should be promoted as part of WTPs, to encourage businesses to use teleconferencing and hence reduce business travel. As with teleworking, teleconferencing offers a commercial benefit to companies such that its growth could take place without further intervention. The cost to local authorities is, therefore, assumed to be zero, apart from any promotion of teleconferencing within their own organisations. It is assumed that this would be promoted via WTP. DCC has advised that teleworking and teleconferencing have been promoted recently within the authority to help businesses save money.

School Travel Plans

5.80 In the past, School Travel Plans (STPs) have primarily focused on physical infrastructure improvements, such as traffic calming, 20 mph zones, cycle lanes and safe crossings. Subsequently, the approach has developed to include a greater emphasis on consultation between the school and local community, including education and information measures, road safety training, and initiatives such as 'walking buses' and 'cycle trains'. Measures to encourage bus use are also often promoted including discount tickets and dedicated school buses.

Figure 5.6 – 20 mph Zone at School

Figure 5.7 – School 'Walking Bus'

5.81 The focus up until March 2010 has been for each school in the study area to draw up a STP document in partnership with its local authority, as part of developing its own, individual long-term strategy to address school travel issues. Through the Travelling to School Initiative (TTSI) this has enabled schools to apply for Safer Routes to School grants to pay for measures to improve safety and reduce car use on the route between home and school – however, this funding source has now ceased.

5.82 At the end of March 2010, 95% of the LEA schools in Bournemouth and 91% in the Borough of Poole had a STP. BBC intends to continue working with its remaining two schools to reach the 100% target although the capital grant funding finished in March 2010.

5.83 Bournemouth continues to make good progress to reduce the mode share of children travelling to school by car (as measured by indicator NI198). Bournemouth's mode share of car use for journeys to school, has reduced from a high base figure of 40.4% in 2006/07 to 36.8% in 2008/09 – a 3.6% reduction over three years.

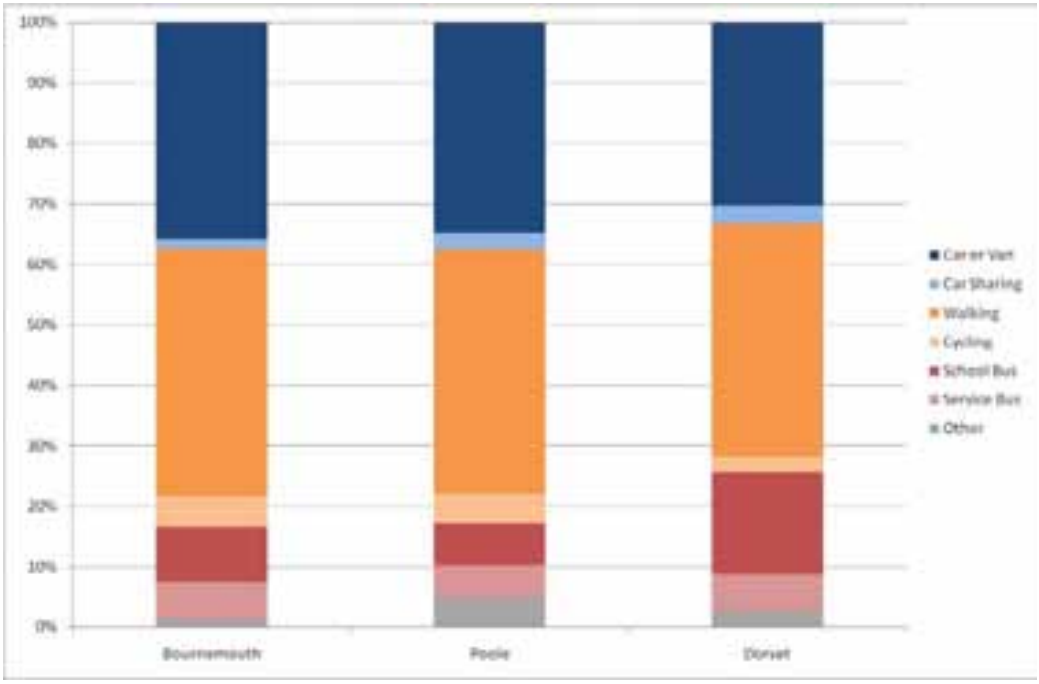
5.84 Bournemouth has had a high adoption rate for STPs through the TTSI and progress is being made with its generalised walking schemes, Healthy Schools Plus, Links to Schools bids from Sustrans, and Bike-IT initiative at five primary schools. This is backed up by tangible evidence, collected annually through the School Travel Health Check.

5.85 BBC and BoP believe that it is doubtful that the amount of mode shift could have been achieved without STPs. The STPs have pushed further forward the principle that sustainable travel to

school is desirable. That message will have been understood by many families even if their school has not yet produced a STP, e.g. there are primary schools without STPs that participate in Walk to School Week.

5.86 Figure 5.8 shows mode share data for the 2008/09 academic year.

Figure 5.8 – Mode Share for Journeys to School[17] (Local Authority Areas, Primary, Secondary and 6th Form)



School Travel Targets

5.87 Common targets have been set in terms of car trip reductions for journeys to school in the Bournemouth, Poole and Dorset Sustainable Modes of Travel Strategy (SMOTS):

- short term success = a decrease in the number of car trips being made by pupils who live within walking distance of their chosen school;
- medium term success = an increase in the average distance pupils walk to school (85th percentile); and
- long term success = an increase in the number of pupils living within walking and cycling distance of their chosen school - this would require increased 'pre-choice marketing', e.g. before parents select which schools to send their children to and therefore involves long lead times.

5.88 The first target is to reduce car use within walk thresholds, then to gently stretch the walk threshold, whilst all the time emphasising the benefits of parents choosing 'a good school locally'. This is set out in each authority's statutory SMOTS.

5.89 Origin, destination and mode data are available for all pupils in state education within and beyond the study area, which can be used as part of assessing the impacts of these targets. This will also help to frame the soft, hard and wider policy measures that need to be employed to achieve the targets. Bournemouth, Poole and Dorset have jointly set school targets through their SMOTS[18], and process and report their school travel data in a consistent way.

[17] For journeys less than 40km/25 miles.
[18] DCC, "Developing a Sustainable Modes of Travel Strategy" Second Update Document: "Starting to deliver positive change" (August 2009) http://www.dorsetforyou.com/media.jsp?mediaid=139881&filetype=pdf

Short and Medium Success Targets

5.90 To date, local authority budgets have limited the work to baseline and short term target work. Further resources would need to be devoted to STPs if the local authorities are to deliver their stated medium and long term school travel targets. The School Travel Health Check (STHC) data has been used by DCC to calculate the proportion of car journeys to school which are within the walking distance threshold[19] (Table 5.5). The medium term target involves stretching the walk and cycle distances. However, it should be noted that some trips to school by car may be part of a chain, for example within the parent's journey to work and hence are less susceptible to a change of mode.

Long Term Target

5.91 Work has been undertaken by the DCC School Travel Coordinator to understand the reduction in distance travelled to school that would be possible if each child attended their nearest school. The proportion of pupils not attending their nearest school is shown in Table 5.5.

Table 5.5 – Proportion of Pupils Not Attending Nearest School

Local Authority Area	Total Pupils (No.)	Pupils NOT Attending Nearest School (%)	Pupils within Walk Threshold (%)	Pupils within Walk Threshold Travelling by Car (%)	Pupils within Walk Threshold Travelling by Car as % of Total Pupils
Bournemouth	20,200	68.4%	49.0%	25.9%	**13%**
Poole	18,700	57.9%	47.0%	25.0%	**12%**
Dorset	54,100	40.0%	41.9%	18.7%	**8%**
Total	**93,000**	**49.8%**	**44.46%**	**21.7%**	**10%**

5.92 Figure 5.9 estimates the change in the total distance travelled to/from school if all children went to their nearest school (i.e. if the long term target is achieved).

5.93 Whilst STPs can achieve a positive change in mode split, DCC is concerned that STPs currently sit at the end of a disjointed policy chain that actively pushes parents to make a choice of school that encourages car use.

5.94 DCC has advised that, now the majority of schools in South East Dorset have a STP, the councils face the challenge of encouraging schools to maintain engagement with a process that can no longer offer the draw of a significant cash incentive. DCC has suggested that the local authorities need to be considering a larger range of better targeted interventions in order to continue to influence school travel patterns.

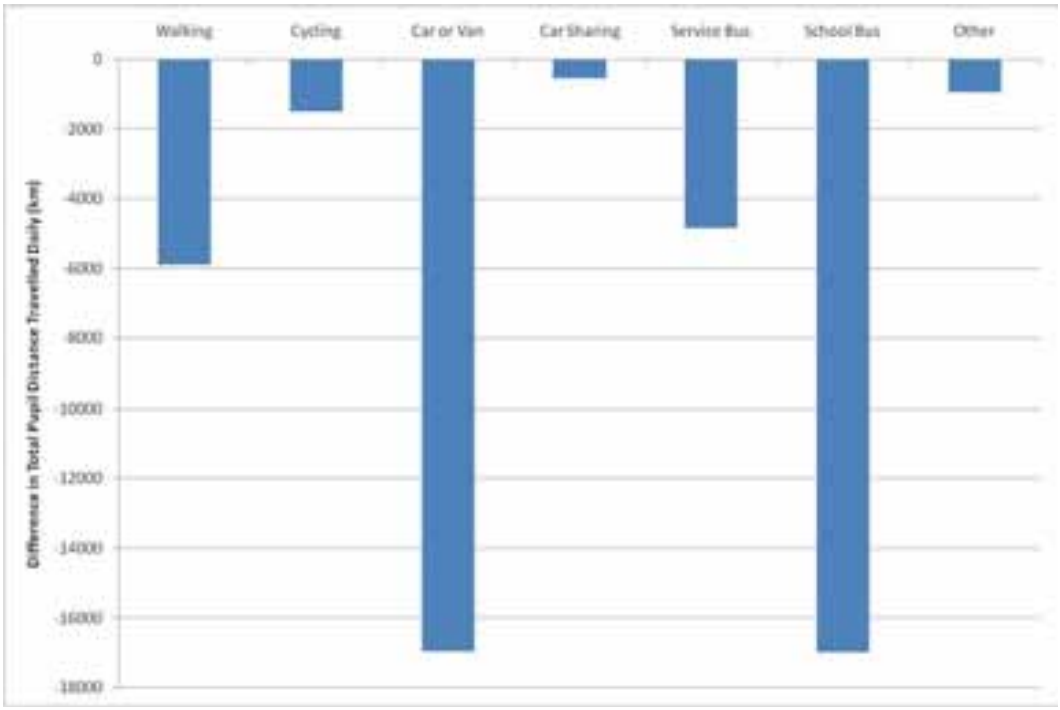
5.95 The authorities also face side issues such as ensuring that the significant infrastructure improvements made as a result of the STP grants are maintained in the future – until all the new cycle sheds and pedestrian waiting shelters appear on the local authority asset management plan they are in real danger of rapidly falling into disrepair. However, this is outside the scope of the SEDMMTS.

5.96 DCC raised the issue that travel-to-school distances tend to be higher in the rural parts of South East Dorset, which may affect the real potential for STPs in the urban fringe. Many trips to/from school may be beyond walking and cycling distance because parents chose to send their children to schools which are not be their nearest; although it should be noted that, in rural areas, the nearest school could still be beyond walk/cycle distances, and dedicated school buses are

[19] Walking threshold = 0.8km for primary and special schools, and 2km for secondary and sixth form.

sometimes provided. DCC's view is that Dorset's STPs (excluding Bournemouth and Poole) are generally not strong enough to become self sustaining; more resources are required to proactively work with the school to engage pupils and deliver against the short and medium term targets.

Figure 5.9 – Difference in Total Pupil Distance Travelled if Pupils Attended Nearest School (Bournemouth)



5.97 The strategy has identified a number of ways in which the local authorities could further influence the mode split for travel to schools and colleges, in addition to the measures under the immediate STP heading. Wider education policy issues are considered later in this chapter within the non-transport policy measures. Without changing wider school selection policy and parental choice, the strategy believes that the transport impacts of the choice of school should be given more prominence in the information provided to prospective students and their parents about each school/college. Details should include information on the ease (or difficulty) with which the school may be reached by alternative modes from different areas. In this way, the selection of school can be made with a full awareness of implications of the decision. A "Child Miles" transport focused behavioural change and social marketing campaign would provide information on home to school travel and to encourage parents to choose their local school for their children's education.

5.98 School travel plans have tended to concentrate on the measures needed to promote modes other than the private car. The strategy believes that greater emphasis should be paid to measures designed to deter the use of the private car, through initiatives such as increased parking controls in the vicinity of schools, etc.

5.99 Supporting cycling clubs at schools would help encourage children to cycle to school, and can help tackle parents' concerns about letting their children cycle – for example, by providing cycle training and by running educational campaigns about the health benefits of cycling, showing that the benefits outweigh the risks.

5.100 Currently DCC has 0.5 FTE working on sustainable school travel (for the whole of Dorset). The transport strategy proposes an increase in the staff resource to 3 FTE (for South East Dorset as a whole) in the medium-long term, with associated revenue and capital cost implications, reflecting the changing school population each year (with a new intake in each September) resulting in the

continued need to refresh travel plans and deliver measures to encourage sustainable travel to school.

5.101 The STP costs for the STDT relate to the period when the local authorities were working towards the target of all schools having a STP by 2010. The current focus is encouraging children who live within walking/cycling distance of their school to do so. STP initiatives need to be maintained due to changes to catchment areas and pupil turnover.

5.102 Maintaining the benefits of the plan, with an ever-changing student population, means that this cost would be incurred every year – thus, the annual revenue cost is estimated to be £43,000 in the short term, increasing to £128,000 in the medium/long term, supported by capital grants totalling 25,000 per year which schools could apply for as an incentive to refresh their travel plans and keep them up-to-date.

Table 5.6 – STP Cost Assumptions

Element	Assumption	Total 15 Year Cost
Grants for capital projects	• £25,000 per year.	£2.042m
Staff costs[20]	• Short term: 1 FTE (£43,000 per year). • Medium-long term: 3 FTE (£128,000 per year).	

Station Travel Plans

5.103 Station Travel Plans are a relatively new form of Smarter Choice measure. The 2007 Railways White Paper asked the rail industry to work with all relevant stakeholder groups to pilot Station Travel Plans and provide advice on whether the travel plan approach could be beneficial to passengers and encourage them to use public transport, cycle, or walk to access the station, rather than the private car. No stations in South East Dorset were selected for the Station Travel Plan pilot, with the nearest in Hampshire: St Denys, Chandler's Ford, Eastleigh and Romsey. The monitoring phase of the pilot project will operate up to Autumn 2011; the National Steering Group will report back to DfT on the outcome of the pilot programme in April 2012.

5.104 Recent rail passenger growth has put pressure on the highway network around railway stations, due to on-street parking and the volume of traffic. A Station Travel Plan is a strategy and action plan to encourage passengers to travel to stations more sustainably – including by cycle and bus.

5.105 The Station Travel Plan can bring together all the stakeholders with an interest in the use and operation of rail stations (rail industry, local authorities, passenger groups, bus and taxi operators, cyclists, etc) to develop and agree common objectives and a coordinated approach to delivering them[21]. In addition to the provision of extra facilities, including cycle storage facilities and the identification of safe, effective routes to the station, an important component is the provision of information, in terms of maps showing access routes to/from the station, including the erection of signs for pedestrians and cyclists. The maps should be displayed in different parts of the station, on platforms and in ticket halls.

5.106 Station Travel Plans form part of the transport strategy and are likely to involve the resources of both the railway industry and local authorities. The authorities should work with the rail and bus

[20] Staff costs for individual smart measures are based on the STDT study, which was estimated, based on the amount of staff time allocated to workplace travel planning in 'full time person-months' and the assumption that the staff costs for project officers to deliver individual smart measures would typically be of the order of £26,000 in 2004/05, rising by annual increments of £1,000 to £30,000 in 2008/09. This has been inflated to 2010/11, and then multiplied by 1.5 to take into account employer National Insurance, pension contributions and other overheads (accommodation, IT etc).

[21] http://www.stationtravelplans.com/what-are-stps

operators to improve interchange and maximise the potential for greater cycle/bus/rail journeys through the adoption of Station Travel Plans. In terms of resourcing, it is assumed that local authority resources for Station Travel Plans would be combined with other smarter choices. The level of capital funding required would mainly depend on the level of improvement required at each station, and is included as part of the wider transport strategy costs.

Tourism and Leisure Travel Plans

5.107 Leisure travel plans involve working with the tourism/leisure industry, with a view to designing and implementing visitor travel plans. A visitor Travel Plan has a different emphasis than one designed for employees. Although staff will be included in the Travel Plan, the main aim will be to actively encourage visitors to travel to the site by the more sustainable modes of public transport, cycling, walking and car sharing. These travel plans feature innovative marketing campaigns and initiatives for encouraging sustainable travel behaviour. Leisure travel plans should also be adopted by organisers of one-off events.

5.108 The leisure travel plan should pay particular attention to the requirement of visitors to South East Dorset who have a significant impact on the transport network in the area, especially during the summer period and at weekends. In order to influence the travel behaviour of visitors, particularly their choice of mode, it is vital that information is readily available. Tourists may have access to the internet at home but often are unable to have the same access when on holiday, whether in rented accommodation, small hotels/guest houses, camp sites, etc. Hence, they are unable to easily take advantage of available public transport and other sustainable transport services. This should not simply be the case of printing and distributing leaflets, but should be directed at different parts of the decision chain:

- when the booking is made, visitors should be provided with a link to the www.gettingabout.info website and/or receive a leaflet highlighting the opportunities for travel and the availability of tickets;
- the www.gettingabout.info website should have a specific area for visitors, highlighting sustainable travel opportunities and encouraging visitors to use train/coach to travel to the area;
- as visitors may wish to get information on local travel while staying in the area, extended internet access should be available across the area, with hotel staff being able to direct visitors to relevant areas of the internet for specific information;
- facilities such as car clubs should be available to tourists on a temporary basis; and
- as part of the non-transport measures, described later, increased broadband coverage and better internet access should be encouraged – this should include local centres (including hotels, camp sites, etc) where tourists are able to access the internet and obtain information on local services.

5.109 Potential ‘car free’ holiday destinations in South East Dorset, which are easy to access and enjoy without a car, should be identified and marketed on this theme. Working with tourism providers to consider the potential for promoting arrival into Dorset by rail/coach and then using public transport, car hire or car club for short trips so that holidays are not constrained.

5.110 For specific events, developing event travel plans for key leisure attractions, shows, food and music festivals should use existing resources such as the Green Event Guide at www.oursouthwest.com/SusBus/gevents.html

5.111 The transport strategy encourages the promotion of leisure travel plans along with WTPs, to encourage visitors to travel by sustainable modes.

Information and Marketing

Public Transport Information and Marketing

5.112 One of the perceived difficulties for existing drivers to use public transport is the absence or shortage of readily available information on services and fares/ticketing. While this may be sometimes an excuse rather than a true reason, there is still a need for both enhanced availability and improved design of public transport information. In recent years, bus service improvements have often taken the form of a package – called a quality bus partnership – encompassing improvements to infrastructure and services as well as information and marketing. Quality bus partnerships (QBPs) involve agreements (either formal or informal) between bus operators and local authorities, where both parties agree to implement measures which will contribute to shared objectives. This section considers the potential impact of these partnerships, along with the marketing of services (bus and rail) and the impact of public transport ticketing schemes, plus insights into the specific contribution made by information and marketing measures within a comprehensive package of infrastructure and operating improvements.

5.113 The network of Bus Showcase Corridors, described in Chapter 6, includes the expansion of real-time passenger information in shops, major offices, hospitals and public buildings, which will provide a significant benefit to passengers. In the near future, it is expected that information will be available through mobile phone applications and hence this may be a more appealing source of travel details. It may therefore be more appropriate to concentrate efforts in this area of development. The at-stop information currently contains a mixture of real-time and scheduled information and it would be beneficial to extend it so that all sites have real-time details.

Figure 5.10 – Real-Time Passenger Information at Stops

5.114 The provision of information needs to be widened and improved, not only at stops but also with a wider general availability. This should involve, for example, identifying a number of key centres and preparing plans showing the range of services, routes and destinations available from the stops in the area. To provide further convenience to potential passengers, local maps showing the street plan in the vicinity of the stop and key facilities should be added. Such information

could also be available on the Internet using the www.gettingabout.info site, which currently provides transport information for Bournemouth, Poole and the surrounding area.

5.115 A key feature of the passenger information is that it must be kept up-to-date so that the public can have confidence in its accuracy and reliability. Sufficient resources therefore need to be devoted to the maintenance of the information sources. At the same time, the information should cover details on all public transport services, not just those of a single operator or mode.

5.116 There is evidence that the impact of improvements to public transport can be enhanced through effective marketing. However, it is also important to tie the information, or specific campaigns, with improvements to the transport network, e.g. the introduction of Bus Showcase Corridor measures, so that there is 'good news' to spread out to current and potential passengers. In addition, the personalised travel planning initiative, described earlier, could be concentrated in areas or corridors where improvements have recently been made, in order to bring these changes to the public's attention.

5.117 The lack of good quality transport information can also be a significant barrier to the ability of people to access services, regardless of where they live – because they are not aware of services that may exist; once again, this links with a more widespread introduction of PTP. Public transport information and marketing should be delivered under the proposed unified Smarter Travel branding.

5.118 The strategy has identified that a range of benefits may be achieved from enhanced public transport information and marketing. A regular annual budget per head of population should be set aside, which would complement the delivery of the BSC and other public transport improvements. This would help to ensure that people are aware of the improvements to services (see Chapter 6 on Public Transport). Note that this excludes the cost of any RTI improvements. Staff resources are included within travel awareness campaigns to ensure a holistic approach to delivering smarter choices.

5.119 The costs of public transport information and marketing that the transport strategy assumed for South East Dorset are based on the example from the Worcester STDT, costing £2 per head of population.

Table 5.7 – Public Transport Information and Marketing Assumptions

Element	Assumption	Total 15 Year Cost
Improvements to the real time passenger information system (RTI)	• See Public Transport Measures (Chapter 6).	N/A
Revenue costs	• Short term: £0. • Medium-long term: £2 per head of population = £213,000 per year.	£2.554m

5.120 However, while the benefits of enhanced levels of public transport marketing are accepted, it is not possible to estimate the level of traffic reduction that may be achieved from a general adoption of this policy. Furthermore, the impacts of the marketing would tend to be short-lived and hence would not have a major long term effect unless the marketing is maintained and updated regularly, particularly in line with improvements in public transport operations or infrastructure, either across the network or in local areas.

Travel Awareness Campaigns

5.121 As with public transport marketing schemes, travel awareness campaigns are closely linked with other enhancements to the transport system. A unified Smarter Travel branded package should

be adopted, including comprehensive marketing and a promotion strategy for low carbon, sustainable transport. Proposed campaigns should include promoting aspects such as:

- themes on health, climate change and financial savings to target specific groups to achieve a shift to low carbon travel modes;
- 'is your journey really necessary?' - aimed at individuals and businesses;
- individual responsibility for the carbon impacts of people's own travel choices;
- journey planning services which are available free of charge to the public via the internet and telephone (such as gettingabout.com, Traveline and transportdirect.com);
- 'Buy local' promoting the purchasing of goods, for example the "Direct from Dorset" accreditation scheme for local food and products;
- Eco-Driving, directed at businesses, freight providers and individuals; and
- support and funding available from the Government to local business and individuals to purchase low carbon vehicles.

5.122 Travel awareness campaigns, such as 'Travelwise' and 'In Town Without My Car', use a wide range of media aimed at improving general public understanding of the problems resulting from their transport choices, and what can be done to solve the inherent problems, including changing the behaviour of individuals. The campaigns stem from long established approaches applied to road safety (notably drink-driving and seat belts) as well as other social problems such as smoking.

5.123 The councils should work with voluntary groups in Dorset, particularly DA21 and the Transition Town movement, to maximise opportunities for jointly raising awareness on climate change and peak oil issues and should encourage low carbon solutions.

5.124 Travel awareness campaigns would also include the promotion of alternative fuel vehicles, supporting any national initiatives to increase the take-up of electric vehicles, and publicising the location of electric charging points locally. Bournemouth Borough Council has recently installed a couple of electric vehicle charging points in Richmond Gardens multi-storey car park in the town centre and the further implementation of charging points is planned. The provision of on and off-street Electric Vehicle Charging Points (EVCP) infrastructure is currently being investigated and dialogue has been opened with neighbouring authorities to ensure consistency with regards to the potential deployment of EV infrastructure. Helping people make informed choice when choosing a new vehicle so that they can compare the whole life carbon costs of different types of vehicles and fuels.

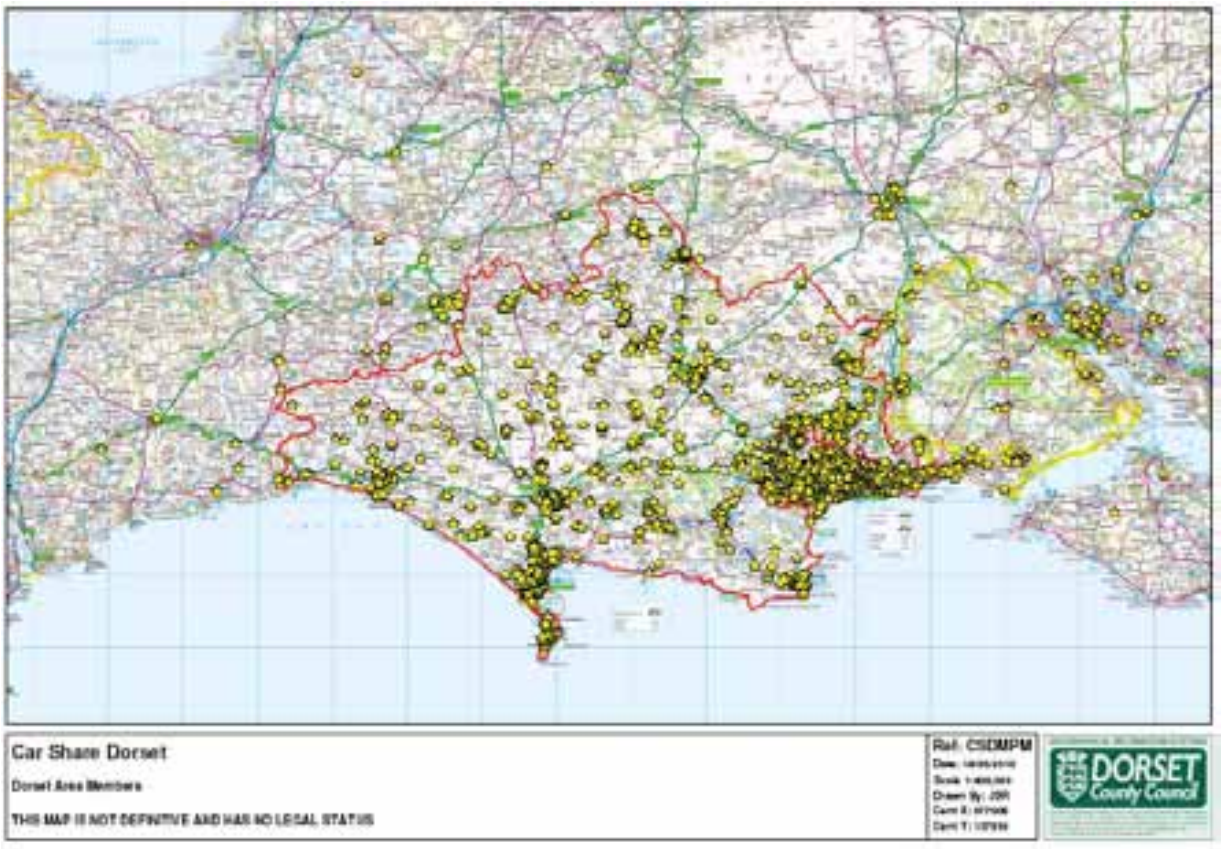
5.125 Promotion of the Car Share Dorset website has been included in travel awareness campaigns, as part of a holistic approach as shown in Figure 5.11. DCC has worked in partnership with BBC and the BoP, to set up www.carsharedorset.com, which was established by ***lift***share, the largest implementer of car-sharing systems in the UK. It is a formal scheme which matches people who register with others making the same trip (as opposed to informal car sharing where the sharers already know each other).

Figure 5.11 – Car Share Scheme

5.126 Promotion of home shopping has also been considered as part of travel awareness campaigns (e.g. encouraging the use of local shops to reduce the need to travel or to travel a long distance). However, this is a low priority for the strategy since a concern was raised during the consultation that promoting home shopping could impact on local centres and that it should not be prioritised.

5.127 Little information is available on the impacts of travel awareness campaigns, although smarter choices research recognises that this is difficult to assess in isolation. Data was provided by DCC showing the home postcode locations of Car Share Dorset members (see Figure 5.12). The scheme has approximately 1068 members across the whole South East Dorset study area, or about 0.2% of the study area's population of 450,000. It is not known if these people are actively car sharing, or the frequency of their car sharing activity. Approximately half of the South East Dorset Car Share Dorset members in live in Bournemouth; BBC has suggested that there are 531 members of the website in the borough, with just 14 (or 3%) actively car sharing.

Figure 5.12 – Car Share Dorset Member Locations



5.128 Currently, DCC has two people working part-time on travel awareness related initiatives, with their time being split between smarter choices and non-smarter choices tasks. Both staff spend approximately half of their time on smarter choices (i.e. 1 FTE in total), and their work covers all of Dorset (not just South East Dorset). Therefore, it is assumed that they spend half of their time on smarter choices relating to South East Dorset (i.e. 0.5 FTE in total). DCC advised the study that currently the "bare" minimum is being done in terms of promoting the Car Share Dorset website.

5.129 There is potential for overlap between public transport information and marketing with area wide behavioural change marketing. The overall aspiration for the strategy is to increase the staff resources employed on travel awareness campaigns from 0.5 FTE to 2 FTE, with an associated budget of £3 per head of population, based on the STDT work. In the short term, the proposed resources have been reduced, reflecting the reduced availability of funding over the spending review period.

5.130 The local authorities' aspiration is to increase the level of marketing of the Car Share Dorset website. The current administration requirement of carsharedorset.com is low – DCC has indicated that 0.5 FTE and a marketing budget are required. BBC and the BoP currently rely on DCC to run the website.

Table 5.8 – Travel Awareness Cost Assumptions (including Promotion of Car Sharing)

Element	Assumption	Total 15 Year Cost
Revenue cost per resident	• Short term: half of the medium-long term revenue cost - £115,400. • Medium-Long term: £3 per head of population, allowing for 6% population growth, allowing £88,500 of this to be spent on 2 FTE = £230,800 per year.	£4.310m
Staff costs[22]	• Short term: 1 FTE (£44,250) • Medium-Long term: 2 FTE (£88,500)	

Car Sharing

5.131 The term 'car sharing' refers to the situation where two or more people travel together by car for all or part of a trip. One of the people travelling is usually the owner of the vehicle and the other(s) usually makes a contribution towards fuel costs (or alternatively car share partners take turns in driving).

5.132 Car sharing may be formal, via an organised car share scheme (covered in the previous section), or informal, for example friends or colleagues travelling to work together. Formal schemes will match people who register with others making the same trip. Alternatively, there are schemes which help people find someone to share a one-off car journey. Informal schemes operate on a more ad hoc basis between friends, family members or colleagues, but can be very effective. There is no information about car sharing outside the carsharedorset.com scheme – the split of formal/informal car sharing is unknown.

5.133 Formal schemes can be employer-led, and are thus assumed to form part of WTPs, or they can be promoted independently by private or public bodies.

5.134 Car sharing schemes aim to encourage individuals to share private vehicles for particular journeys. There are two aspects to the level of take-up for a particular scheme:

- the number of people encouraged to join the scheme; and
- the frequency with which they are in a position to share a vehicle for a particular journey.

5.135 Since there is already a formal car sharing scheme in Dorset, the focus of the strategy is the promotion and marketing of the scheme, as covered in the previous section (see Table 5.8). This will help to both increase membership and the frequency of car sharing.

5.136 The overall impact of car sharing in isolation is likely to be relatively low, but promotion of car sharing will form an important part of an overall smarter choices strategy, particularly in conjunction with WTPs.

Home Shopping

5.137 Promotion of home shopping has been considered as part of travel awareness campaigns (e.g. by reducing the need to travel to shops). Home delivery of groceries is estimated to cut car mileage to the supermarket by as much as 70% to 80% for those residents using the service. However,

[22] For the travel awareness work, the STDT study took rounded averages of staff costs for the relevant officers in the three towns, of £25,000 in 2004/05, rising by annual increments to £28,000 in 2008/09. For media work, a similar approach was used, but with rounded averages starting at £26,500 in 2004/05 and rising to £30,000 in 2008/09. This has been inflated to 2010/11, and then increased 50% to take into account employer National Insurance, pension contributions and other overheads (accommodation, IT etc).

the effect of home delivery services on the overall level of shopping traffic depends on how many people use the service. According to 'Making Smarter Choices Work', if home delivery of groceries reaches 15 per cent of the grocery market within 10 years, it could cut car mileage for grocery shopping by 8% and car mileage for all shopping by 4%[23].

5.138 Whilst home shopping is a growing phenomenon, in many cases, it does not replace a car journey; the items are purchased for convenience or cost saving, and regular journeys are still made to shopping centres to purchase other items. Shopping remains a social activity and visiting the shops will continue to be a reason for travel, particularly during the inter-peak periods and at weekends, despite the growth in internet-based shopping. There was also a concern raised during the consultation that promoting home shopping could impact on the economic viability of local centres and that it should not be prioritised.

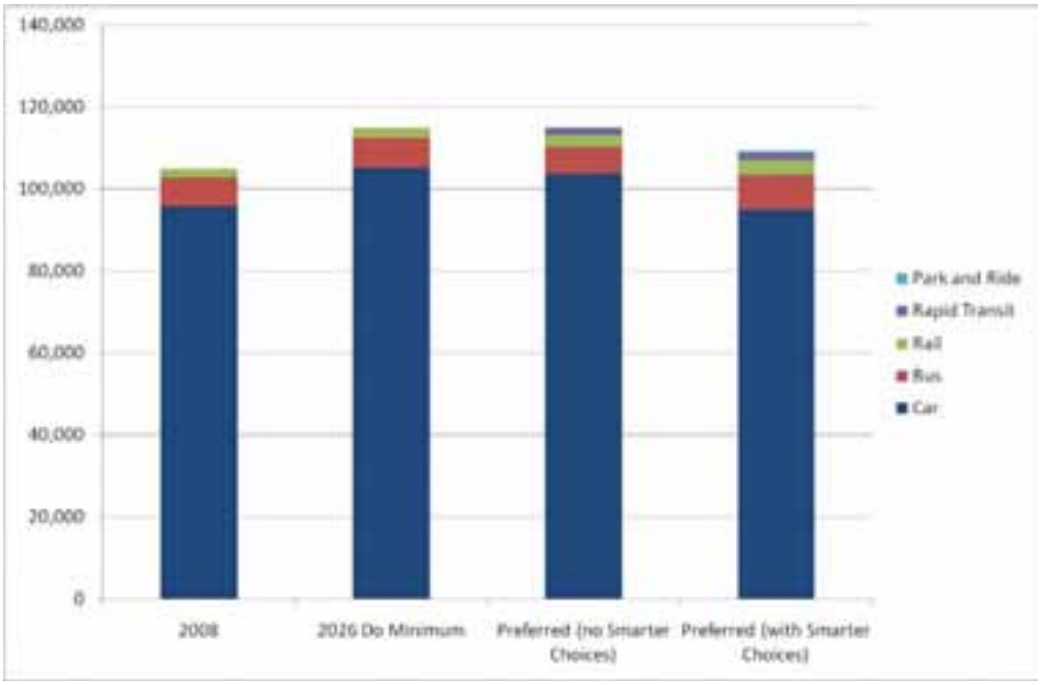
Overall Impact of 'Smarter Choices'

5.139 The preceding analysis has examined the impact of individual measures designed to encourage changes in travel behaviour. Although the impacts of most measures can be added together to provide a prediction of the combined impact, research has shown that, for example, when both WTPs and car sharing policies are pursued, only around 80% of the aggregated benefits can be achieved. On this basis, the effect of implementing the full range of measures outlined above would be a reduction of around 10% in the number of peak period journeys by car across the study area. Using the research in 'Smarter Choices', a proportion of the reduction in car trips is converted into public transport journeys and is allocated to the public transport network as appropriate; from research, on average about one-third of the reduced car trips transfer to public transport, although this will vary depending upon the quality of public transport services. For the remainder, the trip is either suppressed or switched to walking/cycling (and removed from the highway network) or adjusted through increased car occupancy. In the assessment of the full transport strategy, the impact of the 'Smarter Choices' has been considered separately to identify whether the introduction of the 'Smarter Choices' avoids the need for other measures.

5.140 Figure 5.13 summarises the forecast change in mode split in 2026 as a result of the introduction of 'Smarter Choices'. Thus, with the full preferred strategy there would be an 8.4% fall in the level of person trips by car, reducing the car mode share from 90.1% to 87.0%. The increase in public transport use is spread across the three sub-modes with comparable increases in bus (29%), rail (24%), rapid transit (DARTS) (8%) and park and ride (16%).

[23] Making Smarter Choices Work
http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/sustainable/smarterchoices/makingwork/ngsmarterchoicesworkfull5770.pdf

Figure 5.13 – Impact of 'Smarter Choices' on Mode Share



5.141 To achieve this level of impact will require a significant and consistent investment of resources to be allocated to smarter choices measures. Furthermore, as identified at the start of this chapter, without parallel schemes (e.g. demand management) to control the level of traffic induced by the capacity released through the 'Smarter Choices' measures, there is the danger that the overall impact would be less than predicted.

5.142 As suggested by the highway network statistics in Table 5.9, 'Smarter Choices' could have a potentially large impact on highway congestion. Compared with the Do Minimum, the Full Preferred Strategy without smarter choices shows a reduction in highway trips of 1.3%, and total vehicle delay is cut by 10.9% – the addition of smarter choices improves these statistics to decreases of 9.6% and 30.3% respectively – although delay is still higher than in 2008.

Table 5.9 – Impact of 'Smarter Choices' on Highway Network Statistics

	2008 Base	2026 Do Minimum	Full Preferred Strategy without 'Smarter Choices'	% Change Full Preferred Strategy without 'Smarter Choices' vs Do Minimum	Full Preferred Strategy with 'Smarter Choices'	% Change Full Preferred Strategy with 'Smarter Choices' vs Do Minimum
Car Trips	95,890	105,076	103,727	-1.3%	95,024	-9.6%
Vehicle Kilometres	688,501	871,954	868,862	-0.4%	811,387	-6.9%
Vehicle Hours	16,340	25,117	23,875	-4.9%	20,765	-17.3%
Average Vehicle Speed (kph)	42.1	34.7	36.4	+4.9%	39.1	+12.7%

	2008 Base	2026 Do Minimum	Full Preferred Strategy without 'Smarter Choices'	% Change Full Preferred Strategy without 'Smarter Choices' vs Do Minimum	Full Preferred Strategy with 'Smarter Choices'	% Change Full Preferred Strategy with 'Smarter Choices' vs Do Minimum
Mean Journey Length km (per vehicle)	7.2	8.3	8.4	+0.9%	8.5	+2.9%
Total Vehicle Delay (Hours)	5,133	10,709	9,540	-10.9%	7,463	-30.3%

Non Transport Measures

Non-Transport Policy Measures

5.143 An increasing interest and attention is being paid to the impact of policy measures outside the immediate transport sector which could nevertheless make a significant contribution to the level of travel across the South East Dorset conurbation in general and the use of individual modes in particular. This reflects the awareness of the wider implications of policies on travel behaviour. Central Government is placing increasing emphasis on the wider policy implications for transport of these broader measures. The study has therefore reviewed the emerging policy measures and identified those which have the potential to have a significant impact on the travel behaviour in South East Dorset. In considering the impacts of non-transport policy measures, attention is concentrated on the measures that are under the direct control or influence of the study's client partnership, particularly the local authorities, rather than those that would require the central government to play an active role.

Land Use Issues

5.144 The relationship between land use patterns and the transport system is well understood. People need to travel between places in order to undertake their desired activities and thus the pattern and scale of development influences the volume and distribution of travel. Conversely, changes in accessibility brought about by adjustments to the transport system can influence the uses made of available land and the locations where activities are undertaken.

5.145 Land use changes have had a significant impact on facilitating and encouraging the increase in the demand for car travel over the last 25 years. During this time, there has been some implicit travel demand management in the denser urban areas through the rationing of road space by congestion. This has had the impact of producing a major switch in population patterns away from congested urban areas where cars are costly to keep and run, and into suburban or rural areas where cars are easier to park and traffic speeds are higher. Research on national travel patterns over time has highlighted that people 'appear to have a need to travel to find resources and to socialise. Individuals have, on average, spent 55-65 minutes a day travelling since records were first kept'. So, the impact of improving the highway network has been to encourage people to travel further within the given available time and hence workplace and home have tended to become more remote and dispersed. In the same way, the impact of increasing congestion, especially in the outer suburbs, would then be to encourage a movement back into central areas.

5.146 Urban road improvements and the level of congestion have certainly not been the sole cause of population decentralisation, but they have acted as major contributory factors.

5.147 The extension and improvement of the strategic road network have resulted in the generation of a series of new land use developments within the SEDMMTS area. These developments represent a wide range of different land uses: residential, retailing, industrial, warehousing, etc. However, in many cases, the transport system has not kept pace with the traffic generated by the new developments, resulting in an increase in the level of congestion on the local road network. This stems from a time when there was little integration between land use and transport planning policies. Many of the developments were located in or adjacent to the Green Belt, or creating additional pressures on the Green Belt with consequent environmental problems. Furthermore, the growth of the out-of-town-centre developments, for example Castlepoint, was at the expense of the traditional urban centres which therefore experienced a significant decline with resulting economic problems. Finally, the out-of-town centres were designed with car access in mind and hence, due to the wide dispersal of origins, these centres frequently experience low levels of public transport service from outlying areas, thereby increasing the social exclusion for those without access to private transport.

5.148 The creation of local centres could promote sustainable transport through a range of measures, many of which form part of the smarter choices category, including public transport information, personalised travel planning, electric vehicle charging points and drop off/pick up points for deliveries. Co-operation between companies could be increased in making office space, meeting rooms, etc available to other companies or individuals (although for a charge) and therefore potentially reduce the amount of travel. The local authorities could be the catalyst for increased activity by creating a database of organisations offering and seeking these facilities. These would be an example of wider benefits to business from the provision of start-up facilities by local authorities in hubs with convenient transport facilities to provide the impetus for entrepreneurial activities. The benefit from the creation of the local centres, as far as the transport network is concerned, is the reduction in the number of long distance, mainly car-based, trips as they switch to more local journeys which are more easily made by sustainable modes, especially walking/cycling.

5.149 The choice made by households about where to live is based on a complex number of factors including the size of the household, its age composition, number of workers, available schools, cost of housing, etc. However, once the family has found the house that it can afford, in an area where its members wish to live, they are generally reluctant to relocate when one of the household members seeks alternative employment. Changes in the general employment market in recent years have strengthened the effect because of:

- an increased number of temporary and short-term contracts;
- a greater likelihood that both partners in a household are in employment and hence it becomes less likely that the household will move home when one partner changes jobs; and
- the perception that jobs are less secure and hence people are unwilling to move house to be nearer to a job that they may wish, need, or be forced to change in the foreseeable future.

5.150 The diminished desire to move home is exacerbated by the costs involved in house sale and purchase, especially with the extra costs due to Stamp Duty and the reduction in property prices creating negative equity for some households.

5.151 The overall impact of such effects is that, due to the reluctance to change the home location, when a household member is seeking new employment, the potential catchment area is drawn based on the available transport system – the road network and public transport services. As the highway network has been extended and improved in the past, so the employment catchment area has widened and the level and length of commuting has increased. Although congestion may have dampened the impact slightly, often the reaction has been to change the time of travel

(especially to a time before the morning peak and after the evening peak periods) in order to avoid the main congestion. In this way, the peak period has been extended. Hence, there needs to be an awareness of the implications that the location and form of new land use developments will have for the transport systems.

5.152 Within the linkage between land use and transport, the form and density of any development can have a significant impact on the associated volume of travel. Land use policies which may encourage both a reduction in the total volume of travel and a decreased use of the car include:

- concentrating developments within transport corridors and near to public transport nodes;
- mixing development so that homes are closer to schools, workplaces, shops and leisure facilities; and
- increasing the density of development so that more facilities can be reached within a given distance.

5.153 One argument against policies of this kind is that they tend to concentrate development where land is in shortest supply and where it is most costly to provide transport improvements. That aside, the policies ought, in principle, to reduce the need for travel. The three key questions are:

- would they actually result in less travel?
- how quickly could they have an effect?
- how much effect could they have?

5.154 Rather than inducing less travel, policies of concentration simply provide people with more choice within any given travel budget and, as a result, the effects are quite muted. Thus, on their own, land use policies might have a moderate effect, but if they could be supported by public transport improvements or traffic restraint policies (e.g. workplace travel plans, residential travel plans), the effects could be increased. Moreover, in established areas where the need for regeneration is not strong, the pace of redevelopment is likely to be slow, thereby limiting what these policies can achieve within reasonable time frames. That is not to say that these policies are not worth pursuing; they are probably a step in the right direction, but, on their own, they will not lead to large reductions in traffic in short or medium timescales.

5.155 In summary, there are four points of particular note about land use policies:

- policies which, in principle, reduce the need for travel by mixing development and which focus the demand for travel on the public transport system are worthy of support;
- however, even though land use policies may reduce the need for travel by car, on their own, they would not be sufficient to reduce it significantly – some other measures would be required to encourage or coerce people to use the facilities nearest to them;
- moreover, development in established areas is renewed at a relatively slow rate and therefore the effects of land use policies can take a long time to feed through into reduced car travel; and
- even if planning policies which reduce car travel are adopted, and people reduce their car travel voluntarily, and the rate of re-development is high, it is still necessary for the policies to be enforced for their effects to be felt – the desire for more jobs or housing often compromises the strict application of land use policies.

5.156 There is a strong need for increased quality in the general design of new developments, including the provision and incorporation of transport measures. There is evidence that more attention and greater efforts need to be taken in the design of the new developments proposed for the study area in the future.

5.157 One of the primary reasons that strategic roads fill up with new traffic quickly after being built or improved is because new developments spring up close to the new/improved roads and it is often difficult for the planning and highway authorities to resist these development pressures. Clearly, a policy of restricting certain kinds of development (e.g. offices) adjacent to the main road network would avoid localised congestion, both on the major road itself and on the connecting local roads, although, of course, there are other kinds of development (e.g. warehousing and distribution centres) which are better located near to a major strategic road than elsewhere.

5.158 In terms of employment locations, there is a large number of competing sites in the study area, with the result that the planning system has great difficulty in influencing the overall pattern of development. The planning system is, generally, more effective in controlling residential and retail developments than other forms of development. However, in the case of residential development, the planning system cannot control the destination of trips from residents – i.e. their place of work.

5.159 It is recognised that certain kinds of development are acceptable, or even desirable, in proximity to the main road network. For example, warehousing and distribution in these locations can reduce heavy good vehicle mileage on less suitable roads. The problems arise where proposed developments are intensive in employment or retail terms, and hence are likely to be major traffic generators.

5.160 There may also be a need for a strengthening of policies. In particular, it may be argued that proponents of employment or retail developments close to the strategic road network should have to provide evidence that modal shares for public transport, walking and cycling would be significant. Given that current Government policy identifies town centres as the preferred location for major employment and retail development, forecast non-car modal shares could be required to be of the same order of magnitude as is generally achieved for town centres. For most sites on the strategic road network, such non-car mode shares would not be achievable. In such cases, even if a suitable alternative town centre location is unavailable, logic, from the point of view of the management of the road system, suggests that the application should be refused.

Digital Connectivity

5.161 The subject of ‘digital connectivity’ includes a range of technological solutions which provide the opportunity for individuals and organisations to:

- work from a variety of locations outside the normal office base, particularly at home;
- access a range of services from a variety of locations; and
- communicate with clients, business associates and partners without travelling to meet them face to face.

5.162 By supporting and encouraging a comprehensive network of ‘super-fast’ broadband and the establishment of work hubs, the local authorities would encourage increased local working and reduce the need for travel. As identified earlier, central government has recently indicated its intention to promote and encourage improved broadband speeds in order to enhance digital connectivity. This opportunity could be further increased through an expansion of community hubs in local buildings such as post offices, pubs and community centres, particularly in rural areas.

5.163 As part of this, the wider availability of internet connections through the provision of Wifi at public transport interchanges (rail stations, bus stations, Park and Ride sites) and on trains could encourage the use of public transport journeys.

Education and Skills

5.164 It is almost a cliché to state that the highway network operates more smoothly and with less congestion during the school holidays. While this is not merely that the journey to school/college

is no longer being made; it also reflects the situation that parents often take time off work during school holidays and so the impact is more complex than just the simple journey to school.

5.165 Nevertheless, there would be benefits on congestion from changing the journey to school, through altering the wider education policy. The transport strategy therefore highlights some of the wider policy measures that should be considered within a broader perspective of education policy, by emphasising their impact on the operation of the transport system.

5.166 The smarter choices heading includes the introduction and active operation of school travel plans. However, the coverage of school travel plans is almost at saturation level in the local authorities in the study area and hence other opportunities would need to be considered in order to influence the sustainability of travel to schools. These could include:

- staggering of school opening and closing hours so that they are outside the main peak periods;
- changing the school selection process (especially for secondary schools) so that students are more likely to attend a school close to home;
- providing guidance to parents and students during the selection process in order to highlight the sustainable travel implications of their choice of school; and
- increasing the use of school buildings within the community to increase the volume of local activities and reduce the amount of travel.

5.167 While these measures would have benefits in terms of the operation of the transport network, there would of course be wider social implications, e.g. in terms of childcare, as well as impacts on the education system.

5.168 Beyond schools, the wider enhancements of skills through retraining could contribute in some sectors to the narrowing of skills gaps and a reduction in the levels of in-commuting to the area in order to resolve skills shortages. By shortening commuting distances, the potential for sustainable travel in enhanced.

Health

5.169 The linkage between travel and health is gaining increased prominence and therefore elements within the overall strategy which encourage greater walking and cycling will create health benefits. However, there are changes that can be made to the provision of health services which can contribute to the effectiveness of transport measures, including changes to visiting hours at surgeries, clinics and hospitals; increased health education; and greater use of ‘tele-care’ with the equivalent of video-conferencing being used to avoid patients travelling to hospitals and surgeries.

Summary

5.170 Before embarking on measures that are potentially costly in resources or finance, in developing the transport strategy for South East Dorset, it is important to explore measures which have the potential to influence the decision to make a journey or to encourage the use of alternative modes.

5.171 The transport strategy has been prepared against a background of significant growth in population and employment. The design and implementation of the new developments should be planned so as to reduce the total volume of travel and encourage the use of alternative modes to the car. Such policies should include the concentration of developments within transport corridors easily served by public transport; the creation of a mix of developments so that more activities are easily reached by walking or cycling; and an increase in the density of development such that there is a choice of facilities within a specified distance. Furthermore, the design of developments (especially major residential schemes), should pay particular attention to their operation in the most sustainable way.

5.172 Although detailed schemes to enhance walking and cycling are outside the scope of a strategic study like SEDMMTS, there are nevertheless benefits to be achieved from providing attractive schemes and facilities to encourage greater levels of these activities. At the same time, other policies, such as demand management or 'Smarter Choices' will encourage the use of alternative modes and hence will stimulate walking and cycling, if the supplementary measures are in place.

5.173 The expansion of initiatives under the heading of 'Smarter Choices' can have a positive impact on the overall volume of travel and the level of car use. Some of the policies contained in 'Smarter Choices' are within the responsibility of the public sector including workplace travel plans, school travel plans, residential travel plans, car sharing and car clubs. The local authorities within the South East Dorset area already actively pursue these measures, although to differing degrees, and it is vital that renewed and enhanced efforts are made to expand their coverage. This will require a continuous application of resources to maintain the impetus and continue the level of benefits. Expansion of personalised travel planning would play a particularly important part in the overall smarter choices package, by providing increased information about the availability of sustainable alternatives and hence encouraging increased use of these modes.

5.174 The impact of 'Smarter Choices' would be strengthened and supported by other policy measures such as demand management which would provide further encouragement for the use of alternative modes. It is estimated that a comprehensive policy of 'Smarter Choices' combined with other complementary measures could reduce person trips by car by around 10%. Other elements of 'Smarter Choices' could include teleworking, teleconferencing and home shopping; while these features would contribute to the use of alternative modes, much of the initiative behind them would come from market forces with the savings and benefits obtained by the private sector. Hence, because they are generally outside the control or influence of local authorities, their promotion is not included in the SEDMMTS transport strategy.

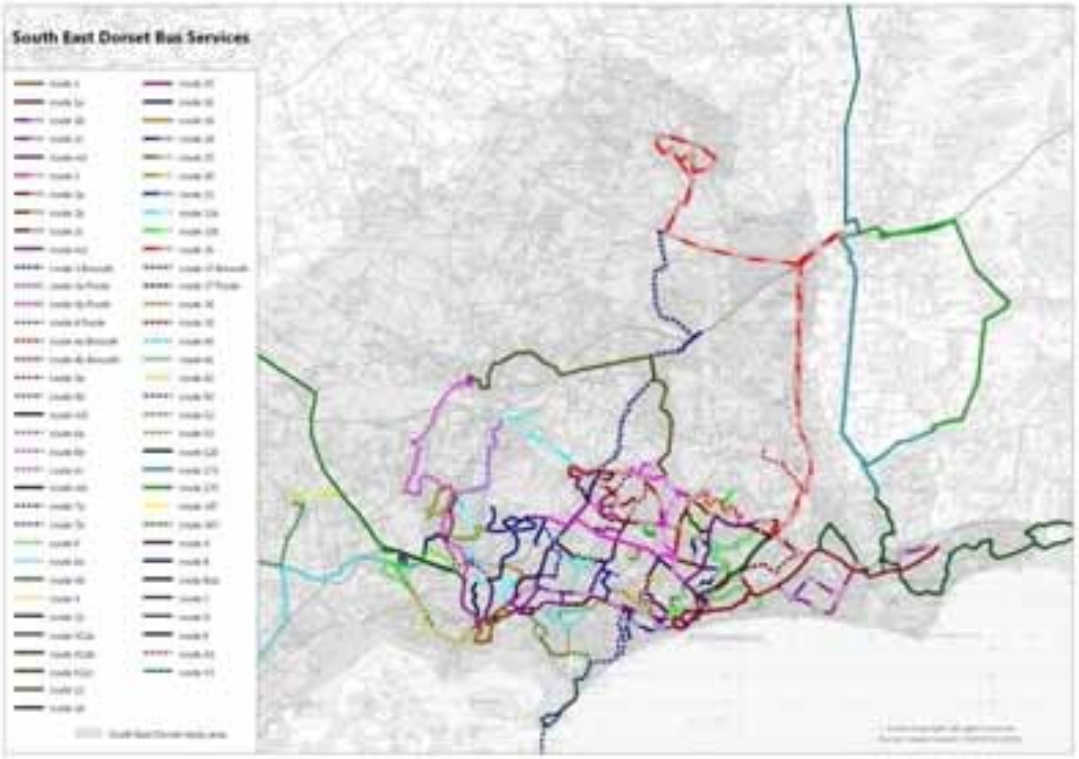
5.175 It will be important to develop the full potential of the range of approaches to encourage alternative modes before embarking on major infrastructure developments. However, there needs to be awareness that the local authorities will need to devote resources to the continued promotion of the measures if the full impact is to be achieved and maintained.

6. Public Transport Measures

Introduction

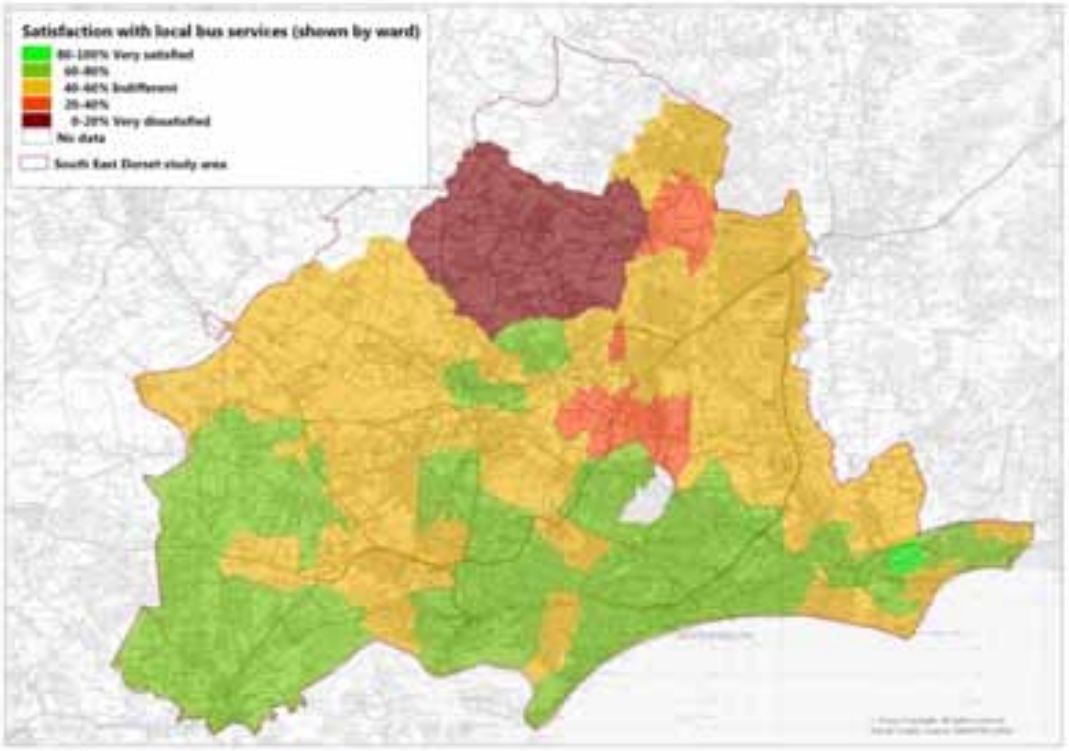
6.1 Public transport represents a key element of the SEDMMTS transport strategy for the sub-region. There are a number of challenges to be resolved in the current public transport network which will experience further pressure in the future with the prospect of significant growth in the demand for travel within the timescale of the SEDMMTS study. Figure 6.1 shows the main bus routes in South East Dorset and the bus routes that extend beyond the study area.

Figure 6.1 – Bus Services



6.2 From the consultation and other surveys of South East Dorset residents, satisfaction with local bus services is generally higher in the urban areas (over 60%); satisfaction is less than 60% towards the north of the study area, with some areas under 40% (Figure 6.2).

Figure 6.2 – Satisfaction with Local Bus Services[24]



6.3 Figure 6.3 shows the requests for improvements made by the bus operators which have been taken into account when developing the bus priority measures including the Bus Showcase Corridors (BSCs).

6.4 From views expressed in the consultation, the current public transport system contains a number of limitations including:

- services to the rural areas, particularly to the north, are considered to be poor and are perceived to be getting worse – although bus patronage has seen recent increases, this is concentrated on the conurbation, which is better served (see accessibility maps in Figure 6.4 and Figure 6.5);
- indirect bus services – the most popular option for encouraging people to switch from cars raised by consultation respondents was “more direct bus services”, particularly in the outer areas such as Wimborne and Colehill, Verwood, Ferndown, Ashley Heath and West Moors, as well as central and western Poole and Christchurch/Highcliffe;
- infrequent bus services – in the consultation, 40% of respondents indicated that “more frequent bus services” would encourage them to switch modes, particularly those living in Wimborne and Merley, West Moors, western Poole and Highcliffe;
- the locations of rail stations, some of which no longer reflect current passenger travel patterns;
- the impact of congestion on bus services, creating increased journey times and worsening reliability – about 20% of consultation respondents said they would travel by bus if buses were more reliable;

[24] Data source: National Highways & Transportation Survey (2009)

Figure 6.3 – Bus Operator Issues/Requests for Improvements 1995-2007

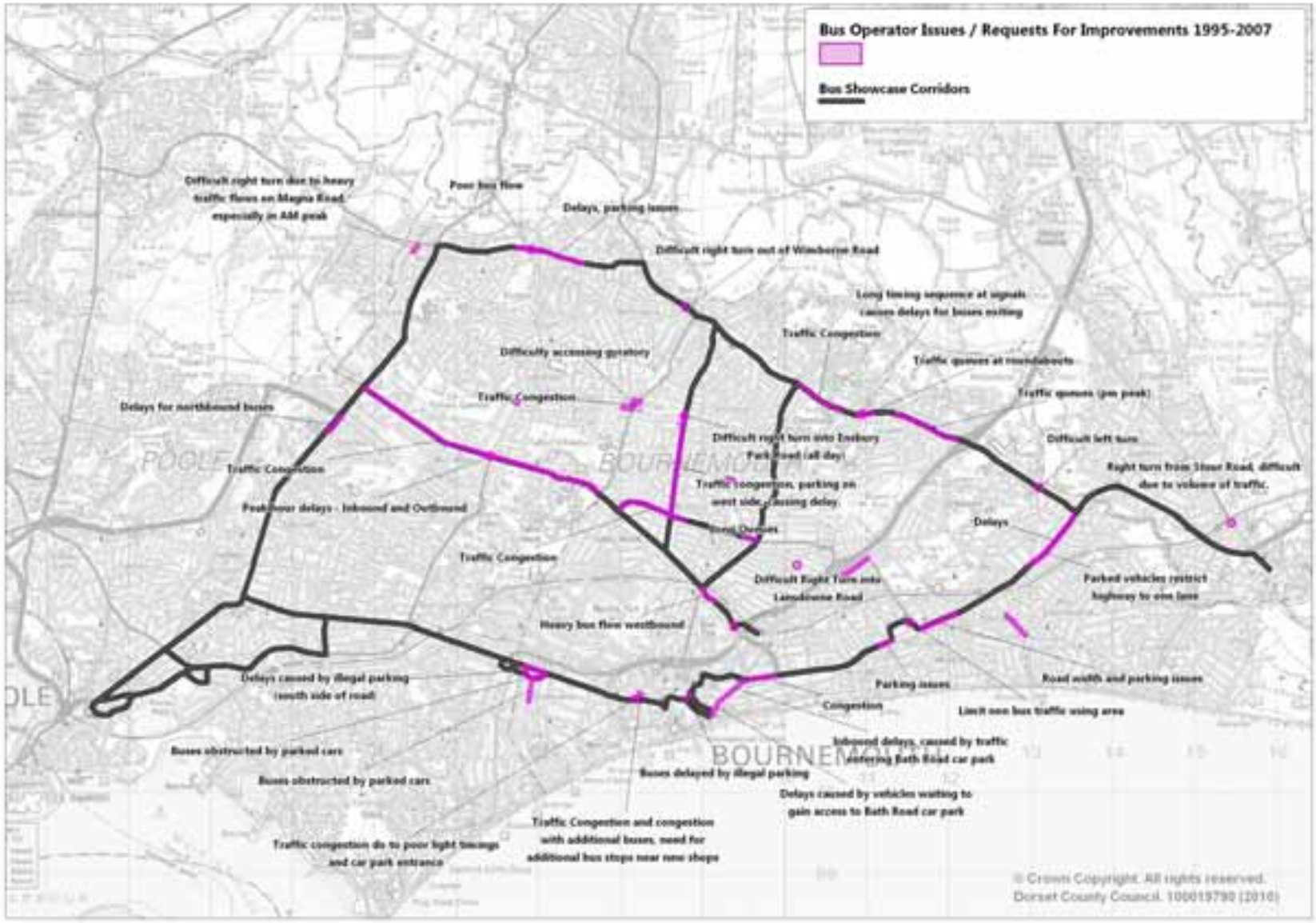


Figure 6.4 – Public Transport Access to Bournemouth Town Centre

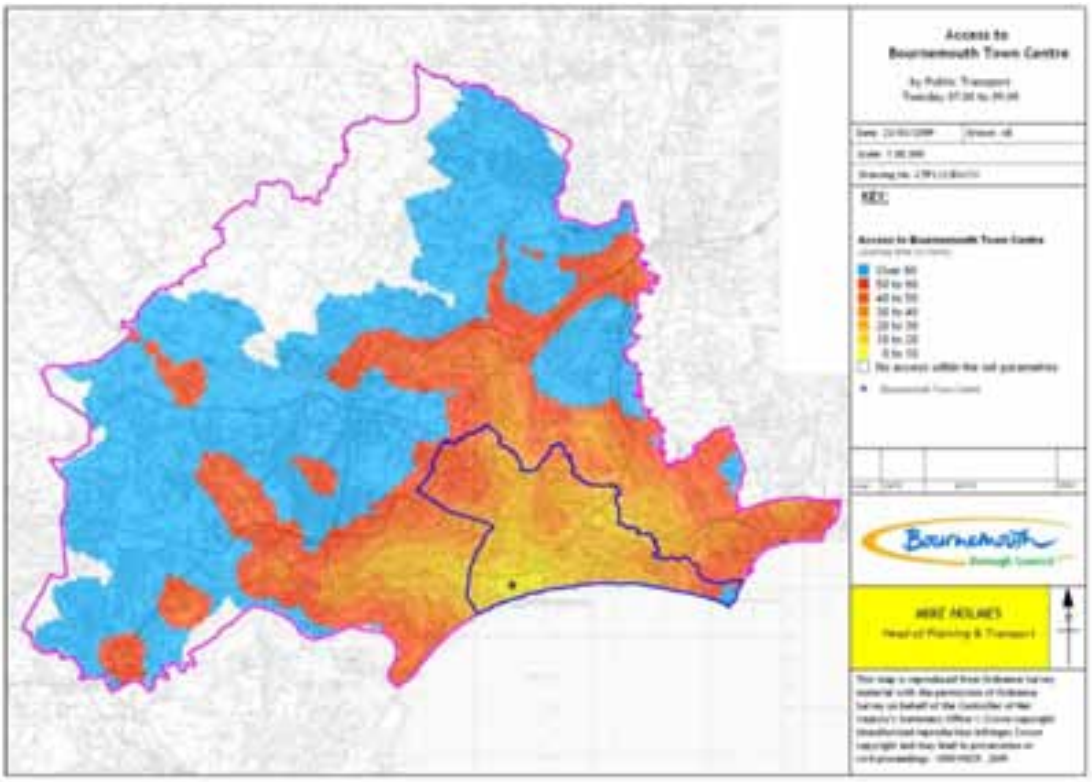
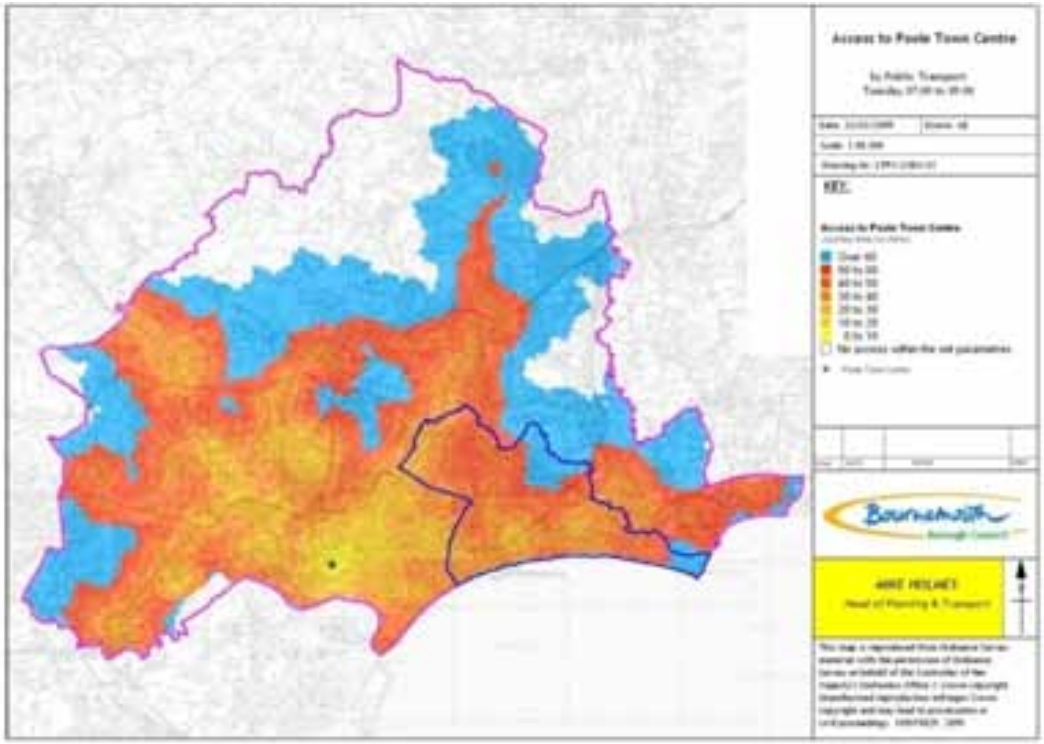


Figure 6.5 – Public Transport Access to Poole Town Centre



- the shortage of bus priority measures to counter the effects of the increased congestion;
- the need for better integration between bus and rail services, including ticketing arrangements; and
- conflicts between long distance and local rail services, leading to irregular service patterns.

6.5 The analysis summarised in Chapter 3 highlighted that, in the future, with the increased population and employment growth across the study area, if no improvements are made to the transport system, then the additional congestion will create significant problems for the operation of bus services with consequent reductions in the level of passenger demand. The rail services are not affected directly by the increased congestion on the road network and, despite significant increases in car ownership across the study area, there are likely to be some increases in rail patronage (9%) although mode share remains the same (2%) between 2008 and 2026 (Do Minimum) as trips also increase on the other modes.

6.6 In order to provide an attractive and competitive public transport system, it is necessary to consider a range of measures, each directed as specific aspects of the travel market, including:

- improvements to urban bus services;
- enhancements to inter-urban services – bus and coach;
- introduction of park and ride;
- creation of Bournemouth Airport Interchange/Hub;
- improvements to public transport interchanges;
- smartcard and other ticketing improvements;
- formation of a single Integrated Transport Authority;
- enhancements to rail infrastructure and services; and
- introduction of rapid transit (DARTS).

6.7 Each of these different aspects is considered separately in this chapter.

Urban Bus Services

6.8 The SEDMMTS builds upon the 2009 QBP Agreement which sets out how the authorities and bus operators will work together to improve the reliability of bus services and increase passenger confidence in bus services. A Reliability Improvement Document for Bournemouth, Poole and Christchurch conurbation (October 2008) is appended to the partnership document which identifies problematic locations.

Bus Showcase Corridors

6.9 In the short to medium term, enhancements to the urban bus networks represent the most effective means of improving public transport services in the study area. A recurring theme in the consultation was the desire for faster, more reliable and more direct bus services. In the commercial environment of bus operations, to be effective, any improvements to the network of bus services would need to be a partnership between the local authorities and the bus operators, with each contributing elements to an overall enhancement in operations. The approach is best exemplified by the Bus Showcase Corridors, with the local authorities introducing priority measures to improve the speed and reliability of bus services, together with better passenger waiting facilities, while the operators introduce aspects such as new vehicles, ticketing systems and revise their operating practices.

Bus Showcase Corridor Development

6.10 A series of Prime Transport Corridors in Christchurch, Poole and Bournemouth was set out in the Joint Local Transport Plan 2 (2006-2011) and these formed the basis for the further development of Bus Showcase Corridors in the strategy. The BSC work was guided by the DfT document 'Bus Priority – The Way Ahead', which notes that a corridor approach should "integrate bus lanes /facilities with enforcement and traffic control (UTC) improvements…using selective vehicle detection and traffic management software".

6.11 In developing the BSCs, the study considered measures for medium-term implementation and, in the design, the proposals have been constrained within the highway boundary, thereby avoiding the need for land purchase and helping to accelerate their implementation. Long-term measures were subsequently considered in less detail, where land purchase may form part of the package. Whilst the medium-term proposals within this report have been kept within the highway boundary, a small number would require major changes to the highway network. The objective of the strategy was to put forward proposals for infrastructure improvements to deliver a step-change in bus services within South East Dorset. As there is a finite amount of space within the highway boundary, the medium-term proposals give priority to bus movements and may therefore adversely affect other traffic.

6.12 On all the corridors under consideration, there is a wide variety of highway types, widths and user types and the nature of the highway changes quickly along each corridor. This creates traffic problems with 'bottle-necks' and congested sections, causing problems for bus movements. This, in many cases, restricts the options for bus priority as any measures that might be of benefit may simply not fit in the available space or may severely disadvantage other road users. On some corridor sections, options for utilising different parallel routes for buses and other traffic may be appropriate. This would primarily involve changes to the signing to direct traffic but could also require traffic management measures to restrict the free movement of general traffic along designated key bus corridors.

6.13 The investigation took into account potential constraints on proposals such as environmental issues, availability of (highway) land, existing parking restrictions, bus operator requests and some historical scheme information where measures have been proposed in the past but not implemented.

6.14 There are significant problems to the smooth operation of bus services caused by readily-available parking throughout the corridors and this needs tackling on a corridor basis as an essential part of the showcase ethos. Free parking in town and suburban centres encourages car drivers to circulate to find a vacant place. This creates general problems inhibiting bus movements as well as causing delays to buses due to private vehicles accessing and exiting from parking bays or spaces. A parking strategy is an essential component measure for any bus priority schemes in the conurbation. An holistic solution to parking is not necessarily to reduce overall parking availability but instead to concentrate low cost or free parking on road/in car parks near shopping areas but off the main corridors, where possible.

6.15 The development of the BSCs took into account the powers and duties of the authorities as noted in the Bus Quality Partnership (BQP) document including a review of the Reliability Improvement Document which lists areas of concern for the operators and the current plan/action to address these problems.

6.16 The development of the BSC measures took into account the following details within the corridors:

- personal injury accidents within the corridors between 2006 and 2009;
- current and forecast traffic volumes and turning movements at individual junctions;
- bus volumes by route;

- committed highway improvements, including pedestrian and cycle enhancements, and junction measures;
- existing bus facilities – stops, lay-bys, bus lanes, etc;
- various design guidance documents for bus priority measures, signing, cycle and pedestrian facilities; and
- current Traffic Regulation Orders (TRO).

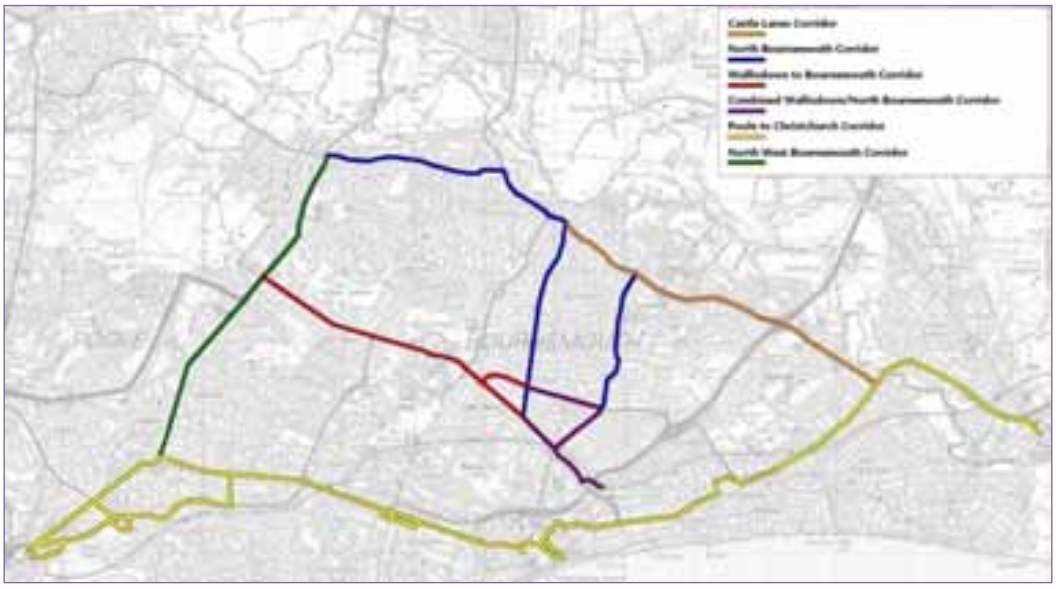
6.17 The following is a list of measures considered for use on the BSCs:

- bus lanes – although most sections of the corridors are not wide enough for bus lanes in each direction and many are not even wide enough for bus lanes in one direction;
- bus pre-signals – a case-by-case assessment was undertaken at each potential location to determine if there would be benefit from introducing these measures;
- removal of parking – where parking is causing delays and there is no alternative location for the bays;
- relocation/rationalisation of parking – the preferred option is to maintain the current provision without affecting bus services;
- relocation of bus stops;
- improved and standardised street furniture – shelters, information displays, seating, raised kerbs, possibly build-outs and litter bins;
- changes to traffic lanes and junction layouts;
- optimisation of traffic signal junctions using UTC to ensure that they operate as effectively as possible, with priority given to the signal stages containing bus movements;
- bus priority at signals using Selective Vehicle Detection (SVD) or Automated Vehicle Location (AVL) in conjunction with traffic control (UTC) systems – ideally to operate only when a bus is delayed against its timetable. AVL is satellite based, tracking all buses on the BSCs and can feed into the UTC system to amend the signal timings at specific junctions to assist delayed buses as well as informing the RTI system;
- restrictions on turning movements for general traffic;
- redirection of general traffic onto other routes – primarily on Boundary Road for north-south movements, using improved signing for general traffic but possibly also with traffic management measures;
- selective improvements for general traffic which would also assist buses;
- new bus interchanges from where more direct buses would run to town centres and improvements to facilities and operation of existing interchanges;
- introduction of express bus services into the town centres;
- urban realm improvements;
- re-routing of bus services;
- support for potential park and ride sites; and
- further support for the measures by enforcement, real time information (RTI), new buses, increased frequency of services, and publicity, including a link with personalised travel planning initiatives.

Figure 6.6 – Contra Flow Bus Lane at Poole Civic Centre

6.18 The North Bournemouth and A35 corridors were identified as offering the greatest benefits and hence were given the highest priority. This was shown by the application of the transport model which indicated a greater increase in bus patronage on links on these corridors if BSC measures were included. The North Bournemouth corridor benefits the potential Park and Ride site at Northbourne (which would be delivered in the longer term) whilst the A35 Corridor would build upon the recent success of improvements along the corridor. The second tier of corridors comprises Castle Lane East/West and those linking the potential Mannings Heath Park and Ride site with Poole and Bournemouth (Poole to North-West Bournemouth and Wallisdown Corridors respectively). Figure 6.7 shows the location of the corridors.

Figure 6.7 – Bus Showcase Corridors



6.19 It is noted that there are a number of 'bus boarder' and raised kerb bus stops installed along the BSCs but a more consistent approach to bus stop appearance and design across the three authorities would be beneficial. This could also include a consistent, high-quality, shelter design. This approach regarding consistency is considered to be critical for all elements of the BSC approach across local authority areas – if all measures that are implemented along each corridor are consistent (both in appearance as well as operation) then it emphasises a showcase corridor to users. This consistency could be emphasised and enforced by the introduction of an Integrated Transport Authority which would ensure compatibility across the three authorities. It should be noted that, once changes are made along the BSC corridors, a higher level of enforcement would be required to ensure that full effectiveness of the BSC concept is achieved.

6.20 All buses should have GPS transmitters/transponders fitted to maximise the potential for bus priority measures. There is the potential to unlock significant benefits using Automated Vehicle Location/Monitoring within the BSCs, in conjunction with an expansion of the existing urban traffic control (UTC) system. In addition, improvements should be made to fare payment systems and ticketing, such as the introduction of smartcards, to reduce dwell times at stops.

6.21 It is recommended that priority should be given to extending the existing UTC systems to cover the entirety of the BSC networks (as shown in Figure 6.7) as well as exploring opportunities for the three UTC systems to be integrated as far as possible. It is considered to be essential that any updating of signal control not only improves the operation of signals along the corridor in general but also maximises the benefit to bus services. To this end, the use of various forms of bus priority using vehicle detection or location technology or pre-signals is seen as essential at most, if not all, junctions along the corridors. It is understood that the additional requirements of the BSC junction priority measures will increase the pressures on the capacity of the authorities' UTC systems to the extent that a general overhaul of the traffic control system would be required. This is covered in Chapter 8.

6.22 It is recommended that a full study of bus operations within Bournemouth town centre is undertaken, for example as part of the Bournemouth Town Centre Vision work. The current arrangement (with bus stops within the carriageway in the centre of the town) is felt to be the best arrangement for maximising the use of bus services as it provides the maximum convenience for passengers. However, it currently has a number of challenges to achieve an effective and efficient operation, particularly due to conflicts with other vehicles (taxis and loading/unloading goods vehicles) as well as insufficient space at the stops to cater for the frequent lay-over of various bus services.

6.23 The range of vehicles having access to the town centre (and the times of access) should be reviewed. The locations of the stops and any other bays (for taxis and loading/unloading) should also be reviewed to identify locations for alighting, lay-over and picking up. Means to restrict access by vehicles other than buses at key times of the day should be explored, as well as the way in which general traffic can be prevented from entering the restricted area, including increasing enforcement.

6.24 The strategy is looking to achieve a step change in service along a network of corridors, and so changes have been proposed that would make a significant difference for bus services. The proposals in the strategy are seen as a package of measures for implementation on a large scale; their implementation would assist the delivery of the BSC package in creating a step-change in bus services.

6.25 It should be noted that not all of the benefits that can be derived from the BSC proposals are quantifiable. Factors such as improvements to the facilities at stops, real-time passenger information, enhanced reliability of bus services and greater quality of vehicles and the overall journey 'experience' are all likely to be perceived by passengers as an improvement to bus services. However, the impact of these measures on bus passenger levels is difficult to predict.

Poole to Christchurch (A35) Corridor

6.26 This corridor was identified as being one of the two highest priorities for identification of schemes. Therefore, medium term proposals have been investigated throughout the corridor and are presented in Figure 6.8 which includes an overall summary of the measures. The corridor extends across the conurbation and passes through parts of the three authorities. It will therefore require coordination between the authorities to achieve a consistent package of measures and to ensure an integrated implementation programme.

6.27 The A35 is probably the most heavily bussed corridor in South East Dorset and has been the subject of significant increases in operations by the two principal operators (Yellow Bus and Wilts & Dorset) to the extent that there is intense competition between the operators along the corridor. In view of the duplication of services between operators along the corridor, with particular impacts on the occupation of bus stops on Gervis Place in Bournemouth, there may be an opportunity to explore with the operators the potential for a joint rationalisation of services, using a Statutory Quality Partnership as has recently been initiated in Oxford. This is considered in more detail later in this chapter.

North Bournemouth Corridor

6.28 This corridor was identified as being one of the two highest priorities for identification of schemes. Therefore, medium term proposals have been investigated throughout this corridor and are presented in Figure 6.9 which includes an overall summary of the measures.

Figure 6.8 – Overview of the Proposals for the Poole-Christchurch (A35) Corridor

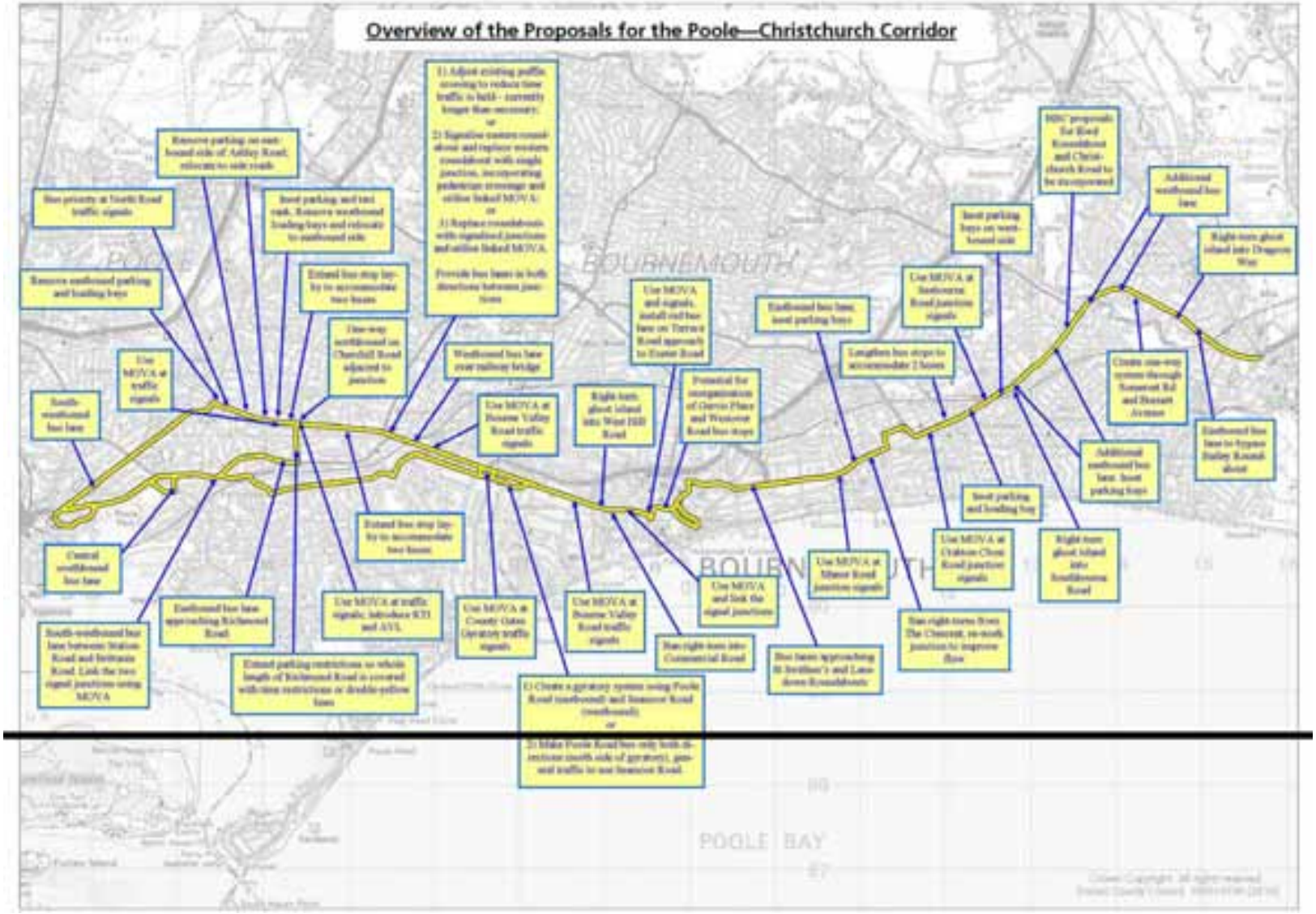
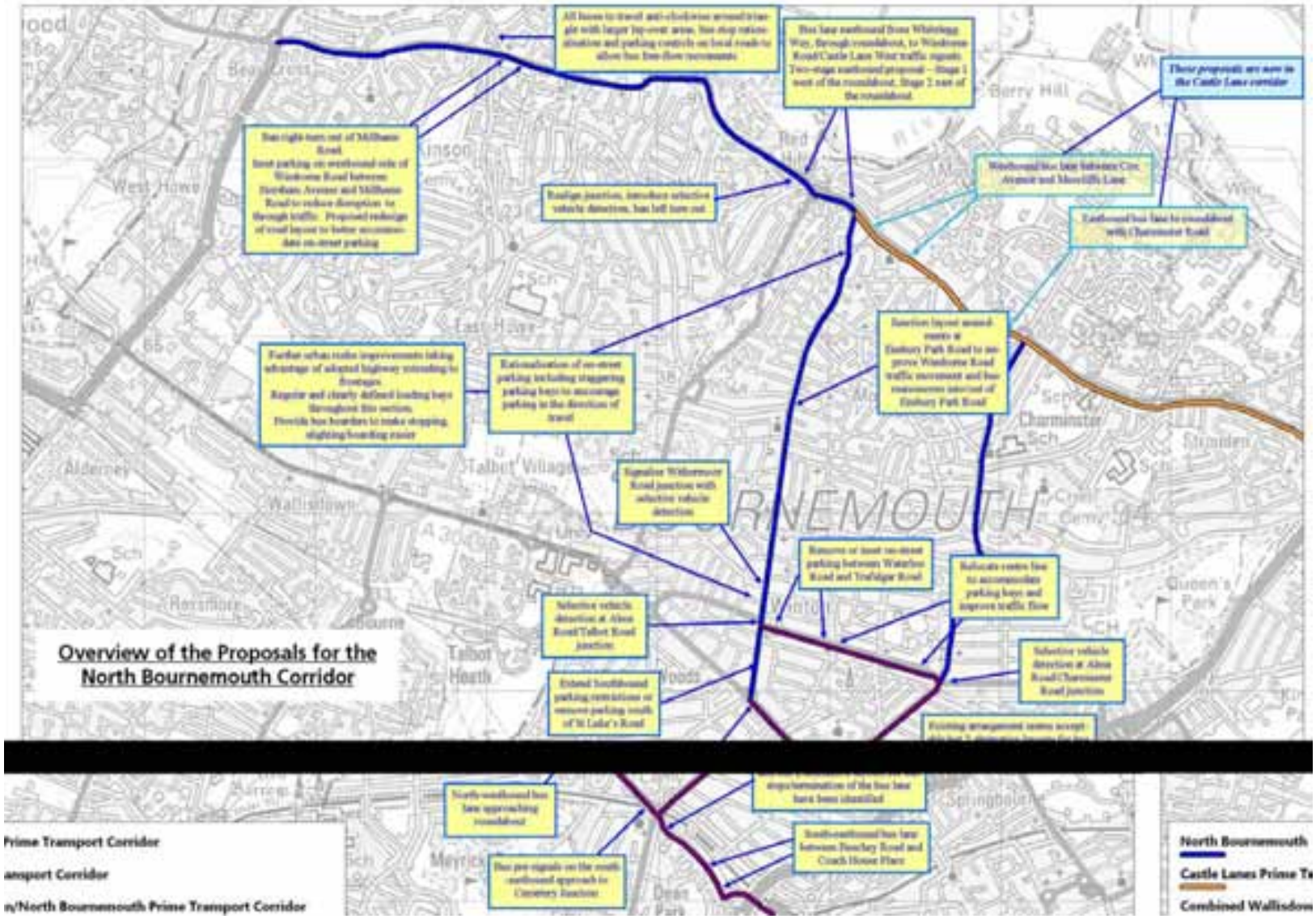


Figure 6.9 – Overview of Proposals for the North Bournemouth Corridor



Longer-Term Proposals

6.29 Longer-term proposals have been considered that would further enhance the showcase nature of the corridors; these measures, which could include elements outside the existing highway boundary and hence could involve some land acquisition and more significant changes to traffic flows and routes, are shown in Figure 6.10 and Figure 6.11.

6.30 The potential introduction of Park and Ride sites within the strategy is described in detail later in this chapter. Three potential Park and Ride sites have been taken into account in the longer term proposals (see Figure 6.10) for the BSC network:

- Manning's Heath;
- Northbourne; and
- Riverside Avenue.

6.31 In the longer term proposal plans, the three sites are shown with links into/extensions of the proposed BSC network where appropriate. In the initial overview of longer term proposals it is appropriate to take account of the potential introduction of these sites. Park and Ride sites should also include secure parking for cyclists/powered two wheelers.

6.32 As part of the longer term proposals, several other locations/sites have been taken into account outside the medium term BSC network; links to these locations are shown in Figure 6.11 as part of an expanded network:

- Bournemouth Airport;
- Ferndown (Uddens) Business Park; and
- areas beyond the centre of the conurbation, e.g. Wimborne and Highcliffe.

6.33 Longer term proposals were considered for the Christchurch/Highcliffe quarter. Whilst there is a high frequency of services in Christchurch and Somerford, there are currently only two services an hour further east in Highcliffe itself. These are routed along residential roads, with limited scope for improvements to bus priority. Significant increases in frequency and patronage would be required to make any bus priority measures viable in the area.

Powered Two-Wheeler Use of BSC Bus Lanes

6.34 At this stage in the development of the strategy, there is no clear reason to resist the inclusion of powered two-wheeler (PTW) vehicles from the set of vehicles permitted in the proposed bus lanes within the BSCs. However, it is recommended that further consideration is given to this matter in the detailed design and implementation, taking into account the number of PTWs along each corridor, if the proposals are progressed at a later date.

Figure 6.10 – Longer Term Proposals Supporting Potential Park & Ride Sites

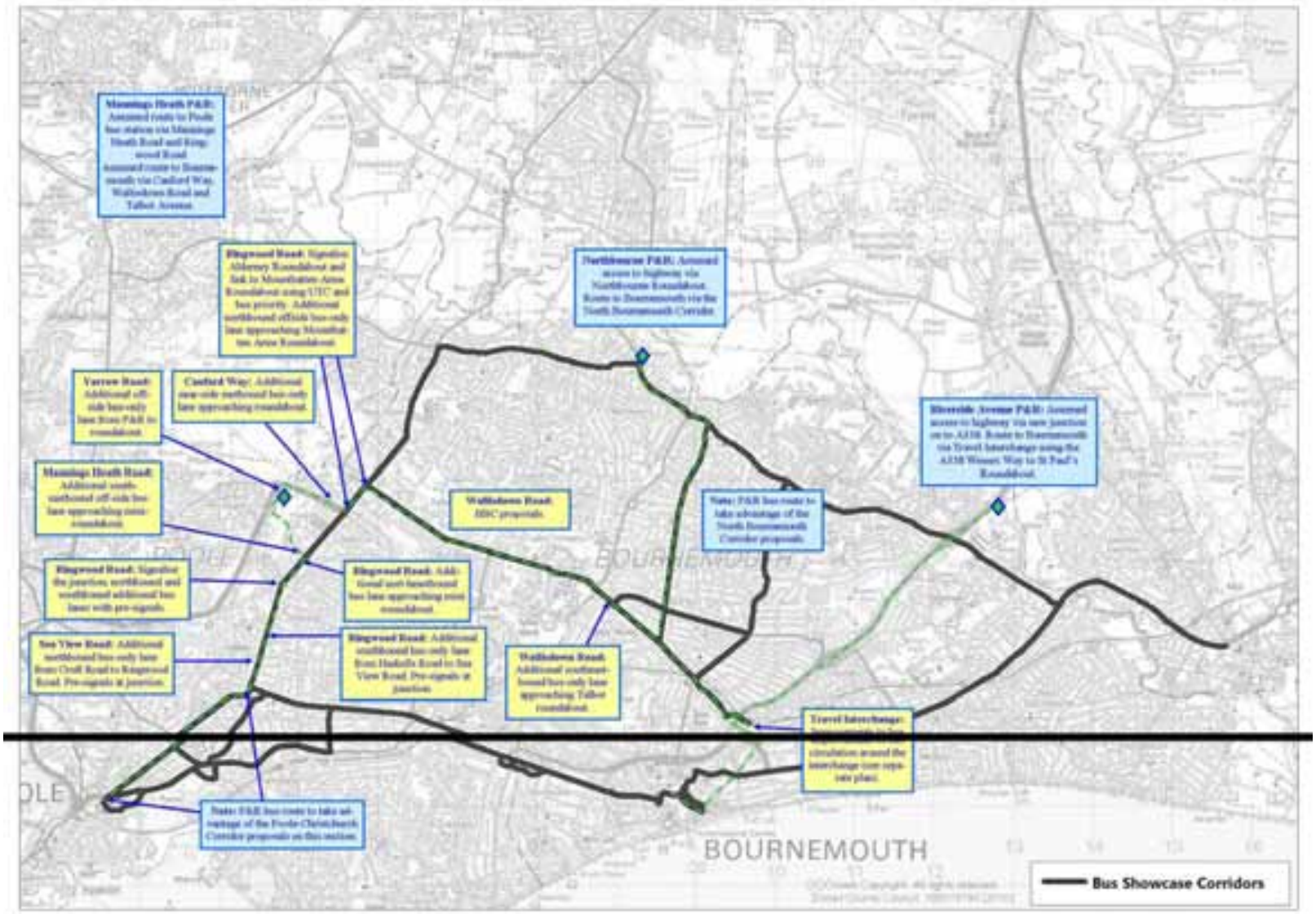
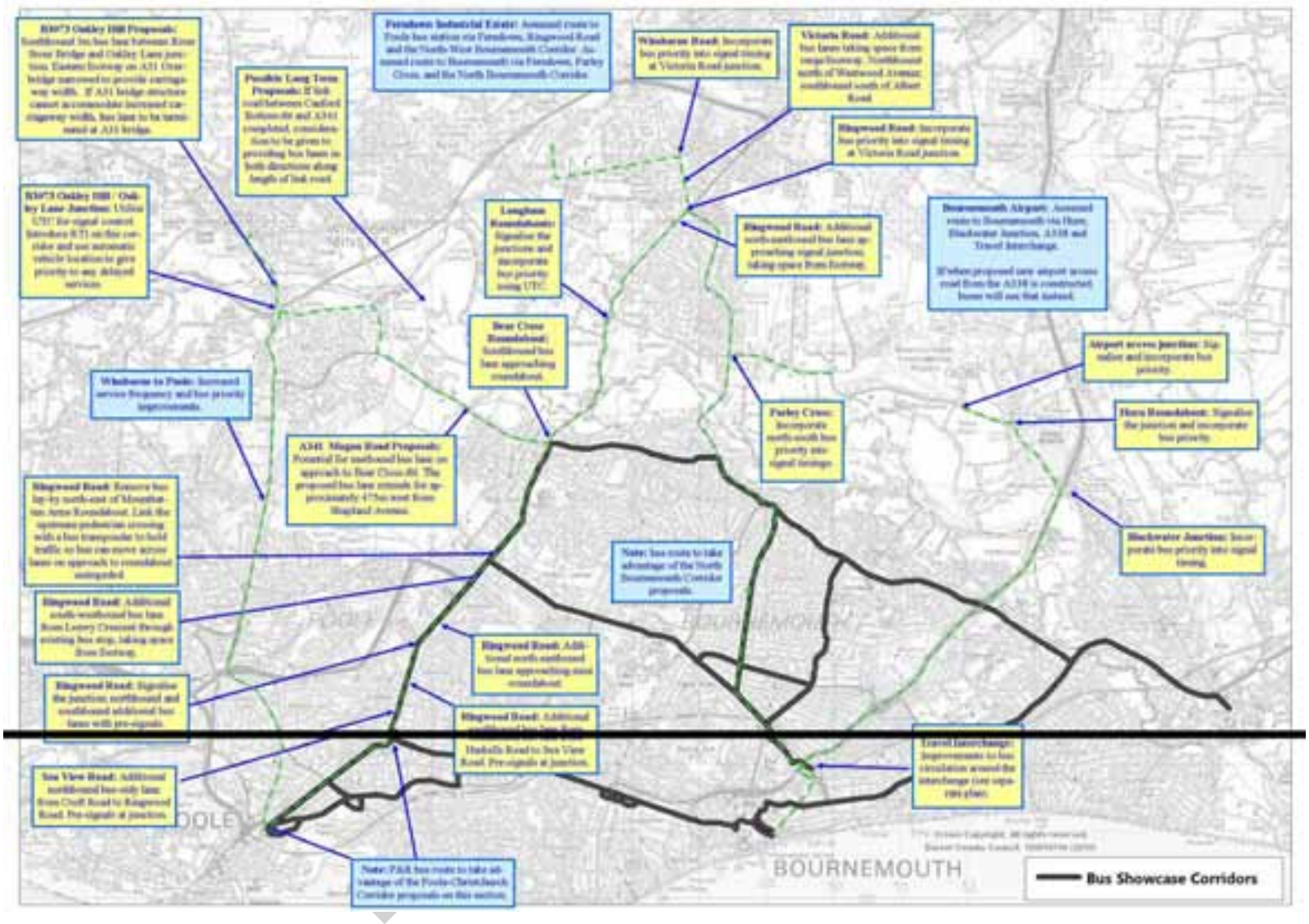


Figure 6.11 – Longer Term Proposals Covering Wimborne, Ferndown and Bournemouth Airport



High Occupancy Vehicle Use of BSC Bus Lanes

6.35 Consideration has been given to widening the range of permitted vehicles that can use the proposed bus lanes to include high occupancy vehicles (HOVs). Each section of proposed bus lane has been assessed for its suitability to carry HOVs. The two primary considerations in this assessment were the frequency of the bus services that would use the lane and the practical ease with which the lane might cater for a significantly higher number of vehicles. This latter point is a concern in many locations where two streams of traffic (from the HOV lane and the general traffic lane) would need to merge close to a junction. Several bus lane locations have been highlighted for possible use by HOVs. These are all on routes where there is a relatively low hourly bus frequency:

- A3060 Whitelegg Way to Wimborne Road eastbound, either side of Redhill Roundabout;
- A3060 Castle Lane West westbound, east of the signalised Wimborne Road junction;
- A3060 Castle Lane West eastbound, approach to Charminster Road Roundabout; and
- A35 Barrack Road westbound, between The Grove and Iford Roundabouts.

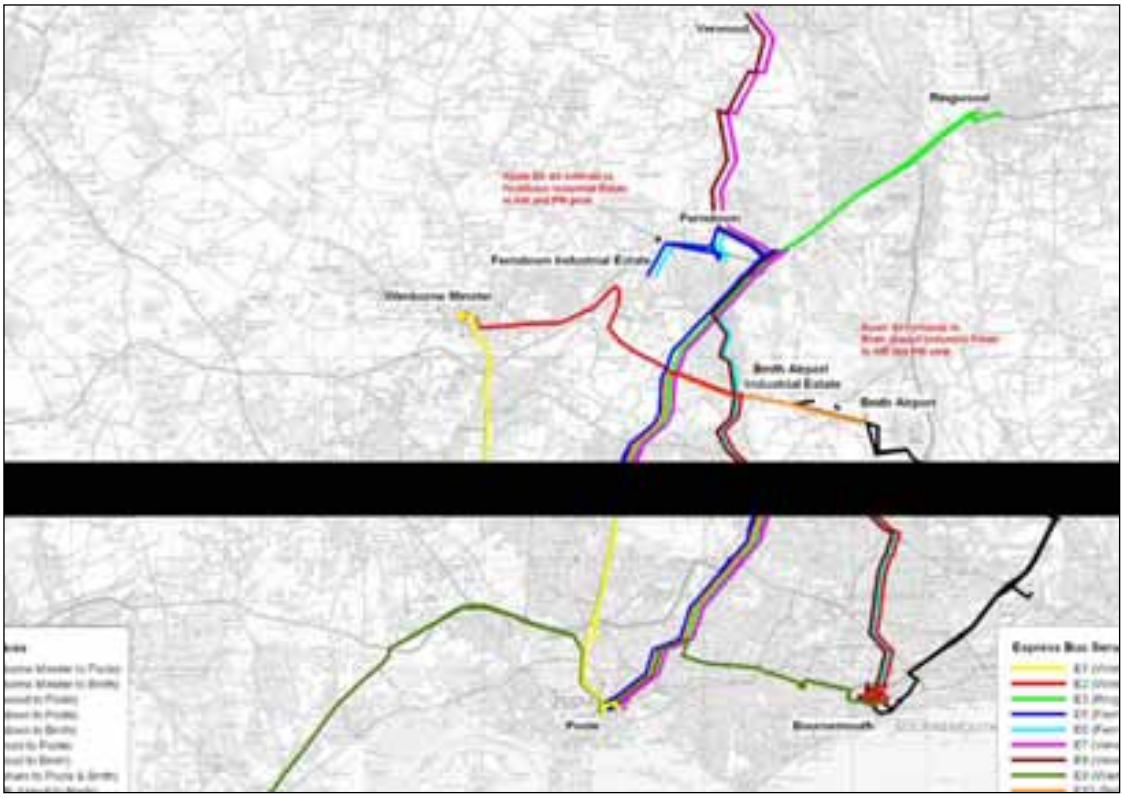
6.36 The experience of HOV lanes on the congested dual two-lane Avon Ring Road near Bristol has been successful. The HOV lane is available for buses, taxis and cars with 2+ occupants. The lane has been extended from the original 750m to 1.2km in length (comprising two sections separated by a roundabout) and operates in one direction in the morning peak only. The lane has led to an increase in efficiency; the proportion of single occupancy vehicles has fallen from 80% to 68%, and traffic levels have increased by 10% (as a result of vehicles re-routeing from parallel roads) as the lane has 'smoothed' flows and allowed higher throughput. Journey times for all vehicles have fallen from 20 minutes to 6 minutes in the HOV lane and 12 minutes in the mixed use lane.

Express Bus Services

6.37 In association with the introduction of the BSCs, as has been indicated earlier, there is the opportunity of enhancing the network of express services providing links from communities outside, or on the periphery of, the conurbation into Poole and Bournemouth. The consultation process highlighted the public's strong desire for faster and more direct bus services and, combined with the benefits from the priority measures, a network of enhanced express bus services was identified, as shown in Figure 6.12.

6.38 Not all of the routes would benefit from operating along the BSCs and hence gaining the journey time savings through the priority measures, but where feasible and without incurring a significant detour from the most direct route, the express services would produce a reduction in journey times. In parallel with the introduction or re-routeing of the services, the package of express services should include other features such as limited stops, specific branding and promotion and perhaps a different type of vehicle to reflect the longer journey distances and the diminished passenger boarding/alighting activity along the route.

Figure 6.12 – Express Bus Routes



Bus Service Enhancements

6.39 Taking into account the powers available to the local authorities, the broad options for public transport bus service procurement are:

- market provides – local authority has no control over frequency, quality or fare level;
- Voluntary Partnership Agreements (VPA) – i.e. Quality Bus Partnership (QBP) – 'agreements (either formal or informal) between one or more local authorities and one or more bus operators, for measures to be taken up by the joint partners to enhance (mainly commercial) bus services, in a defined area, to meet the strategic objectives of the agreement'. A QBP was signed in 2010 between the three local authorities, Transdev Yellow Buses, Wilts & Dorset, and Shamrock (on behalf of the smaller operators), replacing the agreement signed in 1999;
- Quality Partnership Schemes (QPS): the local authority provides particular facilities at specific locations along the routes used by local bus services, and operators of local services who wish to use those facilities agree to provide services of a particular standard; and
- Quality Contract Schemes (QCS) - the local authority determines what local services should be provided in the area concerned (including the routes, the timetable and the fares) and lets contracts with bus operators, granting them exclusive rights to provide services to the authority's specification.

6.40 The A35 corridor which is a prime component of the BSC package is currently the basis for significant competition between the two main operators – Yellow Buses and Wilts & Dorset. The impact of the BSC scheme would be to improve the reliability of operations for both operators and there may be a case for an element of cooperation between the operators along the corridor. A Statutory Quality Partnership scheme along the A35 corridor could be a solution to the high number of buses on key sections (e.g. through Christchurch and on Gervis Place in Bournemouth) operated by the two main bus operators, whilst maintaining a suitable level of service for the

public. In Oxford, under a Statutory Quality Partnership scheme, the two main bus operators now run a joint timetable on the four busiest corridors on which they currently compete. Instead of a bus from each operator arriving at a stop every 5-6 minutes, a bus arrives every 4-5 minutes from alternate operators. A smartcard ticketing system has been introduced to allow people to travel on both company's buses. Oxfordshire County Council is also to investigate whether Bus Quality Contracts could reduce the council's spending on bus services, by packaging together all commercial, subsidised, social and school services. The authorities may therefore wish to consider promoting a Statutory Quality Partnership scheme with the operators on the A35 corridor. As a bi-product, with the subsequent reduction in the number of buses required to operate the A35 services, there may also be the opportunity for the operators to cascade the new vehicles currently used on this corridor onto other routes, to the benefit of passengers.

6.41 The BSC proposals will provide priority measures which benefit not only the bus services within the main urban transport corridors in the conurbation but also services from external communities in Dorset which enter the conurbation along these corridors, particularly North Bournemouth including Wimborne, Verwood, etc. The desire for improved bus services from outlying communities into the conurbation, especially from the north, was highlighted in the consultation. There would therefore be an opportunity for increased express or regular stopping services from these areas as part of the BSC package and the authorities could include such improvements within any Quality Bus Partnership agreements that are developed in parallel with the BSC proposals.

6.42 The proposed land use developments described in Chapter 3 include a number of industrial and employment areas located on the edge of the main conurbation area, e.g. at Uddens/Verwood and north of Bournemouth Airport. With 'out of town' developments such as these, there is the potential for significant levels of car use for the journey to work unless good bus services are provided. The content of the planning approvals and the resulting formal workplace travel plans will determine the opportunity for introducing bus services with some form of employer funding. Any new services would, of course, need to tie in with starting and ending times of the workplaces and in some cases, the routes could benefit from the priorities provided by the BSCs.

Programming BSCs

6.43 In the implementation of the BSC measures in the preferred strategy, it is recommended that the different types of measures are progressed in the following order:

- signal amendments – introduction of signals, bus pre-signals, upgrade of existing signals or changes/relocation of pedestrian crossings;
- junction improvements including large-scale changes and more minor realignments/ reconfigurations;
  - bus stop changes including infill of lay-bys and the introduction of bus-boarder build-outs;
  - introduction of bus lanes with red surfacing for the full width;
- parking/loading amendments including construction of bays and relocation of spaces; and
- Traffic Orders for banning turning movements and changes to parking restrictions.

6.44 Progressing the A35 and North Bournemouth corridors in tandem would allow the three authorities to work in partnership on a corridor that has already seen significant improvements and a step change in patronage, whilst also tackling another corridor with high potential for step change in patronage.

Bus Showcase Corridor Costs

6.45 The A35 and North Bournemouth BSCs are collectively estimated to cost £11.3m, including allowances such as preparation and risk (Table 6.3).

Table 6.1 – A35 and North Bournemouth BSC Costs (£million, 2010 prices)

	A35	North Bournemouth
Signal amendments – introduction or upgrade	£1.09	£0.14
Bus stop changes	£0.16	£0.02
Introduction of bus lanes	£0.82	£0.82
Parking/loading amendments	£0.86	£1.26
Traffic Orders	£0.05	£0.02
Junction Improvements	£0.11	£0.49
(A) Works Cost - Sub-Total	**£3.09**	**£2.75**
(B) Supervision, Design, Traffic Management and Client Cost *(2.5%, 5%, 6% and 7.5% on top of works costs respectively)*	***£0.65***	***£0.58***
(C) Total Capital Cost = (A)+(B)	**£3.74**	**£3.33**
(D) Total Scheme Cost (includes Preparation and Optimism Bias)	**£5.98**	**£5.32**
(E) Preparation and Capital Cost Split:		
• Preparation:	£0.60	£0.53
• Capital Cost:	£5.38	£4.79

6.46 Table 6.2 shows indicative costs for the remaining BSC proposals. These have been calculated on a cost per km basis, based on the costs developed for the A35 and North Bournemouth corridors:

- longer term BSC: North-West Bournemouth to Poole, Castle Lane and Wallisdown Road; and
- extended BSC: covering Wimborne, Ferndown and Bournemouth Airport, and supporting Park and Ride sites.

Table 6.2 – Longer Term and Extended BSC Costs

	Longer term BSC	Extended BSC
(A) Works Cost	**£2.75m**	**£3.60m**
(B) Supervision, Design, Traffic Management and Client Cost *(2.5%, 5%, 6% and 7.5% on top of works costs respectively)*	£0.58m	£0.76m
(C) Total Capital Cost = (A)+(B)	**£3.33m**	**£4.36m**
(D) Total Scheme Cost (includes Preparation and Optimism Bias)	**£6.97m**	**£6.31m**
(E) Preparation and Capital Cost Split:		
• Preparation:	£0.70m	£0.63
• Capital Cost:	£6.27m	£5.68

Inter-Urban Services

Bus Services

6.47 The specification of detailed changes to the inter-urban bus services is outside the scope of a strategic study. Nevertheless, in terms of the network of inter-urban services, there will be a need to review the connections in the light of new population and employment developments to ensure that there are opportunities to access the new developments by public transport.

Coach Services

6.48 The main National Express coach services in South East Dorset are:

- Weymouth-Poole-Bournemouth-Victoria Coach Station (23 per day, with 3 of these starting at Swanage or Weymouth);
- Poole and Bournemouth to Heathrow & Gatwick Airports (12 per day);

6.49 There are other National Express services running once a day through the area, for example Helston – Eastbourne.

6.50 There used to be a Megabus coach service between Bournemouth and London, which no longer operates. Taking advantage of this gap in the market, Greyhound has introduced a coach service between London and Bournemouth/Poole (one return journey per day).

6.51 The proposed interchange at Bournemouth Airport would include facilities for coaches and hence some of the existing services could be re-routed to serve the airport. It is outside the scope of the study to specify detailed changes to the network of coach services although improved connections with the rest of the public transport network in the area will provide the opportunity for expansion to the current services.

Park and Ride

6.52 With well-used car parks at many of the rail stations in the study area, park and ride represents a popular form of access. However, there is no bus based park and ride in the study area, except for special Christmas/Summer services – e.g. the summer service between bus stops near the Hawkwood Road car park and Boscombe Pier, and a Christmas service into Poole. Until recently, there was a site at Creekmoor which was restricted to employees of the Borough of Poole and Poole Hospital, see Figure 6.13.

Figure 6.13 – Creekmoor Park and Ride/Park and Share Site

6.53 There is the opportunity to expand the system by:

- creating new park and ride sites linked with bus services; and
- expanding capacity at selected rail station car parks.

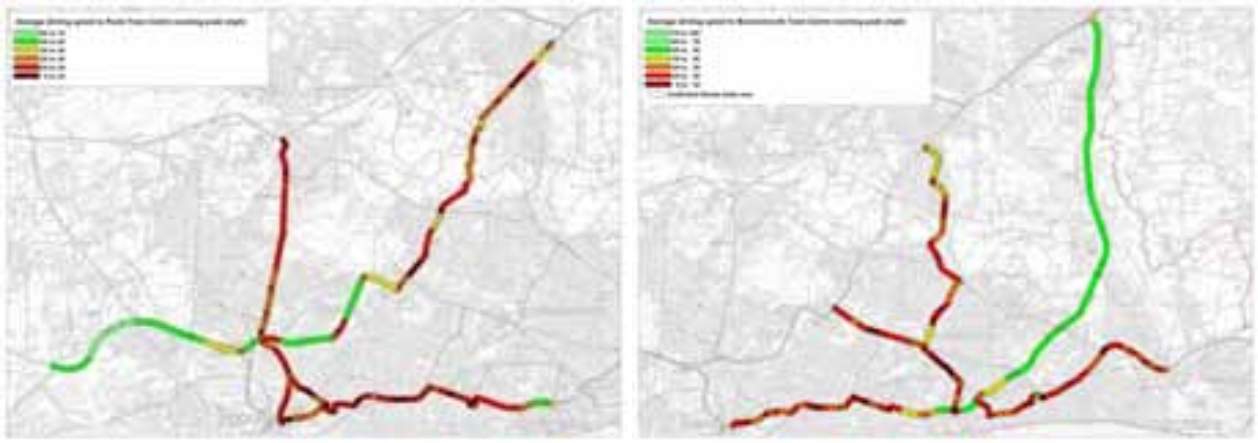
6.54 In considering potential sites, it is important to identify the role of the site, its impact on the environment, its effect on the neighbouring road network and the extent to which it diverts demand from existing public transport services. Other considerations include the operation of sites, for example opening hours, improved facilities (including security issues) and ticketing/payment arrangements, etc. Bus Based Park and Ride: A Good Practice Guide' provides the following advice on the location of park and ride facilities: *'In considering the best location for a Park and Ride site, balance has to be struck between considerations such as land availability, accessibility, landscaping and security and the potential for abstraction from conventional bus services'. 'Essentially, the location should optimise the potential for intercepting the inbound motorists. As well as being strategically effective it must also be acceptable in planning, environmental and political terms to the local authority and to neighbouring councils…*'

6.55 Sites should preferably be:

- close to a major radial approach route to the conurbation;
- on the edge of the built-up area, not too close to the town centre, although the further the sites are placed from the town centres, the greater the maximum potential traffic reduction that will result;
- outside the congested area to maximise the potential advantage of bus priority measures;
- located to reduce the likelihood of abstraction from the conventional bus services;
- well signed, and provided with safe and easy access and egress; and
- surrounded by sufficient adjacent land to allow expansion should levels of demand warrant this, while remaining consistent with the surrounding land usage.

6.56 The introduction of a park and ride site is designed to attract existing motorists, who currently drive into the town or city centre, onto public transport for the final part of the journey which would normally be on the congested sections of the road network. VMS on approaches to the conurbation will help to encourage drivers to use the Park and Ride sites. Figure 6.14 shows average Driving Speeds into Poole and Bournemouth where dark red is slower and light green faster[25]. Within South East Dorset, the public transport component of the park and ride journey would normally be by bus, using one of the dedicated services, although there is some potential park and ride activity at key rail stations.

Figure 6.14 – Average Driving Speeds into Poole (Left) and Bournemouth (Right)



6.57 Where existing motorists have a bus service available for their whole journey, they currently prefer not to use the service for a variety of possible reasons, including frequency, journey time, convenience, reliability, etc. The objective of improvements is to make the public transport element of the Park and Ride journey sufficiently attractive (by bus priority measures, frequent operations, suitable hours of operation, etc) in order to outweigh some of the perceived benefits of the direct car journey.

6.58 An important factor is the overall charge for the park and ride activity compared with the parking charge in the central area (taking into account the availability of parking spaces) and the prevailing bus fares. Hence, the success of park and ride is linked directly with the complementary policies of parking charges, availability of spaces (including restrictions designed to deter commuter use) and other measures aimed at discouraging car use. In the operation of park and ride sites there is therefore a continuing need to monitor the balance in relative costs to the motorist between park and ride and alternative direct journeys by car. The general principle should be that:

- with the introduction of the Park and Ride sites there should be a reduction in the number of parking spaces available in the town centres so that there is no overall increase in spaces across the conurbation – in some cases this may mean that the authorities could release the land for some of the central area car parks for other uses; and
- the charges for using the Park and Ride sites should be linked with the charges for the town centre car parking.

6.59 With the introduction of park and ride, there is sometimes the danger that existing bus passengers are encouraged by the enhanced public transport journey to switch from a current direct bus journey onto park and ride. This would therefore:

- increase the level of car activity in the vicinity of the park and ride site; and

[25] Full size diagrams are included in Appendix D (Figure D.12 and Figure D.13).

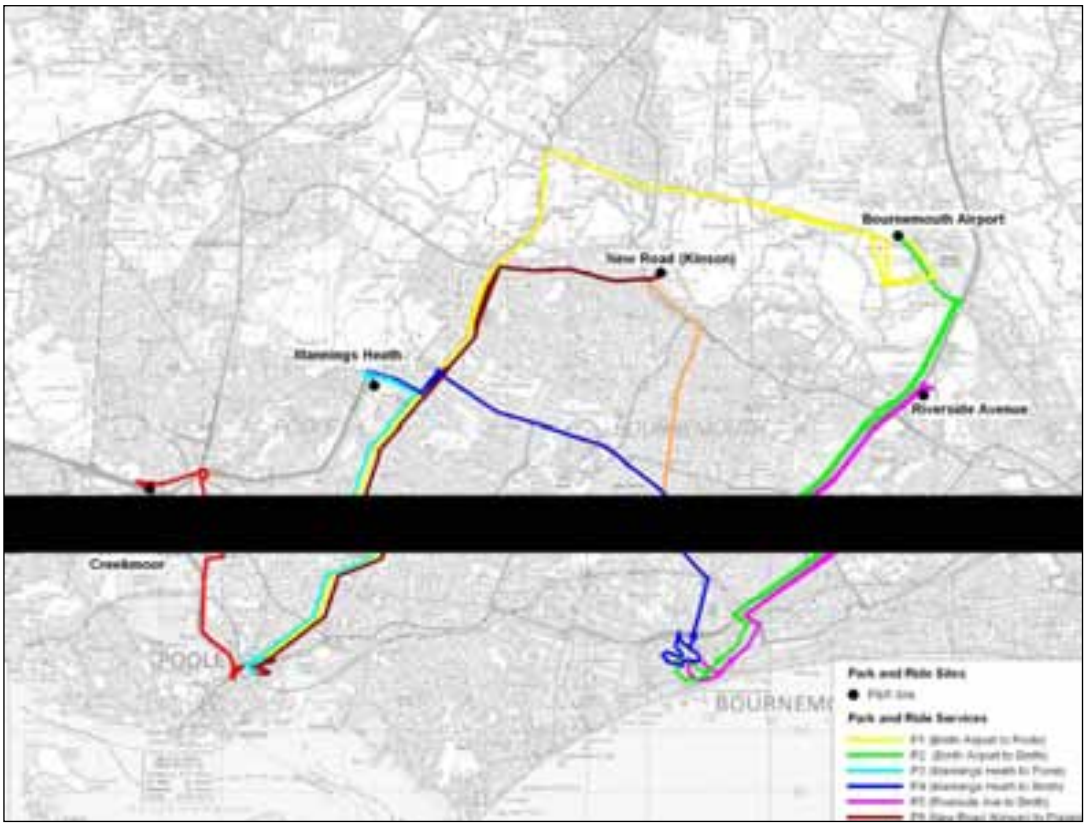
- potentially impair the viability of the existing bus services by the loss of passengers.

6.60 The magnitude of these potential effects will vary between sites and it may be necessary to introduce remedial measures, such as:

- provision of improved feeder bus services to the park and ride site from neighbouring communities, with enhanced frequencies at the key commuting times;
- introduction of ticketing arrangements to encourage through ticketing between local bus and park and ride services; and
- potentially, provide revenue support for local bus links to the park and ride site.

6.61 In association with the introduction of the Park and Ride sites, services linking the sites with the town centres would be introduced. In designing these services, the objective would be to provide direct and speedy links to the most appropriate town centres. As a starting point, services were designed to link each site to both Poole and Bournemouth town centres; these services were then revised based on the forecast demand in order to focus the services on the main destinations of the Park and Ride users. In identifying the routes to be followed by each service, the aim was wherever possible to seek to most direct and fastest connection, taking advantage of the priority measures provided by the Bus Showcase Corridors wherever possible. Figure 6.15 summarises the routes to each of the sites.

Figure 6.15 – Bus Routes for Park and Ride Sites



6.62 The demand for the park and ride site was assessed using the transport model. The demand was considered in association with different elements of the overall transport strategy, in order to understand the extent to which other policy measures have a significant impact on the demand for Park and Ride as a concept and individual sites in particular. Figure 6.16 presents the forecast vehicle levels at each Park and Ride site in conjunction with different strategies, in each case with Smarter Choices (SC) either included or excluded:

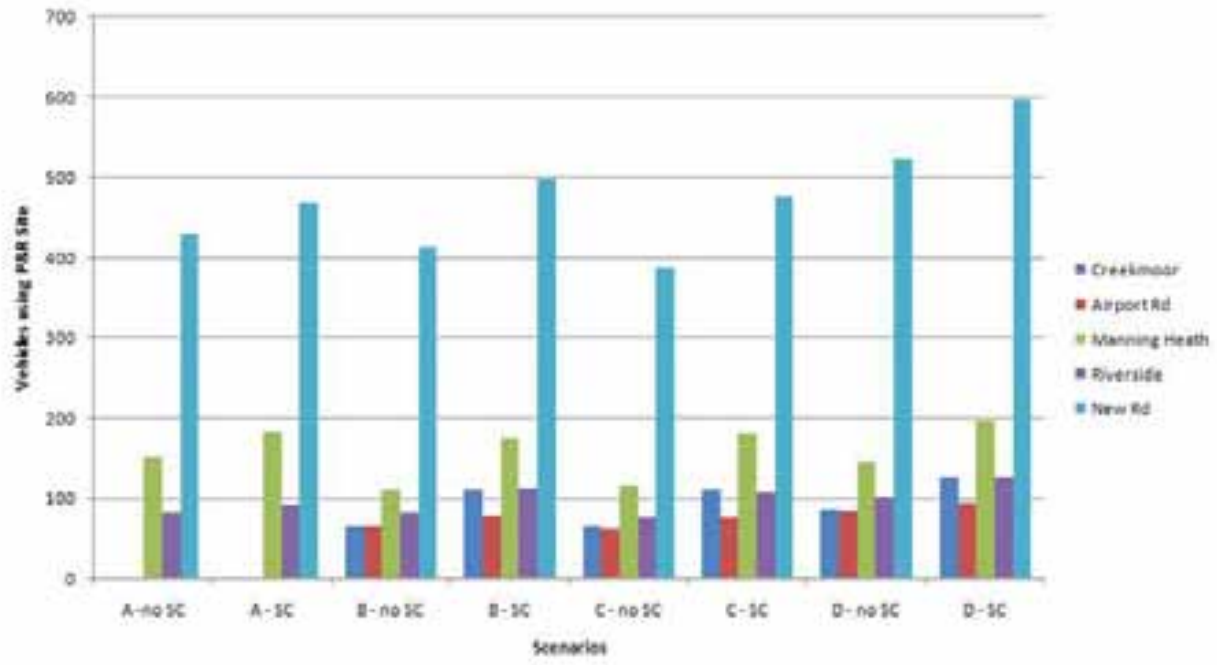
- A – moderate public transport improvements;

- B – significant public transport measures, including DARTS;
- C – Strategy B with major highway improvements; and
- D – Strategy C with congestion charging.

6.63 The sites at Mannings Heath, Riverside and New Road were included in each assessment while Creekmoor and Airport sites were not included in Strategy A. The analysis highlights that, although the ranking between individual sites remains reasonably consistent between the different circumstances, the absolute number of users for the Park and Ride system varies by as much as 50% depending on the parallel policies that are in place. It is clear that the New Road site attracts the highest volume of users in each test, with a strong total level of demand. However, it is important to understand the role that the other policies play in influencing the demand and therefore it is important to reassess the demand in the context of the other policies. In particular, in the consultation on the recommended strategy indicated that there were strong views about the suitability of some sites, especially New Road where the local impact was questioned. Hence, once there is consensus about the broader strategy components, it will be necessary to revisit the analysis of Park and Ride sites. In particular it would be appropriate to consider each of the sites in turn, rather than as a package. This would help to identify the degree of overlap between the sites. For example, it is considered that some of the New Road demand could use the Airport site as an alternative and, since many of the facilities already exist at the airport, it may be more cost effective to consider introducing Park and Ride at the airport before the other locations.

Figure 6.16 – Demand for Park and Ride Sites (vehicles)

=



6.64 The first phase of park and ride will involve a Hub/Interchange at Bournemouth Airport Interchange, including coach facilities. In the longer term the following Park and Ride sites are proposed:

- Riverside Avenue (near Bournemouth Hospital), serving Bournemouth;
- Northbourne, serving Bournemouth and Poole;
- Manning's Heath, serving Bournemouth and Poole; and
- Creekmoor, serving Poole.

6.65 The strategy includes proposals for an increase in rail services across the conurbation which will increase the attractiveness of rail and hence encourage rail-based Park and Ride. As a result, expanded capacity at selected rail station car parks is proposed at:

- Wareham (linking with the Swanage rail reconnection);
- Holton Heath; and
- Hinton Admiral.

6.66 The proposed Park and Ride sites are shown in Figure 6.17, and the Park and Ride bus services are shown as green dashed lines in Figure 6.10 with links into/extensions of the BSC network.

Figure 6.17 – Proposed Park and Ride Sites (Bus and Rail Based)

6.67 The park and ride schemes would tend to concentrate on traditional activities with a high frequency, fast and direct link into the central urban areas. However, in some locations, there may be the potential for expanded activities, for example by the provision of stops on the inter-urban bus network which would be attractive to passengers. There is also potential to provide services from Park and Ride sites to beaches etc during the summer period, especially at weekends. In order to advertise the availability of Park and Ride sites, in addition to the local website, it will be important to use Variable Message Signs (VMS) on the main approaches to the conurbation, e.g. A31 (east and west), A338, A35 in order to further promote the sites.

Bournemouth Airport Interchange/Hub

6.68 Bournemouth Airport is located 7km to the north of Bournemouth town centre, 5km to the north-west of Christchurch town centre and 2km to the west of the A338 Ringwood to Bournemouth spur road, the dual carriageway that joins the A31 trunk road at the Ashley Heath interchange. The airport is a key economic driver for South East Dorset. Current public transport access to the airport is concentrated on Bournemouth; the Bournemouth Airport Shuttle runs between Bournemouth town centre and the airport once an hour from 7am to 7pm, seven days a week, serving the Bournemouth Travel Interchange, East Cliff, the Pier, West Cliff and the Square.

6.69 Air passenger demand through Bournemouth Airport has experienced significant growth, although there has been a slight decline in recent years. The airport's passenger throughput has increased from 271,000 in 2000, peaking at 1,083,000 in 2007, with 868,000 more recently in 2009[26]. The forecast in the previous Government's 'Future of Air Transport' White Paper was that this would grow to around 4 million by 2030[27].

Figure 6.18 – Access to Bournemouth Airport by Public Transport

6.70 In parallel with the growth in passengers, there would also be a corresponding increase in employees at the airport from 380 to 940 Full Time Equivalents (FTE) between 2005 and 2030 (for employment directly related to the airport operation). Indirect employment, resulting from the local chain of suppliers to firms directly involved in the airport's operation, is forecast to increase from 120 to 270 FTE. Induced employment, arising locally through the personal expenditure of those employed either directly or indirectly is forecast to increase from 680 to 1650 FTE over the same period. Only a relatively small number of these are involved in the day to day operation of the airport (480 out of 2,700 people in 2005) with the remainder employed by companies based at the airport site as a whole[28].

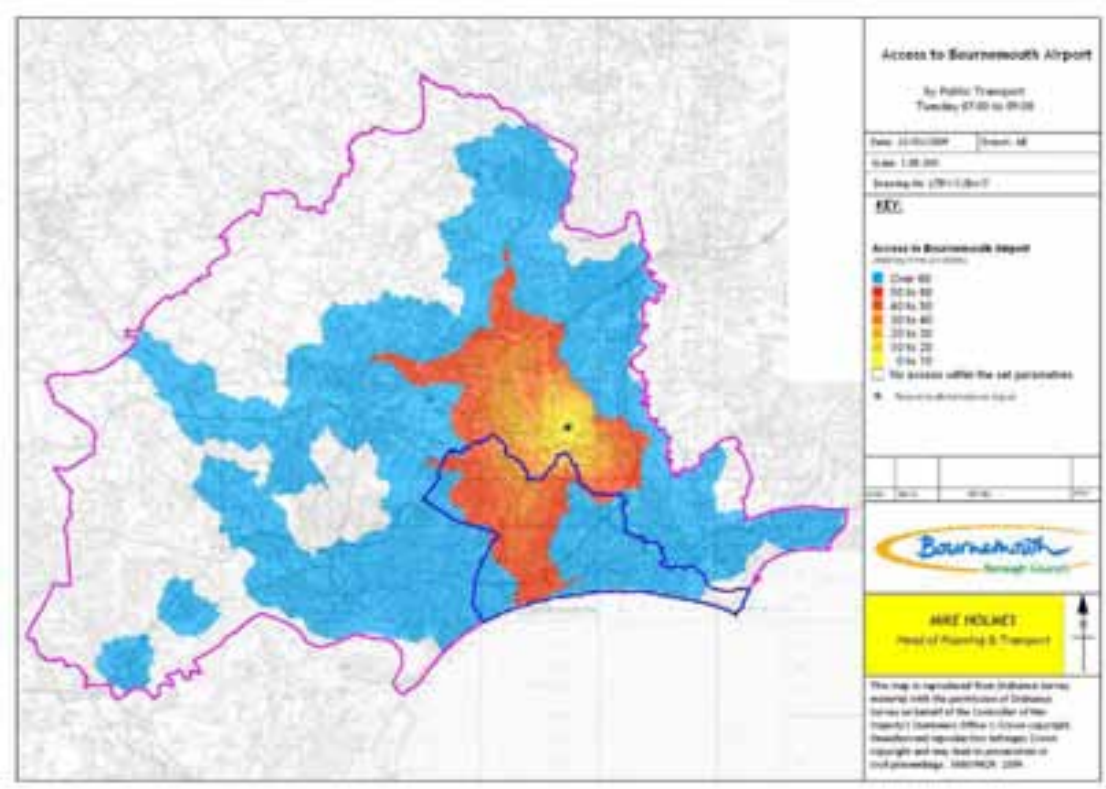
[26] Airport Terminal Passengers, CAA Website
http://www.caa.co.uk/docs/80/airport_data/2009Annual/Table_10_3_Terminal_Pax_1999_2009.pdf
[27] Bournemouth Airport (2007), Bournemouth Airport Masterplan 2006 to 2030
[28]

6.71 Despite the introduction of the Airport Shuttle, Bournemouth Airport is still relatively isolated in public transport terms, with a large proportion of the study area being unable to access the airport by bus. Around 2% of the airport's passengers currently travel there by bus. Most (59%) are 'dropped off' at the airport by friends or family, which gives rise to four car journeys for every return air trip. More than 40% of the SEDMMTS consultation respondents agreed or strongly agreed that access by car to Bournemouth Airport is good – by comparison, less than 10% thought access by public transport is good. Figure 6.2 shows current access to Bournemouth Airport by public transport.

6.72 There are a number of opportunities for improving the public transport provision to the airport:

- as indicated above, with the potential industrial and employment growth to the north-west of the airport, it is recommended that additional bus services are provided, these services could also serve the airport site itself – although the services may be more suitable for employees rather than flyers;
- there is the scope in the longer term for the airport to act as a small hub, with the airport car park being the basis for a Park and Ride operation, thereby also improving bus services to the airport;
- local services, from Bournemouth, Poole and, perhaps, Christchurch would provide local links, taking advantage of proposed improvements to the B3073 between A338 (Blackwater) and the Airport (see Chapter 8); and
- some long distance and coach services from the conurbation diverted to visit the airport at key times.

Figure 6.19 – Access to Bournemouth Airport by Public Transport



Public Transport Interchanges

6.73 Within the study area, there are a number of established interchange points or transport nodes where transfer occurs between public transport modes, e.g. the principal rail stations at

Bournemouth and Poole together with bus stations in Bournemouth, Poole, etc, as well as between on-street stops in town centres, especially Gervis Place in Bournemouth. A travel hub is also proposed at Bournemouth Airport, as outlined above.

Figure 6.20 – Stops in Gervis Place, Bournemouth

Figure 6.21 – Bournemouth Interchange

Figure 6.22 – Poole Bus Station

Figure 6.23 – Boscombe Interchange

6.74 With geographically dispersed levels of demand, it is difficult to design commercially viable public transport services that can provide the direct links desired by passengers. It is therefore inevitable that passengers will need to transfer in order to complete their journey and, if the overall public transport service is to be attractive, it becomes increasingly important for strong interchanges to be provided between modes and services.

6.75 The existing interchange points will continue to play a crucial role and extra facilities will therefore be required in order to strengthen the position, supplemented by facilities to encourage walking and cycling access to them.

Smartcard Ticketing

6.76 The main focus for smartcard ticketing improvements in South East Dorset (and the wider Dorset area) is the migration to an ITSO compliant smartcard. An interoperable ticket has been identified (the Getting About Card) which will become 'smart' as part of the implementation of ITSO compliant Electronic Ticket Machines (ETM).

6.77 The South West Smartcard Board, comprising local authorities, operators and passenger interests, was established to drive forward the delivery of a Host Operator Processing System (HOPS) for the South West Region. The specification of the HOPS has been designed so that it can be scaled up to a size that can deliver the functionality across the whole South West region.

6.78 BBC, BoP and DCC, in partnership with Go South Coast and Bournemouth Transport Ltd, have made a bid to the 'ITSO Migration Capital Grant Fund'. This bid is aimed at developing an ITSO based environment across three authorities of Dorset, Poole and Bournemouth. Within the ITSO membership, smaller operators would be able to operate ITSO products without the significant overhead of ITSO membership and product ownership, helping them to develop smart ticketing as well as participate in the local authority supported 'Getting About' ticket.

6.79 The bid includes:

- ITSO Membership;
- ITSO Electronic Ticket Machines (ETM) and a managed back office for small operators, and ITSO ETM upgrades for major operators;
- retail environment for the issue of commercial tickets;
- migration of the current area wide inter-operable integrated ticket on to a smart platform; and
- infrastructure that will allow the issue of smart tickets for education transport.

6.80 The bid, if successful in its entirety, will deliver 557 ITSO equipped vehicles in the three local authorities, many of which will also be operating in the neighbouring authority of Wiltshire giving additional benefit beyond the area of the participating local authorities.

6.81 The bid document estimates the following benefits from:

- use of the South West Host Operator Processing System (HOPS):
  - CO_2 reduction of 4,300 tonnes over five years, valued at £110,000;
  - NO_x reductions of 20 tonnes over five years, valued at £45,000.
- efficiency gains over five years of £880,000 from smart enabled buses and from enhanced data and fraud reduction;
- efficiency gains over five years of £59,000 from smart inter-operable tickets and SW HOPS use; and
- efficiency gains over five years of between £1,114,000 and £2,228,000 from Bus Service Operator Grant (BSOG) for participating operators who will receive the higher rate of BSOG payments that is available to those who have ITSO compliant ticket machines and who participate in an interoperable ticketing product.

Single Integrated Transport Authority

6.82 The formation of a single Integrated Transport Authority (ITA) would provide the driving force to co-ordinate, promote and secure the public transport proposals in this chapter, in partnership with public transport operators. An ITA is a body responsible for setting local public transport policy and for deciding how money is spent on supporting and improving the public transport network, and usually operates across multiple local authority boundaries.

6.83 Although the local authorities work together and cooperate on a regular basis, the introduction of the ITA would represent a combining of resources by the three authorities across South East Dorset with the consequent benefits from:

- consistency in the design and implementation of measures across the area, for example in the design of bus stop improvements along Bus Showcase Corridors;
- prioritisation of improvement measures across the whole area;
- governance structures would be in place for future joint major scheme bid submissions, which would be an important delivery consideration for the DfT when it assesses bids;
- an ability to provide a more powerful force in discussions and negotiations with operators and other suppliers;
- consistency in the design of promotional material and in the organisation of promotional events and other initiatives; and
- the potential for increased specialisation by the local authority officers.

6.84 The study would support a move towards the creation of an ITA although it is appreciated that there will be potential issues for the local authorities if it is seen that the ITA could result in a dispersal of local responsibilities.

Rail

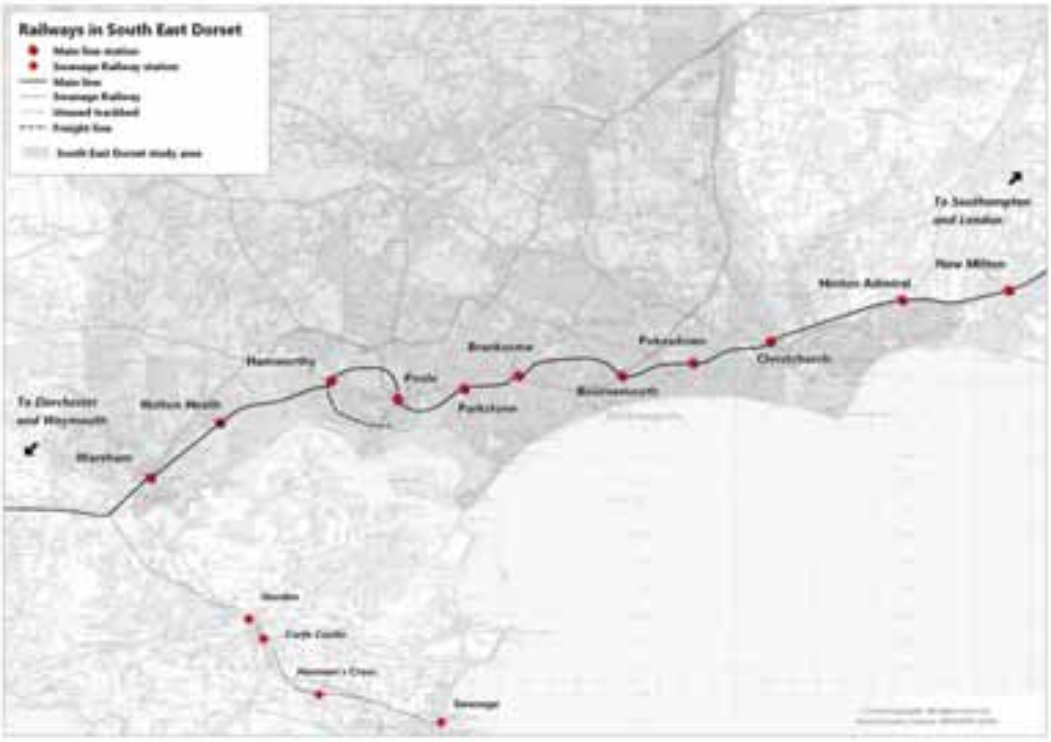
6.85 Figure 6.24 illustrates the rail services within the study area: Wareham, Holton Heath, Hamworthy, Poole, Parkstone, Branksome, Bournemouth, Pokesdown, Christchurch, and Hinton Admiral. Stations in South East Dorset (in bold) are served by the following rail services:

- **Bournemouth** – Brockenhurst – Southampton Central – Southampton Airport Parkway– Winchester – Basingstoke – Reading – continuing to the Midlands and North. Hourly service (CrossCountry);
- **Poole – Parkstone – Branksome – Bournemouth – Pokesdown – Christchurch** – Hinton Admiral – New Milton – Sway – Brockenhurst – Beaulieu Road – Ashurst (New Forest) – Totton – Southampton Central – Southampton Airport Parkway – Eastleigh – Winchester – Basingstoke – Clapham Junction – London Waterloo. One train per hour with additional peak journey (South West Trains);
- Weymouth – Dorchester – Wareham – Hamworthy – **Poole – Parkstone – Branksome – Bournemouth** – Brockenhurst – Southampton Central – Southampton Airport – Winchester – Woking – London Waterloo. One train per hour (South West Trains); and
- Weymouth - Upwey – Dorchester – Moreton – Wool – Wareham – Holton Heath – Hamworthy – **Poole – Bournemouth – Pokesdown – Christchurch** – New Milton – Brockenhurst – Southampton Central – Southampton Airport – Winchester – Basingstoke – Clapham Junction – London Waterloo. One train per hour (South West Trains).

6.86 The rail network within the South East Dorset area represents a potential resource capable of wider and more intensive use, although there are significant limitations as to the extent to which its

usage can be increased. The most obvious limitations lie in the existing number of stations and the single rail line which provide only partial coverage of the area. At the same time, the rail line provides insufficient penetration of the current main passenger objectives, for example central Bournemouth. These factors contribute to the current relatively low levels of rail use in the South East Dorset area, with just 2% of morning peak journeys being made by rail, compared with 91% by car, although in some corridors (e.g. Poole and Christchurch to Bournemouth), rail has a more significant, although still minor, role. In the face of such levels of usage, the scope for rail improvements to make a significant impact on car use must therefore be limited; for example, a hypothetical doubling of rail demand through diversion from car would only produce a 2% drop in the car mode share.

Figure 6.24 – Passenger Rail within the Study Area



6.87 With the present state of the rail industry, there are currently limited resources available for major enhancements to the rail network. The DfT consulted between July and October 2010 on reforming rail franchising[29] following the coalition Government's pledge that: *"we will grant longer rail franchises in order to give operators the incentive to invest in the improvements passengers want – like better services, better stations, longer trains and better rolling stock"*[30].

6.88 The objectives of the SEDMMTS include the need to take into account the affordability and potential to implement measures and this therefore represents a constraint on the types of measures that can realistically be pursued, especially in the short term. The Route Utilisation Strategy and the South West Trains franchise indicate the direction in which the development of the railway is likely to take in the short to medium term.

6.89 The rail services which operate through the South East Dorset area are essentially part of longer distance services between London and Dorset or between Dorset and the Midlands and the North. These services have significant constraints at other points along the route, for example Reading and Birmingham New Street on the Cross Country services or Woking, Clapham

[29] Reforming Rail Franchising Consultation, Department for Transport Website, http://www.dft.gov.uk/consultations/open/2010-28/consultation.pdf
[30] Our Programme for Government, http://programmeforgovernment.hmg.gov.uk/transport/index.html

Junction and London Waterloo on the London services. It would not be prudent to propose improvements to the rail services within the South East Dorset area by increasing the frequency of these main line services. There is, however, an opportunity to increase the use of the existing rail infrastructure without requiring new construction, by adding a local service between Wareham and Brockenhurst, using the existing facilities at each location for turning trains. Initially a single additional departure .per hour would be operated.

6.90 In the short to medium term, with completion due in 2013, the scheduled resignalling of the Poole to Wool section of the network provides a further opportunity to increase the flexibility and capacity of the infrastructure with the potential to significantly increase the rail throughput across the area.

6.91 DCC has guaranteed the £3m needed to allow regular rail services between Swanage and the main line rail network at Wareham, to be undertaken by Network Rail as part of the area resignalling. The Swanage Railway currently operates heritage trains over six miles of track between the Swanage and Norden. DCC has reached agreement with Purbeck District Council to use developer contributions to fund the scheme. The completion of the re-signalling provides the opportunity for improvements to rail operations which, with the addition of the Swanage Line into the main network, could prove significant.

6.92 It is anticipated that initially the service would operate as a shuttle between Swanage and Wareham, building up the frequency and operating hours in line with demand. There would be an aspiration to extend services to Poole and/or Bournemouth in the longer term.

Figure 6.25 – Swanage Rail

6.93 The combination of increased congestion on the road network and measures designed to encourage the use of public transport (i.e. ‘Smarter Choices’ described in Chapter 5) would produce increases in rail demand compared with current levels, even without improvements to public transport. The passenger growth between 2008 and 2026 in South East Dorset would be 9.9% under the Do Minimum scenario (although from a low base) compared with the Preferred Strategy which would result in a 31%, or 63% with the additional implementation of smarter choices. Even with these levels of growth on rail, the impact on car traffic growth is relatively small.

6.94 However, measures need to be introduced to meet the potential demand for rail to ensure that there is sufficient capacity on the rail network to accommodate the additional demand. The danger might be that, in the absence of sufficient capacity, the train operating company seeks to match supply and demand by raising real fare levels.

6.95 In addition to the measures outlined above, there are additional schemes which could be scheduled throughout the SEDMMTS study period and would contribute to a further extension of rail services in the SEDMMTS area.

Rolling Stock and Train Capacity

6.96 The transport strategy includes a number of measures designed to encourage car drivers to use other modes of transport. With the parallel growth in development in the sub-region including significant increases in population and employment, there will be pressure for additional capacity for the rolling stock used in the area. This pressure will be increased if other measures such as Smarter Choices and demand management are introduced and have the anticipated impact of influencing mode choice and hence increasing rail patronage levels.

6.97 The Southern Regional Planning Assessment (RPA) for the Railway (January 2007) stated that the future use and capacity of Waterloo station is a critical issue as this is the main constraint to the expansion of services on the South West network. It also raises the issue of infrastructure constraints that restrict the number of trains that can operate including flat junctions, most significantly at Woking.

6.98 The 2007 Rail White Paper indicated additional peak capacity could be provided as a result of the remodelling of the Reading station area, which started in 2010, and the deployment of the new Intercity Express trains along the route – this issue is reflected in the Thames Valley RPA (2007) which includes the GWML.

6.99 The growth in demand over time will further increase the need to raise capacity on the local services by increasing frequency of trains.

Rapid Transit

6.100 One potential component of the transport strategy is the introduction of the DARTS (Dorset Area Rapid Transit System), which was first considered in the South East Dorset LTP1. The service would complement the existing bus and rail services by combining faster operation than bus services with greater penetration of the Bournemouth town centre than is achieved by the current rail operation. The initial plans for DARTS involve the introduction of a rapid transit system which operates both on the existing rail network and on-street in the town centre. This builds on the experience of similar tram-train operations in Germany as well as the emerging expertise of Network Rail.

6.101 Tram-trains were first developed between Karlsruhe and Bretten, in Germany about 15 years ago to enable tram style vehicles to run over the wider suburban heavy rail network as well as using on-street running to penetrate Karlsruhe city centre, using vehicles as shown in Figure 6.26. The system was conceived to make greater ‘integrated’ use of existing tram and rail infrastructure, involving only minimal infrastructure works to connect the two networks. The vehicles are capable of operating on both the heavy rail network and on urban low floor tram networks. Since the first route was developed, more such routes have been developed in Germany, France and the Netherlands.

Figure 6.26 – Tram-train Vehicle

6.102 Network Rail has established a tram-train development team to consider how the concept might be applied in the UK. It has been developing a 'National Tram-train Trial' – a 750v DC electric tram-train, which would operate from around 1 mile north of Rotherham Central, on freight only lines, and then connect into the Super tram system at Meadowhall to run into Sheffield city centre. The trial is resolving issues such as technical and safety standards. Some particular issues which need to be taken into account when considering the application of tram-train technology to the South East Dorset conurbation in the future include the crashworthiness of vehicles, the specification of the signalling system, the power supply, and the track/wheel profile.

6.103 The DARTS is proposed as a new Rapid Transit (RT) system, potentially between Christchurch and Hamworthy. DARTS tram-trains would run across the conurbation, mostly on the existing heavy rail network, with some street running through Bournemouth town centre. The total length of the proposed route in Figure 6.27 is about 20km, including about 4.3km of street running, shown in Figure 6.28.

6.104 From Hamworthy Station, the potential route continues due east along the South West main line passing through Poole, Parkstone and Branksome, before leaving the main line just east of Branksome station. The route then continues through Bournemouth West Train Depot, towards the town centre.

Figure 6.27 – Outline DARTS Route

6.105 Once east of the depot, the route runs through former sidings to Wharfdale Road where the street-running section begins. Following mostly existing town centre streets, the route runs across the town centre to Bournemouth station, along:

- Queen's Road;
- Suffolk Road;
- Avenue Road;
- Bourne Avenue;
- Gervis Place;
- St Peter's Road;
- Fir Vale Road;
- Old Christchurch Road;
- Madeira Road;
- Lansdowne Road; and
- Coach House Place.

6.106 In the eastbound direction, the route passes south of Bournemouth station and crosses over to the north of the railway line using an existing road bridge, and merges back with the main line about 500m east of the station. In the westbound direction, the route diverges from the main line at Bournemouth Central Business Park (access road), where the track level lies close to the road level, and follows the business park internal road to Holdenhurst Road where it turns left and then right towards Coach House Place. From here, the route merges back to the original alignment and continues west making its way through the Bournemouth West depot, rejoining the main line east of Branksome.

6.107 Figure 6.28 illustrates the on-street alignment of the route within the town centre, and the proposed location of the town centre stops; seven stops have been identified. In passing through the town centre, the route would be required to negotiate a number of busy junctions. Some of these junctions will require careful design to achieve the manoeuvrability of DARTS through them.

Figure 6.28 – On-street Alignment in Bournemouth Town Centre and Potential Stops

6.108 The proposed Westbourne stop would provide access to the light industrial area around Bournemouth West, and also potentially reduce the need for private cars in and around the area. The Triangle and the Bournemouth Square stops are at the heart of the town centre, and would provide strategic access directly to the centre of the town, particularly the pedestrianised areas. Both have the potential to help in reducing congestion in the town centre, and the Bournemouth Square stop would also provide interchange with existing bus services on Gervis Place. The last stop in the town before the route merges back into the heavy rail network is Bournemouth Travel Interchange, which would offer both key strategic connections to long distance heavy rail services from Bournemouth station, and also links to local bus and coach services.

6.109 Some of the issues that will need to be resolved with the development of the town centre route include:

- the route through Bournemouth West Rail Depot may pose track and signal standards issues, because the existing lines running through the depot are not signalled to handle regular passenger services, and therefore, the tracks and signalling would require to be upgraded to passenger standards;
- merging DARTS services onto the heavy rail tracks east of Bournemouth station, would involve the use of local streets to the north and south of the existing tracks, which may create some issues with the physical capacity of the local roads;
- the existing one way junction between Holdenhurst Road and the approach road to Bournemouth station would need to be re-configured in order to accommodate bi-directional DARTS tracks;
- structural works would be required at the crossing of Suffolk Road with Cambridge Road – the existing pedestrian underpass beneath Cambridge Road would need to be upgraded to accommodate a single RT track; and
- the street running section underneath the Queen's Road over-bridge will require careful detailed design to accommodate the DARTS track.

6.110 Hamworthy and Poole are potential turn-back locations. Hamworthy has a bay platform in the down direction which it is proposed to re-signal to passenger train standards. Alternatively, there are carriage sidings to the west of Poole station which are currently used to turn trains. At the east end of the route, it appears unlikely that the tram-trains would be able to turn around on the

main line. Therefore new turn-back facilities would be required whether the turn-back is at New Milton or Christchurch. Each requires further investigation although there is space on the northern side of existing tracks at Christchurch.

6.111 At present there are two Waterloo – Weymouth (fast) services every hour in each direction. These services are not evenly spaced, with headways (at Hamworthy) of about 34 mins and 26 mins in the London direction, and 33 mins and 27 mins in the Weymouth direction. In addition to the fast services, there is an hourly Waterloo – Poole (stopping) service, and an hourly Cross Country service from Southampton, terminating at Bournemouth. Both these services have a greater impact on the operation to the east of Bournemouth, and have implications for timetabling both east and west of Bournemouth.

6.112 On Fridays, one freight service in either direction is scheduled to operate (as required) between Hamworthy and Whatley, passing through Eastleigh. On Mondays-Thursdays, one freight service is scheduled to operate (as required) between Neasden and Wool, passing through Eastleigh. In the reverse direction, a single service is scheduled to operate (as required) only on Mondays and Wednesdays, between Wool and Neasden.

6.113 The following Rules of the Plan have been identified, derived from the present current Network Rail publication:

- headways of 4 minutes following a fast train or 4½ minutes following a stopping service, except between Pokesdown and Bournemouth where headways of 3 and 3½ minutes respectively apply;
- there is a junction conflict allowance of 3 minutes at Branksome, Christchurch and Hamworthy;
- an allowance of 1 minute to depart a bay platform after a train passes / arrives at the station in the opposite direction;
- 3 minutes for the re-occupation of the bay platform; and
- 5 minutes minimum turnround in a bay platform.

6.114 A timetabling exercise has been carried out for running DARTS services on the heavy rail network, i.e. for the stretches of the route where DARTS shares the heavy rail tracks. This basically forms two different sets of timetables – one for west of Bournemouth town centre going to Hamworthy, and the other east of Bournemouth town centre extending to Christchurch. There appears to be slightly more flexibility west of Bournemouth than east, because the existing rail service is reduced on this section.

6.115 The irregular pattern of services on the existing heavy rail network represents a constraint to the introduction of regular interval services on DARTS routes. At this stage, it is not appropriate for the study to attempt to re-schedule the heavy rail services through the South East Dorset area since this would have implications across the South West Trains operation up to London Waterloo. However, it may be reasonably assumed that some adjustments to the heavy rail operation would be feasible in order to better accommodate DARTS.

6.116 As a result of the differential operation of heavy rail services east and west of Bournemouth station, it is prudent to split the operation of DARTS into two parts, with an overlap in Bournemouth:

- Hamworthy to Boscombe; and
- Branksome to Christchurch.

6.117 The analysis of the potential timetables identified that a reasonable regular interval service of five DARTS vehicles per hour would be achievable, in addition to the basic heavy rail services. This would give a 10 DARTS tram/hour service over the central section within Bournemouth town

centre. It would be feasible to have a higher frequency operation on the western section, with up to eight vehicles/hour as far as Poole and five to Hamworthy, if required.

6.118 With DARTS operating at five vehicles/hour on each section, the resulting forecast passenger loads in the 2026 morning peak hour in each direction are shown in Figure 6.29 to Figure 6.32, with Figure 6.29 and Figure 6.30 relating to the Hamworthy – Boscombe section and Figure 6.31 and Figure 6.32 presenting the Branksome – Christchurch section. The figures present the following information:

- the blocks show the number of passengers on board the DARTS vehicle between stops;
- using a notional seating capacity of 60 seats per vehicle, the orange blocks indicate the sections where the seating capacity is exceeded; and
- the arrows indicate the level of activity at each stop, with the green arrow representing boardings, the blue arrow reflecting alightings and the yellow arrow showing the number of passengers travelling through the stop.

6.119 The figures demonstrate the following levels of passenger demand:

- as would be expected, in the morning peak hour, the dominant passenger movement is towards Bournemouth with a peak load of around 400 from Christchurch and 300 passengers on the Hamworthy service, with the reverse direction showing 175 and 200 passengers respectively.
- on the Hamworthy to Boscombe route:
  - the eastbound route has a peak load between The Triangle and The Square in Bournemouth with high loadings between Westbourne and The Square;
  - the eastbound boardings and alightings are spread along the route with principal boardings at Hamworthy and Poole and main alighting points at Poole, The Square, Lansdowne Road and Boscombe;
  - in the westbound direction there are consistent flows from Lansdowne Road through to Poole; and
  - the main eastbound boardings points are at Boscombe and Lansdowne Road while Poole is the dominant alighting stop.
- the Branksome to Christchurch service:
  - shows steady passenger levels from Westbourne through to Pokesdown in the eastbound direction;
  - with main boarding points at Branksome and Westbourne and alighting points at Lansdowne and Pokesdown;
  - while in the dominant westbound direction from Christchurch, there are strong volumes from Iford through to The Triangle; and
  - with the main boarding points at Iford, Pokesdown and Boscombe with alightings at Lansdowne Road, The Square, Westbourne and Branksome.

Figure 6.29 – Hamworthy-Boscombe Forecast Passenger Loadings

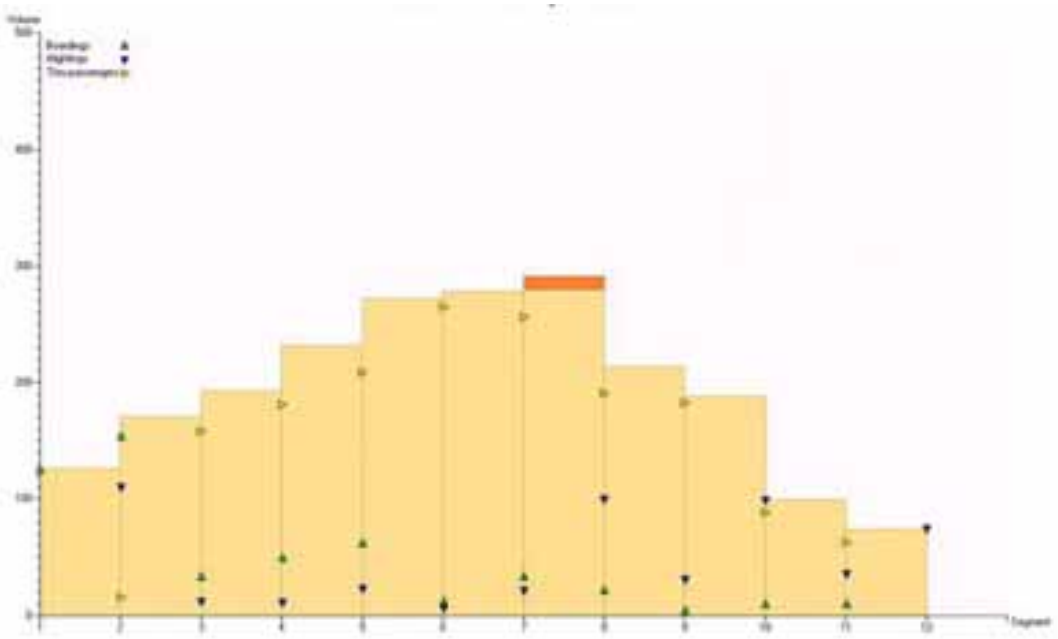


Figure 6.30 – Boscombe-Hamworthy Forecast Passenger Loadings

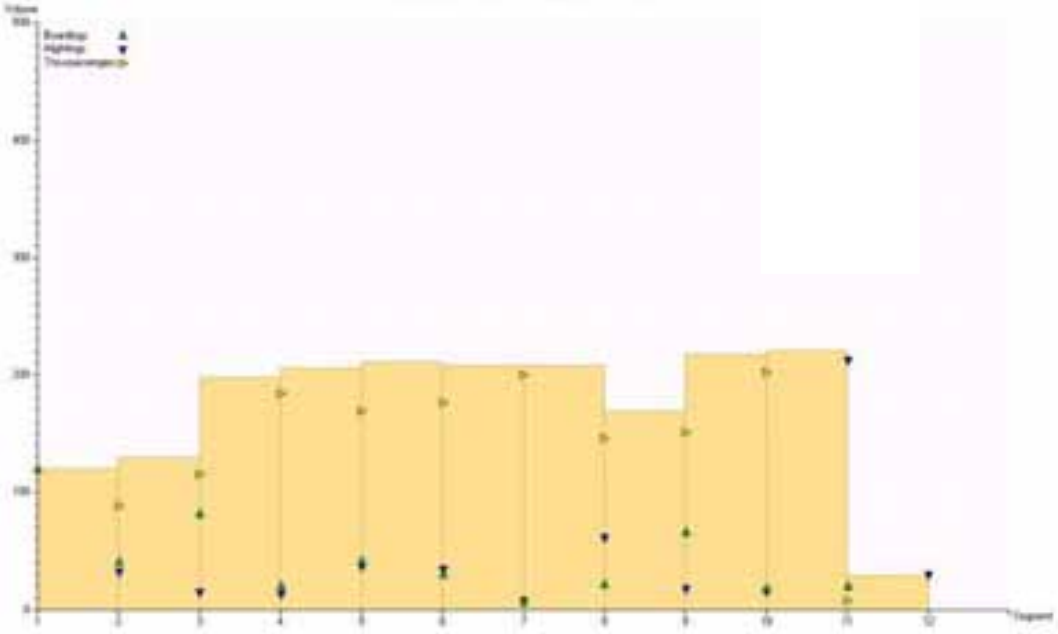


Figure 6.31 – Branksome-Christchurch Passenger Loadings

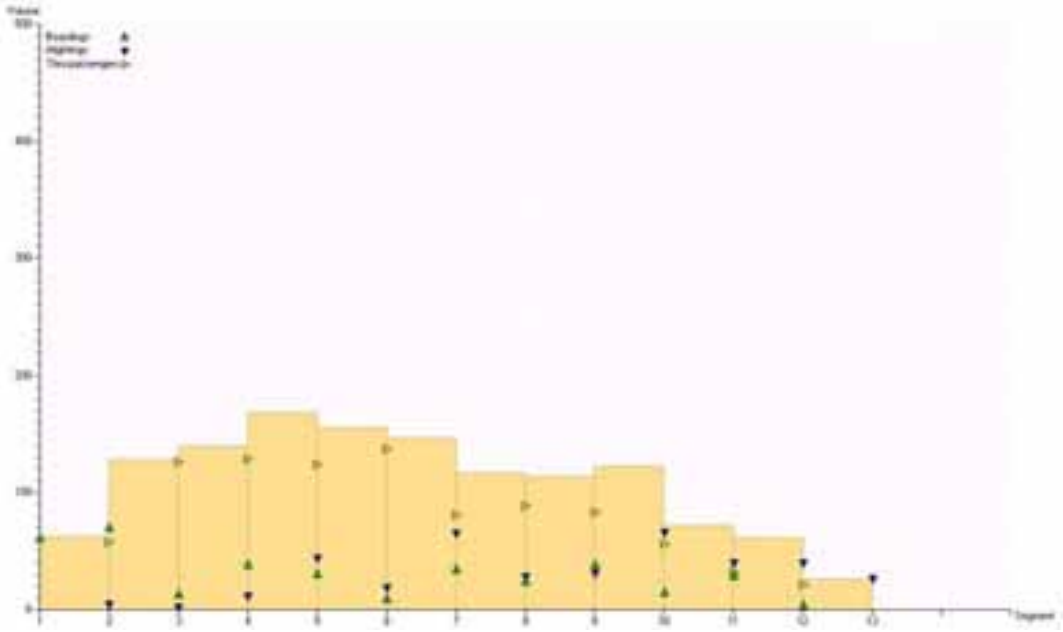
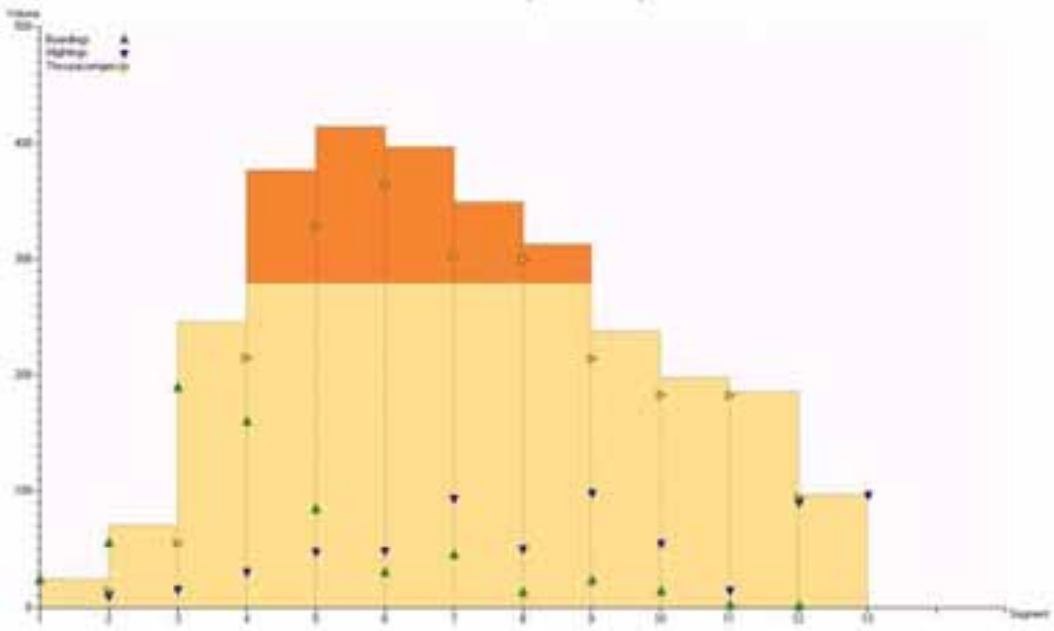


Figure 6.32 – Christchurch-Branksome Passenger Loadings



Cost of DARTS

6.120 DARTS is estimated to cost £212m, including allowances for preparation and risk (Table 6.3).

Table 6.3 – DARTS Cost

	Cost (£m)
Engineering - on-street	73
Stations	17
Vehicle leasing	20

(A) Works Cost - Sub-Total	**110**
(B) Supervision, Design, Traffic Management and Client Cost *(2.5%, 5%, 6% and 7.5% on top of works costs respectively)*	**23**
(C) Total Capital Cost = (A)+(B)	**133**
(D) Total Scheme Cost (includes Preparation and Optimism Bias)	**212**
(E) Preparation and Capital Cost Split:	
• Preparation:	21
• Capital Cost:	191

Potential Implementation Programme

6.121 An implementation programme for the public transport schemes has been developed, based on a wide range of criteria, including the timing of new developments, timetable for scheme design and appraisal, availability of resources, implementation of associated measures, etc:

- in the short term (2011-2014):
  - Low cost improvements to public transport (especially within Bus Showcase Corridors);
  - Development/implementation of a Smartcard (Oyster card) type scheme.
- in the medium term (2014-2020):
  - Phase 1 BSC - A35 Poole to Christchurch and North Bournemouth corridors;
  - Express bus services to outlying areas;
  - Bournemouth Airport Hub/Interchange, including Park and Ride;
  - Swanage Rail Line reconnection – running through trains to Wareham;
  - Increased rail frequency – Brockenhurst to Wareham;
  - Park and Rail – Wareham/ Hinton Admiral/ Holton Heath.
- in the long term (2020-2026):
  - Phase 2 BSC - Wallisdown, North South link to Poole, Castle Lane corridors;
- beyond 2026:
  - Park and Ride sites at Mannings Heath, Northbourne, Riverside Avenue and Creekmoor, in conjunction with a review of town centre parking charges and a reduction in town centre long stay parking capacity;
  - DARTS - operation of train/ tram vehicles across the conurbation, utilising the existing heavy rail network with on street running section connecting to Bournemouth town centre.

Summary

6.122 The study has examined a wide range of potential improvements to the public transport system in order to cater for the general growth in the demand for travel across South East Dorset. The particular components of the public transport measures within the transport strategy range from improvements to the local bus services through to an expansion of the rail network.

6.123 Improvements to **urban bus services** would be a main focus in the strategy for enhancing the public transport system in the short to medium term through the introduction of Bus Showcase Corridors. The BSCs include a large scale series of measures with junction improvements providing priorities for buses, new bus lanes, improved bus shelters, real-time passenger information and new low-floor buses. The initial focus will be the A35 Poole to Christchurch and North Bournemouth (Wimborne Road, Whitelegg Way, Redhill Avenue, Boundary Road, Talbot Road) corridors, and then subsequently on other key corridors including Wallisdown Road, Ringwood Road (Poole), New Road, Gravel Hill/Waterloo Road, alongside Park and Ride and other bus improvements.

6.124 It is possible to identify new or improved **inter-urban bus services** that would be necessary following the new population and employment developments across the study area. In addition, extensions to the highway network will provide the opportunity to offer service improvements such as journey time cuts and reliability gains. The network of services will need to be reviewed in association with the priority measures in the BSC together with the introduction of DARTS rapid transit and improvements to rail services.

6.125 Creation of a series of **park and ride** sites with links to Bournemouth and/or Poole town centres plus, during summer months, to key beaches. In the medium term Park and Ride can be provided at the proposed hub/interchange at Bournemouth Airport and at rail stations, and in the longer term sites would be introduced at Mannings Heath (to Bournemouth and Poole), Northbourne (to Bournemouth), Riverside Avenue (to Bournemouth), and Creekmoor (to Poole).

6.126 An **Interchange/Hub is proposed at Bournemouth Airport** - public transport access to the airport must be enhanced to accommodate the growth in air passengers and workers at the airport and at the proposed adjacent industrial. The strategy identifies the potential creation of transport hub at the airport in the longer term including Park and Ride, additional local bus services and potentially some longer distance and coach services visiting the site.

6.127 The main focus for **smartcard** ticketing improvements in South East Dorset (and the wider Dorset area) is the migration to an ITSO compliant smartcard. The Getting About Card will become an interoperable ticket.

6.128 Creation of an **integrated transport authority** to progress and administer some of the proposals identified below.

6.129 The **rail** network within South East Dorset represents a potential resource capable of wider and more intensive use although there are limitations through the number of stations and the location of existing rail line. The restricted penetration into Bournemouth town centre contributes to low levels of current rail use, with currently just 2% of journeys in the morning peak period. A range of measures has been identified to improve and expand the rail network, taking into account the availability of resources within the industry:

- reconnecting the Swanage rail line to the main line at Wareham incorporating new/reopened stations, Park and Rail, with necessary extensive signalling and junction works at the Worgret junction, as part of the Network Rail Poole to Wool scheme (which is likely to be completed by 2013);
- increase to the frequency of local rail services within the study area – from Wareham to Brockenhurst;
- improve Park and Rail, e.g. at Wareham, Holton Heath, Hinton Admiral;
- increased services across the conurbation between Wareham and Brockenhurst; and
- improve access, parking, and walking/cycling link at all stations.

6.130 A major area of new development for the public transport involves the creation of the **DARTS rapid transit** between Christchurch and Hamworthy/Poole, with a new off-line town centre section

between Westbourne and Bournemouth Interchange – split into two sections (Christchurch to Branksome and Boscombe to Hamworthy/Poole); further work is required to clarify some operational issues with the potential for the scheme to be introduced in the longer term.

7. Demand Management Measures

Introduction

7.1 Chapter 3 highlighted the growth in the demand for travel by 2026, linked to the general rise in travel and the specific impacts of individual developments. Table 7.1 summarises the main statistics for the operation of the highway network in 2008 and the 2026 Do Minimum or Without Intervention situations.

Table 7.1 – Highway Network Statistics for 2008 and 2026

Sector	AM Peak			Inter Peak			PM Peak		
	Base (2008)	Without intervention (2026)	% Rise	Base (2008)	Without intervention (2026)	% Rise	Base (2008)	Without intervention (2026)	% Rise
PCU Kilometres (thousands)									
Bournemouth	163.4	205.9	26.0	112.1	145.9	30.2	156.6	200.4	27.9
Poole	174.0	216.9	24.7	121.9	159.6	30.9	169.9	215.8	27.0
Christchurch	64,8	78.8	21.7	46.1	61.9	34.2	61.1	76.0	24.4
Dorset County	286.3	370.3	29.3	196.8	272.5	38.5	260.1	350.8	34.9
Total	688.5	872.0	26.6	477.0	640.0	34.2	647.8	843.0	30.1
PCU Hours									
Bournemouth	4,887	7,282	49.0	3,020	4,159	37.7	4,537	6,891	51.9
Poole	5,008	7,223	44.2	3,137	4,329	38.0	4,813	7,217	49.9
Christchurch	1,297	2,141	65.1	878	1,229	40.0	1,236	2,037	64.8
Dorset County	5,148	8,471	64.5	3,106	4,485	44.4	4,266	7,295	71.0
Total	16,340	25,117	53.7	10,141	14,202	40.0	14,852	23,440	57.8
Average Vehicle Speed (kph)									
Bournemouth	33	28	-15.2	37	35	-5.4	35	29	-17.1
Poole	35	30	-14.3	39	37	-5.1	35	30	-14.3
Christchurch	50	37	-26.0	53	50	-5.7	49	37	-24.5
Dorset County	42	35	-16.7	47	45	-4.3	44	36	-18.2
Total	42	35	-16.7	47	45	-4.3	44	36	-18.2
Total PCU Delay (Hours)									
Bournemouth	1,682	3,111	85.0	841	1,273	51.4	1,470	2,851	93.9
Poole	1,790	3,177	77.5	911	1,417	55.5	1,660	3,152	89.9
Christchurch	350	982	180.6	198	331	67.2	342	923	169.9
Dorset County	1,310	3,439	162.5	471	875	85.8	798	2,587	224.2
Total	5,132	10,709	108.7	2,421	3,896	60.9	4,270	9,513	122.8

7.2 Chapter 3 identified that the overall volume of travel by car is forecast to rise between 2008 and 2026 by 8% in the morning peak, and by 10% in the evening peak but by 26% in the inter-peak period. However, the potential growth in demand for car travel would be much higher than this; the congestion in the peak periods would have the impact of suppressing demand in the peak periods and encouraging the switching of journeys into the inter-peak and off-peak periods. This is highlighted in Table 7.1, with the increased congestion on the highway network resulting in a more than doubling of delays in the peak periods across South East Dorset. Due to the more extensive highway network in Bournemouth and Poole (and hence the increased availability of alternative routes), and the greater availability of public transport in the urban areas, the increase in delays in the conurbation is less than in Christchurch and the rest of Dorset.

7.3 The improvements to public transport (described in Chapter 6) and the promotion of smarter choices (outlined in Chapter 5) would have the effect of expanding the use of modes other than the car. However, on their own, they would not be sufficient to stimulate the scale of switching to more sustainable modes that is needed to reduce the levels of congestion and delay. The wider impacts of peak oil and the need for reduced carbon consumption further enforce the desire to reduce the level of car travel in the area, and across the country as a whole.

7.4 It would not be feasible, or desirable, to satisfy the full extent of projected car usage by the provision of additional capacity on the highway network. Hence, within the transport strategy, it is important to explore ways of effectively controlling the growth in demand for travel by car while at the same time providing more attractive public transport alternatives before considering extensions to highway capacity. Such measures to control car demand would also act to support the policies, outlined in Chapter 5, to encourage the use of alternative modes and in Chapter 6 to improve public transport. Within this chapter, we describe the impact of measures designed to manage the demand for private car use before examining potential direct highway measures in Chapter 8.

7.5 There is a wide range of potential measures that can play an important role in influencing and controlling the volume of travel across the SEDMMTS study area, and the proportion of that travel that is undertaken by the private car. While many of the measures can be undertaken immediately (and many are already being employed by some or all of the local authorities as part of their current transport policies), many additional potential measures are not yet available. In some cases, the measures would require new legislation and could not be implemented for several years, perhaps towards the end of the immediate SEDMMTS horizon of 2026.

7.6 In examining the available measures and their potential impacts, it is therefore important to distinguish between policies that can be implemented immediately and those that will require considerable development time and resources. In the latter case, it would not be prudent to develop an overall transport strategy that is critically dependent upon measures that have long development time and hence such a high risk associated with them. This is particularly true of various forms of road user charging which would require a combination of additional legislation, new technology and the resolution of significant technical and policy issues before they could be implemented, and would probably be more appropriate as part of a national scheme. As a result, the transport strategy has two elements within the heading of demand management measures: firstly, using conventional demand management tools and secondly including more innovative, charging-based policies and techniques, which inherently require a longer timescale.

7.7 At the same time, it is important to stress that the analysis is initially directed at the technical assessment of the potential measures. If potential benefits can be identified, there would then be a need to consider the potential implications for the implementation of the measures. Particularly, in the case of measures such as the workplace parking levy or congestion charging, there is an obvious need to take into account the likelihood of being able to implement them. The experiences in Manchester and Edinburgh, in which a local referendum on congestion charging demonstrated significant opposition to the measure, highlight that, whatever the technical case, there are strong political and local implementation aspects that need to be taken into account

before including such measures within a policy. However, we believe that it is firstly important to identify whether a technical case exists before moving onto issues of implementation.

7.8 Within the development of the transport strategy, there is a distinction between the potential policies that are available at different stages in the timescale for the study:

- short term – parking controls and other existing policy instruments;
- medium term – introduction of workplace parking charges and local vehicle charging measures including toll roads; and
- long term – application of wider regional or national charging measures.

7.9 Within this structure, the use of parking controls is considered before moving onto various forms of charging for the use of different parts of the highway network.

Parking Controls

7.10 There are several forms in which parking controls could have an impact on the use of the private car, each of which is currently implemented in various ways and to differing extents by the three local authorities in the SEDMMTS study area:

- increased or improved enforcement of existing parking controls;
- varying the cost of parking – this could include changes to the general charge level, the structure of charges (e.g. variation according to the time of day or the duration of stay) or the area covered by the charging system, although the latter would also require increased resources for enforcement;
- controls on the number of spaces available, including a reduction in the absolute number of spaces, controlled levels of growth or restrictions in parking availability at specific times of day or for certain types of vehicle;
- limits to the availability of spaces for specific categories of user, e.g. the introduction of controlled parking zones for local residents or the allocation of parking places to specific users (e.g. the disabled) or drivers of specific vehicles (e.g. electric powered or hybrid); and
- parking standards – controls on the maximum number of spaces provided in new developments.

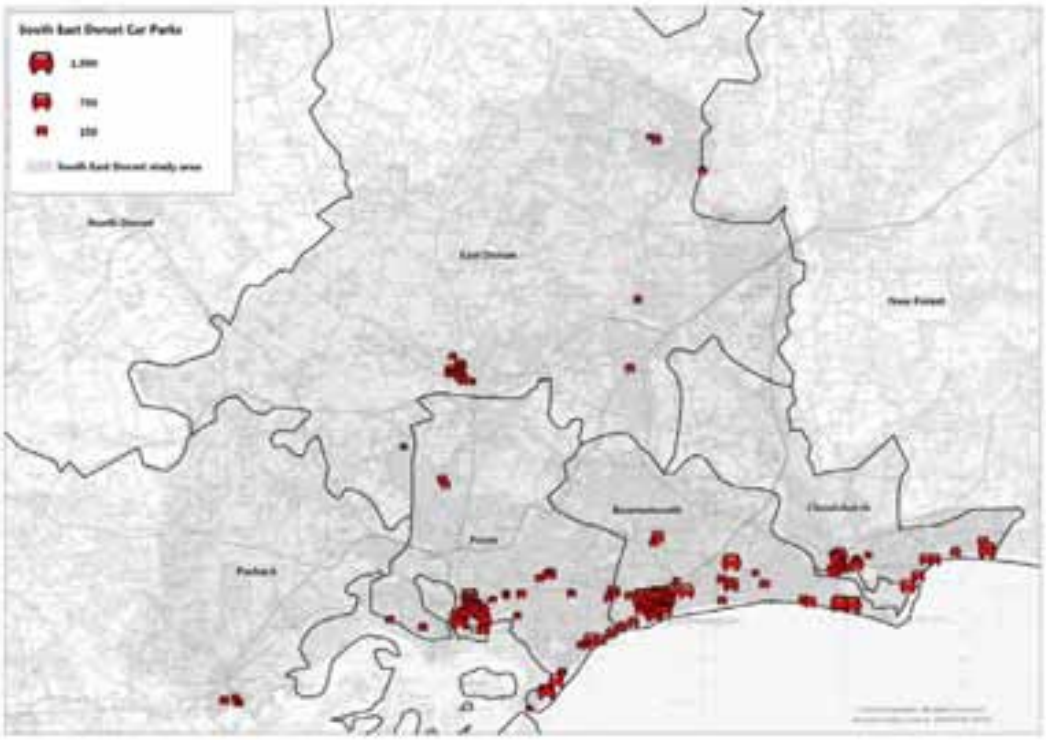
7.11 Most of the measures identified above could be introduced or amended within a relatively short period of time and hence would have an early impact on demand. The exception is with alterations to the parking standards which, although existing standards might be adjusted quickly to control the maximum permitted number of spaces, the speed with which they might reduce traffic levels would be dependent upon the rate at which new developments are completed. Hence, the policy will be effective in only a limited number of locations and over the medium to long term. Furthermore, in a situation where much of the planned growth in housing is contained in small-scale infill developments, the impact of changes in parking standards on the levels of car use is likely to be small.

7.12 As far as the potential impact of policy changes on local authority parking is concerned, a key factor is the scale of parking which is controlled by the local authorities. Figure 7.1 shows council owned and operated car parks in South East Dorset. Outside Bournemouth and Poole (which manage and enforce both on and off-street parking), the division of responsibilities between the districts and county is as follows:

- the districts generally operate off-street car parks (but DCC operates a few across the county);

- on-street parking is managed by DCC (*except* in Christchurch where the borough manages it on behalf of DCC, but Christchurch currently does not charge for the parking); and
- enforcement is undertaken by DCC on behalf of the districts – except in Christchurch.

Figure 7.1 – Publicly Owned and Operated Car Parks in South East Dorset



7.13 Parking controls are usually introduced and applied in major centres of activity such as town centres or local suburban centres. However, there is no reason, in principle, why the controls could not be introduced over wider areas, although the costs of enforcement would increase and resources would be spread over a wider area. Within the SEDMMTS study area, there is the additional constraint that parking at the main out-of-town shopping centre at Castlepoint, which has 3,000 spaces[31], is outside the control of the local authority and hence there are severe limitations on the opportunity and effectiveness of using parking controls to influence the use of the private car at this site. With the importance of Castlepoint to traffic movements in the east of the study area, this represents a major restriction in the ability of the local authority to control traffic levels on the highway network in the area.

[31] Source: Castlepoint website – About Castlepoint Facts & Figures http://www.castlepointshopping.com/CentreGuide60.html

Figure 7.2 – Car Park at Castlepoint

7.14 With increased parking controls, it is likely that there would be some induced traffic both in the controlled area and immediately outside it (where congestion is likely to be reduced as a result of parking restraint). Hence, other traffic restraint measures would also be required to supplement the effects of parking controls if they are to be fully effective. In addition, controls which limit the availability of parking spaces are likely to increase the volume of circulating traffic in search of spaces

7.15 The introduction of workplace travel plans or workplace parking charges could also require additional on-street controls (e.g. controlled parking zones) and enforcement, potentially over a wide area. This would therefore lead to the need for the development of a comprehensive area-wide parking plan.

7.16 An additional significant factor with the introduction of parking controls is that they are an important potential source of revenue for the local authorities (see Table 7.2). For each of the local authorities, parking creates a net revenue surplus, thereby generating valuable funds to supplement the authorities' resources. If this revenue is 'recycled' through the funding of other transport measures, the revenue obtained parking can, in turn, provide a means of redressing some of the adverse effects of traffic restraint, through investment in beneficial complementary transport projects, especially improvements to public transport.

Figure 7.3 – Surface Car Park in Bournemouth

Table 7.2 – 2009/10 On- and Off-Street Surplus or Deficits (including Enforcement)[32]

	Income	Expenditure	Surplus
Bournemouth Borough*	• Off-Street: £5.132m • On-Street: £1.251m	• Off-Street: £2.218m • On-Street: £1.448m	£2.717m
Borough of Poole	• Off-Street: £4.627m • On-Street: £0.807m	• Off-Street: £2.153m • On-Street: £0.961m	£2.320m
Christchurch Borough*	• Off-Street: £1.992m • On-Street: £0.070m	• Off Street: £0.956m • On-Street: £0.141m	£0.965m
East Dorset District	• £0.505m	• £0.371m	£0.134m
Purbeck District	• £0.187m	• £0.083m	£0.103m
Dorset County Council (*note whole of Dorset*)	• £0.681m	• £0.669m	£0.012m
Overall			£6.251m

Note: * data for 2008/09 not 2009/10

7.17 Changes to parking charges can readily be applied to publicly controlled parking spaces, but not privately operated public car parks (e.g. those operated by NCP and APCOA). The local authorities have indicated that competition between privately and publicly operated car parks is driving down charges.

7.18 Although increased parking charges and extensions to the coverage of parking controls could produce additional revenue for use in complementary measures, the variations in charges will need to take into account factors other than those related specifically to controls in private car usage. In particular, the levels of charges in town centres could have a significant impact on the level of retail activity and hence the economic prosperity of the area. Hence, any increases in parking charges would need to reflect this, perhaps by concentrating any increases on long-stay, commuter parking and limiting the increases in off-peak charges or for short stays so as to limit

[32] Note that 2008/09 data is substituted where 2009/10 data is unavailable.

the impact on shopping activities which are a major influence on the commercial prosperity of the area. Furthermore, not all parking revenue accrues to the public sector; there are significant volumes of publicly available parking which is operated by the private sector – for example the Avenue Road MSCP in Poole has 1480 spaces (Table 7.3). Revenue from these spaces is therefore not available for reinvestment in complementary measures.

Table 7.3 – Examples of Privately Operated Car Parks in South East Dorset

Car Park	Town	Operator	Spaces
Exeter Road	Bournemouth	NCP	236 (5 disabled)
Terrace Road	Bournemouth	NCP	90 (1 disabled)
The Square MSCP	Bournemouth	NCP	236 (4 disabled)
Avenue Road MSCP	Bournemouth	APCOA	1480 (15 disabled)

Figure 7.4 – Privately Operated Car Parks

7.19 Park and Ride complements parking controls by providing lower cost long stay parking outside the town centres. Chapter 6 contains an assessment of the potential Park and Ride sites and identifies of programme for implementation. However, the Park and Ride programme needs to be seen in combination with the overall parking policy in Poole and Bournemouth town centres. The Park and Ride sites will each add to the total parking supply in the study area; furthermore, the charge for use of the Park and Ride facilities needs to be set in combination with the town centre charges. In terms of the overall parking supply, the introduction of Park and Ride should not result in an overall increase in parking spaces in the area. Hence, there should be a compensating reduction in spaces in the town centres, potentially resulting in an opportunity to redevelop the sites to the overall benefit of the town centre. The selection of the sites to be released should take into account factors such as current usage levels, the alternative potential uses for the sites and the vision for the redevelopment of the town centres. As far as the pricing is concerned, the Park and Ride sites should show a discount from town centre car parking charges, particularly for long stay or commuter parking.

7.20 As indicated in Chapter 6, Park and Ride is seen as a long term measure and would only be introduced following a full assessment of the wider impacts at each site. Particularly in the short to medium term, the use of parking is the principal policy tool for traffic demand management and therefore changes to the policy should include:

- increasing parking charges at rates above the level of inflation, with particular attention to long stay rates charged to commuters, rather than short term charges for shoppers;
- controls on the number and availability of parking spaces – with the potential release of car parks based on their anticipated usage levels and the potential alternative uses for the sites;
- increased enforcement;
- introduction of controlled parking zones on the periphery of the central areas and in locations where there is significant on-street employment-related parking;
- exploration of ways of controlling traffic levels at Castlepoint and other out-of-town developments; and
- introduction of more stringent parking standards at new developments, coupled with Travel Plans and 'Smarter Choices' described in Chapter 5.

7.21 The introduction of controlled parking zones reflects the responses received in the consultation in which the issue of parking by non-residents along residential streets was raised, especially on the periphery of the town centres and close to the beaches.

Figure 7.5 – On-Street Parking at West Cliff, Bournemouth

Workplace Parking Charges

7.22 The 2000 Transport Act provided local authorities with the powers to introduce workplace parking levies, by which employers incur charges based on the availability of parking spaces provided for staff. In the first instance, the workplace charge would be incurred by the employer. Its effectiveness as a mechanism for reducing traffic is likely to be dependent upon the extent to which employers pass charges on to the users of the parking spaces, i.e. their employees. It is employees who are making the decision about which mode to use for the journey to and from

work and hence, if this choice is to be influenced in favour of more sustainable modes, then the charge should ideally be passed onto the employee. However, for a number of reasons, there is the strong likelihood that employers would not pass the charge onto the employee. Even if there was an obligation on the employer to pass the charge onto the employee, salary levels could be increased to compensate for the charge, if the employer was concerned about potential problems of staff retention. Hence, the impact on reducing traffic levels would be muted.

7.23 The introduction of a Workplace Parking Levy (WPL) would, however, encourage employers to reduce the number of parking spaces on the site and, in parallel, would provide an impetus for an active workplace travel plan (WTP) to influence the travel behaviour of employees. Thus, the WPL scheme could be seen as a complement to WTPs, described in Chapter 5.

7.24 With no practical experience in the UK of implementing WPLs, it is difficult to assess fully the effectiveness of the measures. Nottingham City Council's (NCC) scheme is the first to be approved, but is not yet implemented. NCC had been working on the proposals for a number of years, with the primary objective being to generate funding for the local contributions required for the second phase of its tram scheme, together with improved bus services and the development of its new station hub. The City Council made an Order for the scheme in May 2008, with the Secretary of State confirming the Order in July 2009. The licensing scheme in Nottingham is scheduled to commence in October 2011, with full charging of spaces commencing in April 2012. In the setting of the charges, the decision was taken by NCC to minimise the impact of a new levy upon businesses at a time of economic uncertainty and to provide additional time to plan for the scheme's introduction.

7.25 Although other UK authorities are known to be considering or have already considered the WPL, the Nottingham scheme is currently the only one to be formally approved by the DfT and as such offers the greatest scope for identifying key issues and challenges associated with introducing WPL. The Nottingham scheme is looking to raise £14million per annum through the WPL, with the funds being used to finance the construction of public transport measures, including the expansion of the tram system. Employers with fewer than 10 spaces would be exempt from the annual WPL, which would ultimately be £300 per space (in 2008 prices) although the initial change would be set at a lower level. Although not included within the strategy for South East Dorset, the effectiveness of the WPL should be monitored with a view to reconsidering its suitability for study and assessment in the future.

7.26 Before any consideration of WPL occurs in the future, further research will be required. Information about the amount and usage of Private Non-Residential (PNR) parking across South East Dorset is limited. PNR car parks are located on private property and are provided for a variety of purposes, including: offices, supermarkets, sports/leisure facilities, educational establishments, and hotels.

7.27 The Bournemouth Town Centre and Lansdowne Parking Strategy Report (2005) estimated that there were approximately 3110 and 4460 PNR spaces in the town centre and Lansdowne parking restraint areas respectively; this is a similar quantity to the overall off-street public car parking supply in the two areas. A 'snapshot' occupancy survey was undertaken as part of the parking study. Whilst data is unavailable of how many vehicle movements were associated with the PNR, it is known that a total of approximately 4700 vehicles were estimated to be using the PNR at the time of the occupancy survey. The study states that, if each vehicle was to arrive and depart the PNR once during a day, then almost 10,000 vehicle movements would result. Hence, if WPL were to be introduced such that many of the PNR spaces incurred a charge, then there is considerable potential for the introduction of WPL to control the level of car use in the town centre.

7.28 As indicated above, to be fully effective, the WPL would need to oblige employers to pass the charges onto their employees as users of the parking spaces; only in this way would the levy really influence travel behaviour. The introduction of the WPL would also need to be combined with measures such as:

- improvements to alternatives to the car for commuting journeys, especially public transport – these would need to be in place before the WPL is introduced;
- controls over the level of induced traffic; and
- measures to manage the volume of longer distance traffic that might re-route through the area in which parking is controlled.

7.29 Since there has been a high level of public and political local opposition to WPL in South East Dorset, which was raised during all consultation phases, and because the effects of the Nottingham scheme are yet to be realised, the impact of WPL has not been pursued in the study.

Congestion Charging

7.30 Charging for use of the road network by private vehicles could take a number of forms. All such schemes would create benefits and disbenefits for different users of the transport system in terms of changes in journey times, vehicle operating costs and the level of charges paid. In line with the 2000 Transport Act, receipts from any charging scheme would need to be hypothecated to fund other transport initiatives in the area, which should then create further benefits to transport users.

7.31 For a road user charging scheme to be worthy of implementation, it should:

- be good value for money, taking account of environmental and safety impacts, economic benefits and disbenefits, and the costs of implementation, operation and enforcement;
- be acceptable in terms of the distribution and equity of its impacts, particularly in terms of its effects on social exclusion; and
- be financially viable, practical and broadly acceptable to the public.

7.32 Ideally, the charges should be set so as to yield the maximum net benefits to society as a whole. In principle, to achieve this, charges would need to vary by area, by road type, by vehicle type, by time of day and/or by the level of congestion. However, there will be limits to the variations that would be practical to implement and acceptable in practice if they are to be fully understood by the public. To be effective in influencing behaviour, the driver would need to know the likely charge before setting out. If there are too many potential reasons for variations to the charge, the lack of transparency could influence the successful operation of the scheme.

7.33 Following the introduction of charging, road users who continue to drive gain benefits from the reduced congestion, which arises because of the lower traffic levels across the road network. Disbenefits to the current road users arise in a number of ways, if, as a result of the charge, they decide to change their existing journeys to a less preferred alternative, including a change of mode, a change of destination or the suppression of the trip. People who change mode would experience a loss because the trip by the new mode could take longer, or be less desirable or convenient in some sense, than the current car trip; otherwise they would have used the new mode initially. Similarly, if the charge encourages drivers to change their destination, then travel to the new destination will be less desirable or convenient than travel to the original one. If they are deterred from travelling at all, car drivers will clearly experience a loss of benefit in some form through their inability to undertake the desired activity at the destination.

7.34 If current congestion is sufficiently high, the benefits arising from reduced congestion and faster travel times on the road system should outweigh the penalties experienced by those who are deterred from travelling as they would wish. Thus, charging in areas where congestion is high will often yield a positive net travel time benefit, but charging in areas where congestion is low may not actually yield any net travel time benefit at all.

7.35 There may also be some potentially undesirable side-effects, such as extra traffic and development pressures on roads which, without the charging system, would be relatively uncongested and therefore would potentially attract lower than average charges. In principle, the

charging structure could be set up so that people pay for the costs they impose on society, whether in the form of congestion, accidents or environmental impacts, but there are significant difficulties in developing a practical system that achieves these aspirations.

7.36 In the following paragraphs, we consider in turn some of the different approaches that are available for the introduction of road user charging in the study area, with increasing geographical coverage:

- tolls;
- urban congestion charging; and
- area-wide congestion charging.

7.37 After exploring the theoretical aspects of each type of charge, we then present the results from testing the different approaches using the transport model.

Tolls

7.38 There is the potential to toll new roads to help both control generated traffic on the new link and provide source of funding for the scheme and possibly other transport measures. In the highway schemes considered in Chapter 8, a number of new roads have been identified and the potential impact of applying tolls to them has been examined. It would not be practical to consider imposing a toll on an existing road. The potential use of tolls for new roads would be in line with announcements by the Transport Minister who stated in July 2010 that the government is '…..completely open to suggestions that entirely new roads could be funded by private capital supported by tolling and charging for the use of these roads.'

7.39 General studies of the tolling process have shown that the most likely reaction of drivers to a charge for use of the tolled road is to divert onto uncharged roads, and the change in overall demand across the whole road network is likely to be small by comparison. Hence, for new links, the introduction of tolls would 'lock in' the benefits of journey time savings from the new investment so that they are not eroded by increased traffic levels and hence lower speeds and less journey time savings. While this achieves the objective of reducing congestion on the charged roads, or controlling induced demand for the new link, congestion, accidents and environmental nuisance would still exist on the parallel uncharged roads. The propensity of drivers to divert away from the tolled road is dependent on the availability of other routes, on the comparative levels of congestion on charged and uncharged roads and on the size of the charge.

Urban Congestion Charging

7.40 Charging for the use of the road network in urban areas by private vehicles could take a number of forms, with each varying in the effectiveness of the impact and the scale of their area of influence:

- charges for using the following elements of the road network, with charging levels possibly varying by direction, time of day, type of vehicle, etc:
  - a single link (e.g. a bridge toll);
  - a road, particularly a new road constructed with the intention of creating a new link, or
  - each of a series of links forming a cordon around an area.
- payment for a supplementary licence – either a charge to enter an area (an entry permit) or to travel within an area (an area licence);
- congestion metering – a charge which reflects the congestion caused by each driver, varying according to traffic conditions;

- time-based charging – a charge which is proportional to the time spent travelling within the charged area; and
- distanced-based charging – a charge directly linked to the distance travelled within the charged area.

7.41 With point-based or cordon charging, drivers would be charged for entering an area (for example south of the A338 in Bournemouth or crossing the River Stour), and a number of pay stations would be required to cover such an area adequately. Through the use of electronic payment and monitoring systems, the need for pay stations can be minimised. Supplementary licences charge for access but, once a payment has been made, the amount of travel in the area is unlimited. The Mayor's scheme for central London is a form of supplementary licence.

7.42 There is merit in such cordon schemes, although particular attention needs to be paid to the location of the cordon so that it is sufficiently large to influence the behaviour of a number of drivers; a small cordon would have little impact on overall traffic levels, although it could represent a means of testing the technology and payment systems as well as providing a source of revenue for investment in other transport improvements and a way of introducing the principle of charging. A widespread cordon, on the other hand (for example along the River Stour), would mean that a large number of journeys are made wholly within the cordon and hence would not be intercepted by the charging system.

7.43 Distance-based charging can now be achieved, in principle, through the use of GPS-based systems which are being developed for use in many parts of the world although a number of technical, administrative and political issues need to be resolved before a full system can be implemented. The removal of traffic from an area can cause secondary effects such as induced traffic and the re-routeing of traffic previously travelling around the controlled area. Congestion metering has the advantage that it can be used to control the amount of new traffic that would be induced when congestion in an area is reduced.

Area-Wide Congestion Charging

7.44 The impacts of urban congestion charging schemes, especially those confined to central areas (such as the Mayor's scheme for London), will dissipate quite rapidly outside the charged area. The impacts of this kind of central area scheme on strategic traffic, e.g. on the A31, would therefore be quite limited.

7.45 In order to reduce traffic on the principal roads without causing major diversions onto the local road network, the congestion charging would need to be extended to cover all roads. This area-wide approach would provide a means of reducing congestion and controlling traffic levels across the network as a whole, thereby minimising the likelihood of additional traffic being induced due to reduced congestion. Furthermore, the introduction of area-wide charging in parallel with other transport measures, e.g. parking controls, will tend to reinforce the other measures by controlling the level of induced traffic.

7.46 The revenue from an area-wide system, net of the costs, is expected to be considerable. For the economy of the charged area to benefit, the net revenues should be invested in the charged area. Furthermore, it is important that the revenues are spent wisely, so that the investment from the revenues itself brings further benefits.

7.47 Any scheme would need to reflect a number of key issues, including:

- developing a scheme that is not too complex or costly to run;
- establishing the technological options for a reliable and cost effective system of recording distance, place and time of travel; and
- establishing safeguards to protect privacy of individuals and to ensure that an appropriate price is charged for each journey in a way that the motorist can see and understand.

7.48 Public acceptability is a key issue when developing road user charging schemes. In December 2008, the residents in Greater Manchester rejected the local authority's package of congestion charging and public transport investment in a referendum. Similarly, Edinburgh Council developed a road user charging scheme but this was rejected at a referendum in 2005.

7.49 The coalition Government's policy document 'Our Programme for Government', which sets out its programme for partnership government over the next five years, states that the Government will work towards the introduction of a new system of HGV road user charging to ensure a fairer arrangement for UK hauliers. At one stage, the previous Government had plans to introduce an initial distance-based charging scheme for goods vehicles which had the broad support of the UK freight industry which felt that the charge would have the impact of equalising operating costs, especially with foreign based vehicles which currently have lower operating costs. The operators of goods vehicles perceive significant benefits from the introduction of area-wide road user charging, with the impacts of improvements in journey time reliability, a key aspect of freight operations.

7.50 Whilst there are Government plans for a system covering charging of HGVs, there is no intention to extend it to all vehicles. In view of the costs of setting up the necessary infrastructure, including equipping vehicles, it would not be effective for a single local authority to establish a scheme of its own, with the extensive development costs that would be involved. Hence, it would be sensible to await the introduction of a national scheme rather than consider developing an initial scheme for South East Dorset on its own. Nevertheless, it would still be informative to identify what the impacts of such a scheme might be on travel behaviour across the study area.

Overall Impact of Charging

7.51 Within SEDMMTS, alternative forms of charging have been assessed as part of the strategy testing:

- toll on new roads (as part of Strategy III); and
- distance-based charge applied at a standard rate on all roads in the study area (as part of Strategy IV).

7.52 The "no charge" tests for Strategy III (tolls) and Strategy IV (distance based charge) both include all the schemes in strategies II plus the same set of extensive highway link proposals.

Toll Roads

7.53 With the toll, the alternative charges of £1, £1.50 and £2.00 to use the new road were applied to a possible East-West Link Road between the B3073 at Chapel Gate through to the A341 Magna Road west of Bearwood with a spur north to the B3073 west of Longham (Figure 7.6).

Figure 7.6 – Toll Roads Tested

7.54 Table 7.4 and Table 7.5 show that the introduction of a toll on the new links dramatically reduces the amount of traffic using the new link roads, with the traffic diverting onto other existing routes. Thus, on the eastern section summarised in Table 7.4, the impact of the £1 toll is to significantly reduce the amount of traffic using the new link, to just 17% of the non-toll level in the westbound direction and 43% in the eastbound direction. A similar picture emerges in Table 7.5 for the western section of the new link, with the £1 toll cutting traffic levels to 21% (northbound) and 44% (southbound) of the pre-toll levels. Thus, as would be expected, as the toll is increased, so the volume of traffic on the tolled road falls dramatically.

Table 7.4 – Impact of a Toll on Traffic between A348 Ringwood Road and A347 New Road (AM Peak)

	No Toll	£1.00	£1.50	£2.00
Eastbound	1,106	474 (-57%)	391 (-65%)	257 (-77%)
Westbound	1,040	172 (-83%)	129 (-88%)	24 (-98%)

Table 7.5 – Impact of Toll on Traffic between A341 New Road and B3073 Ham Lane (AM Peak)

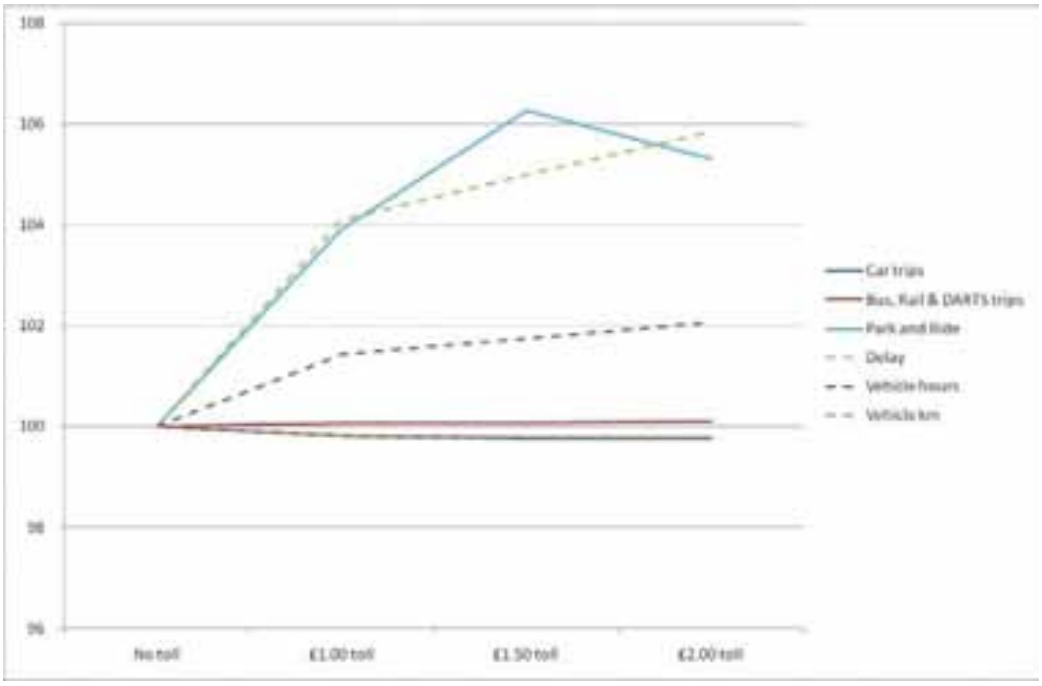
	No Toll	£1.00	£1.50	£2.00
Northbound	1,057	222 (-79%)	114 (-89%)	91 (-91%)
Southbound	791	351 (-56%)	223 (-72%)	162 (-80%)

7.55 The introduction of the tolls on the new links therefore produces some interesting results which occur because significant levels of traffic are deterred from using the new links by the tolls.

7.56 At a network level, as shown by the index of changes in Figure 7.7, the impact of the tolls in the morning peak is to increase the extent of the delay, rising by 4.1% with the £1 toll to 5.9% with the £2 toll. The delay occurs because traffic is returning to the more congested local road network to avoid incurring the toll. The increased delay is also reflected by the rise in vehicle-hours across the network.

7.57 There is a negligible change in public transport demand although the Park and Ride usage shows an increase, mainly because the new link roads on which the toll is charged improve access to some of the Park and Ride sites. Although the analysis above concentrates on the morning peak, a similar situation occurs in the inter-peak and evening peak.

Figure 7.7 – Toll on New Roads – Index of Impacts (AM Peak)



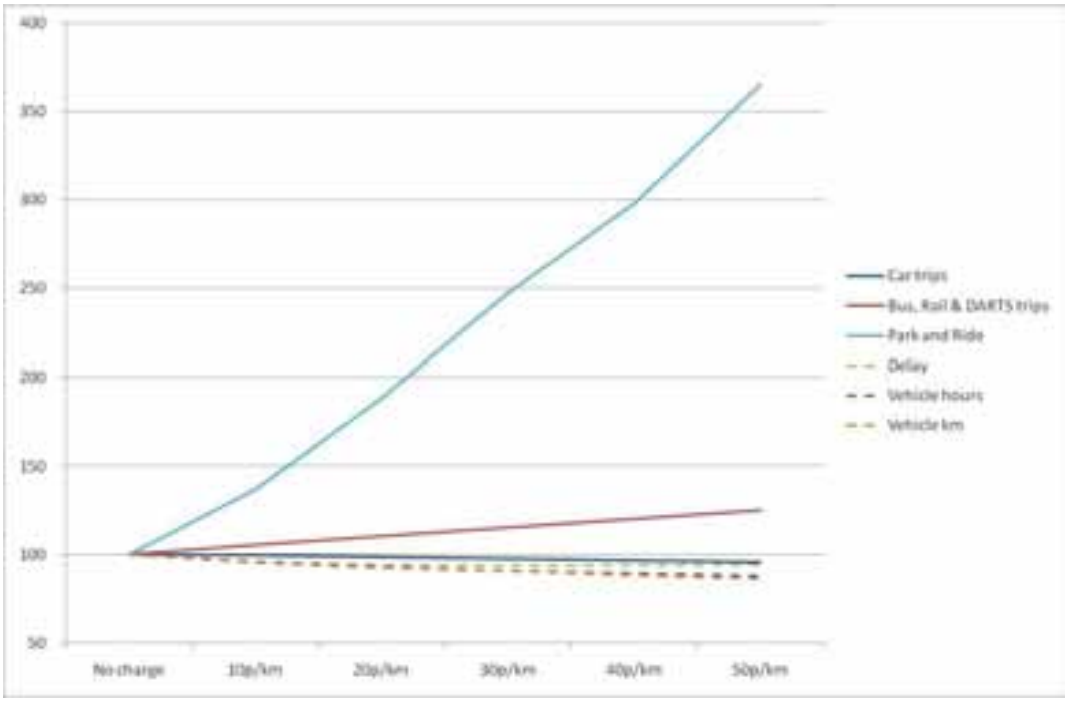
Distance-Based Charge

7.58 With the distance-based charge, a wide range of different charge levels were examined ranging from 10p/km to 50p/km, with the charge being applied to all roads within the conurbation, within a cordon which follows the River Stour from Christchurch to Wimborne and then runs to the west of the urban area to Poole Harbour, as shown in Figure 7.8.

Figure 7.8 – Distance-Based Charge – Area of Coverage

7.59 Figure 7.9 demonstrates the index of changes to key indicators as a result of the different levels of charge from 10pence/km up to 50pence/km. The chart concentrates on the morning peak, although the other time periods demonstrate similar behaviour. It is immediately evident from the diagram that the charges have a significant impact on the volume of Park and Ride demand across the study area with a charge of 50pence/km, there is a 250% increase in Park and Ride demand. This is primarily because the Park and Ride sites are generally located on the boundary of the charged area and hence traffic entering the conurbation would avoid or reduce the charge by transferring onto the Park and Ride bus service.

Figure 7.9 – Distance Based Charge – Index of Impacts (AM Peak)



7.60 Due to the dominant effect of Park and Ride changes, it is difficult to distinguish other individual effects in Figure 7.9. Therefore Figure 7.10 excludes the Park and Ride index and therefore highlights the steady growth in public transport usage (bus, rail and DARTS) as a result of the charge with the public transport index rising by 5 units for each 10p increase in the charge. At the same time, the car trips also show a steady decline such that with the 50p/km charge the number of cars on the whole network has fallen by 4%.

7.61 Although not immediately evident from Figure 7.10, the level of delay (i.e. congestion) shows an interesting behaviour with the 50p/km charge, with the effect occurring in each of the three time periods. In general, the delay declines slightly as the charge increases 10p/km upwards due to a combination of drivers switching to alternative modes and diverting to routes outside the charged area. However, at the 50pence/km charge the level of delay starts to rise again (albeit slightly) as the congestion increases outside the charged area due to the volume of traffic diverting to outside the charged area. Hence, as far as the congestion on the network is concerned, the optimum change is around 40p/km.

Figure 7.10 – Distance Based Charge – Index of Impacts excluding Park and Ride (AM Peak)

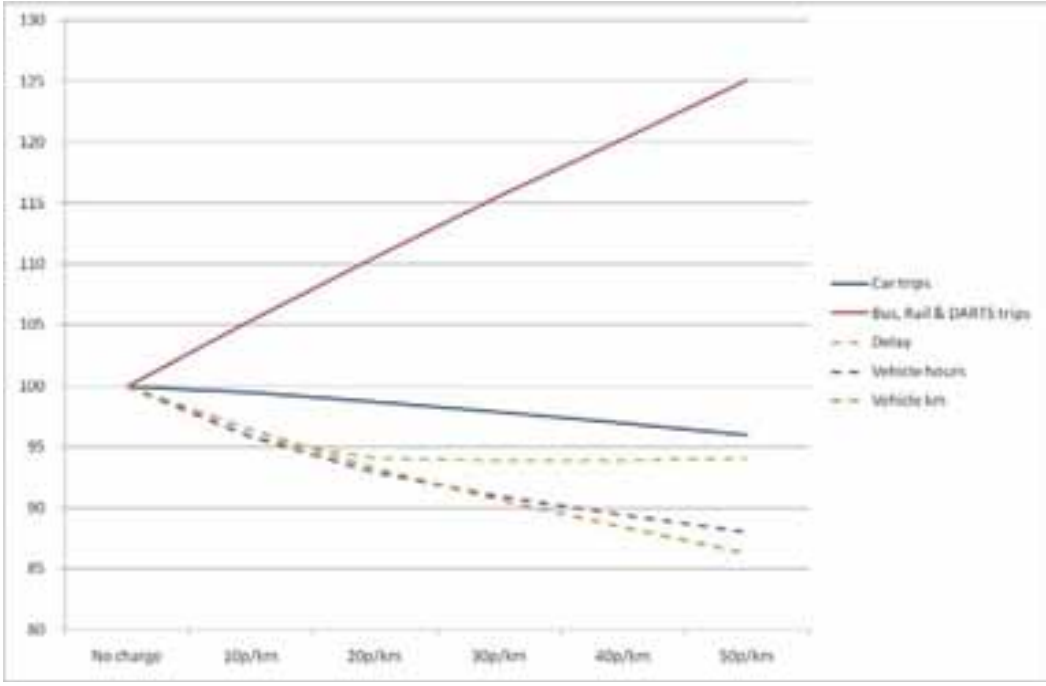


Table 7.6 – Impact of Road User Charging (AM Peak)

Measure	2008	Do Minimum	Strategy with No Toll	£1.00 Toll	£2.00 Toll	10p/km	50p/km
Car Trips	95,890	105,076	95,148	94,981	94,927	94,689	91,341
Vehicle Kilometres	688,501	871,954	814,649	813,249	812,881	785,585	702,587
Vehicle Hours	16,340	25,117	20,544	20,837	20,969	19,686	18,074
Average Vehicle Speed (kph)	42.1	34.7	39.7	39.0	38.8	39.9	38.9
Mean Journey Length km (per vehicle)	7.2	8.3	8.6	8.6	8.6	8.3	7.7
Total Vehicle Delay (Hours)	5,133	10,709	7,295	7,595	7,722	6,988	6,864

7.62 Road user charging could generate substantial revenues, which could be used to fund other transport schemes. Local schemes (cordon or urban area charges) could generate gross revenues (i.e. before infrastructure and operating costs are taken into account) around £20 million per annum, while area-wide schemes would generate even more. The revenue reflects the charges paid by the motorist, and hence the highest revenues are derived from an area-wide distance based charge of 25p/km. It should be noted, however, that the figures quoted assume the same charge would be levied in the inter-peak period as in the morning peak period; in practice the inter-peak and off-peak charges, and hence the revenue, would be lower. Furthermore, there are evident issues with public acceptance of local charging schemes which should not, of course, be underestimated.

A Potential Implementation Programme

7.63 The preceding analysis has identified a range of potential demand management measures. However, due to a range of factors, it would not be possible to introduce many of the measures immediately, even though there might be merit in doing so. Hence, a potential programme has been developed with which the different elements can be introduced in a phased manner.

7.64 Parking controls will be the main demand management tool available to influence driver behaviour and mode choice. Currently town centre parking charges are set to balance parking demand and revenue against the need to retain vitality of the various town centres and support the local economy. This includes competing with private sector car parks, workplace parking and the spread of on-street all day parking by commuters in residential areas.

7.65 It is recommended that long stay parking charges for commuters are increased in real terms by 50% by 2026. This would encourage commuters who currently drive into town centres in peak hour periods to consider alternative sustainable modes such as public transport, walking or cycling in which the local authorities would be investing. Complementary measures should be implemented in tandem including the introduction of self financing resident permit schemes to discourage on-street parking, with the roll out of travel planning initiatives to counter single occupancy car commuting.

7.66 The technical justification for Park and Ride relies on a number of factors, principally the need to balance parking supply against demand, both in the town centres and at the peripheral Park and

Ride sites (see Chapter 6). The intention is that availability of long stay all day parking for commuters would be reduced in conjunction with implementation of Park and Ride, thus freeing up short term capacity in the town centres for visitors and shoppers. It would be necessary to implement this recommendation in such a manner to ensure a positive net impact on parking revenues as well as balancing the wider economic benefits.

7.67 A potential implementation programme for demand management measures could therefore include:

- in the short and medium term: Increase long stay parking charges for commuters are increased in real terms by 50% by 2026 and then continue to review parking charges as appropriate;
- in the long term: review and update town centre parking charges and capacity prior to support implementation and viability of Park and Ride.

7.68 Any implementation of area-wide road user charging scheme would only be linked to the timescale and implementation programme for a national scheme. In the view of the low level of local political and public support, and the costs of setting up the necessary infrastructure, it would not be effective for a single authority to establish a scheme of its own, with the extensive development costs that would be involved. However, it would be an effective tool in controlling the volume of traffic within the conurbation.

Summary

7.69 Within the transport strategy, it is important to include measures designed to control or manage the level of demand for travel by car across the study area. A number of measures to manage demand are available for implementation now and concentrate on varying the availability and cost of parking. The study has considered a wide range of potential policies that are available at different stages in the timescale for the strategy:

- parking controls and other existing policy instruments;
- introduction of workplace parking charges and local vehicle charging measures including toll roads; and
- application of wider regional or national charging measures.

7.70 Parking policies will need to be adjusted and refined over the lifetime of the strategy in order to reflect the growth in car traffic, by increasing charges, controlling the number and availability of spaces, raising enforcement, introducing controlled parking zones, exploring ways of controlling parking at Castlepoint and introducing more stringent parking standards.

7.71 We have examined a wide range of area-wide road user charges. However, due to issues of political and public acceptability issues, an area-wide road user charging system would only be implemented as part of a national scheme.

8. Highway Measures

Introduction

8.1 The preceding chapters have outlined the series of measures which were identified and appraised in the development of the SEDMMTS strategy, starting with measures designed to encourage the use of alternative modes to the car (including smarter choice and travel plans), followed by improvements to the public transport network and then the management of demand. This sequence highlighted the emphasis within the strategy development process adopted by the study; firstly, examining and promoting alternatives to the car and making best use of existing infrastructure before considering changes or additions to the road network.

8.2 The coastal location of the South East Dorset study area with three separate town centres has resulted in a distinct, non-radial main road network, as shown in Figure 8.1.

Figure 8.1 – South East Dorset Principal Road Network

8.3 As highlighted in Chapter 3, the combined impacts of the growth in population and employment across the study area between the base year, 2008, and the forecast year, 2026, together with the increased prosperity over the period, are to increase the car trips by 9.6% from 95,900 to 105,100 in the morning peak period (with 91% mode split in both years) as shown in Table 8.1. In the inter-peak period, although the volume of car trips is lower, the growth between the base year of 2008 and 2026 is greater rising by 28.1% from 53,600 to 68,700; this reflects the level of congestion in the peak periods which encourages a re-timing of journeys into the inter-peak period. In the evening peak hour, the figures are similar to those experienced in the morning hour, with the car trips increasing by 11.7% from 85,900 to 95,900.

8.4 The introduction of the measures outlined in Chapters 5 and 6, which are designed to encourage the use of alternative modes and to enhance public transport, have a significant impact on the

operation of the transport system, with the mode split for car use reduced in the morning peak period such that the absolute number of car trips falls to be slightly below the trips in 2008. The 2026 evening peak exhibits a drop from the Do Minimum of broadly the same magnitude as for the morning peak, although to a level slightly above the 2008 base. In the inter-peak, with lower levels of congestion, the impact of the smarter choices measures and public transport improvements is diminished and so the combined impact of these measures is to cut the growth between the 2008 base and the 2026 Do Minimum by 40%, although this still represents an increase of 16.6% from 2008.

8.5 The reduction in the total number of trips with the smarter choices and public transport measures represents a switch from motorised modes to walking and cycling, which are not fully reflected in the model and hence are not included in the total number of trips. However, this represents 6,000 and 5,500 additional walking/cycling trips in the morning and evening peak hours respectively, with an increase of 3,500 in the average inter-peak hour.

Table 8.1 – Mode Split Following Smarter Choices and Public Transport Measures

	Base (2008)	Do Minimum (2026)	With SC and PT (2026)
Morning Peak Hour			
Car	95,890 (91.4%)	105,076 (91.4%)	94,671 (86.9%)
Bus	6,905 (6.6%)	7,547 (6.6%)	8,495 (7.8%)
Rail	2,145 (2.0%)	2,355 (2.0%)	3,518 (3.2%)
Rapid Transit (DARTS)	0 (0.0%)	0 (0.0%)	1,832 (1.7%)
Park and Ride	0 (0.0%)	0 (0.0%)	420 (0.4%)
Total	104,940	114,978	108,935
Inter-Peak Hour			
Car	53,646 (87.1%)	68,737 (88.2%)	62,565 (84.0%)
Bus	7,112 (11.5%)	8,256 (10.6%)	8,587 (11.5%)
Rail	854 (1.4%)	974 (1.2%)	1,316 (1.8%)
Rapid Transit (DARTS)	0 (0.0%)	0 (0.0%)	1,936 (2.6%)
Park and Ride	0 (0.0%)	0 (0.0%)	91 (0.1%)
Total	61,612	77,967	74,494
Evening Peak Hour			
Car	85,884 (90.5%)	95,903 (90.6%)	86,577 (86.3%)
Bus	7,169 (7.6%)	8,003 (7.6%)	8,810 (8.8%)
Rail	1,813 (1.9%)	1,966 (1.9%)	2,805(2.8%)
Rapid Transit (DARTS)	0 (0.0%)	0 (0.0%)	2,003 (1.8%)
Park and Ride	0 (0.0%)	0 (0.0%)	162 (0.1%)
Total	94,866	105,871	100,357

8.6 The change in the number of car trips on the highway network in Table 8.1 is just one element in identifying the task to be faced when developing the highway measures to be included in the strategy. Table 8.2 summarises the alterations in the performance of the highway network between the 2008 base, the 2026 Do Minimum and the impact of the smarter choices and public transport measures.

8.7 The prime factor is the change in the level of congestion or delay across the South East Dorset highway network. As shown in Table 8.2, in the two peak periods, although the volume of car trips broadly reverts to the 2008 level of demand; the smarter choices and public transport measures only reduce the growth in delays experienced between 2008 and the 2026 Do Minimum by around a half. This therefore highlights that the distribution of trips in 2026 results in pockets of congestion which still remain after the impacts of smarter choices and public transport measures have been taken into account. This then highlights the areas to which attention will need to be paid in the development of the future highway measures. Although the congestion in the inter-peak period is less than in the two peaks, the introduction of the smarter choices and public transport measures is less effective in reducing the delays in the inter-peak, with the drop being only a quarter of the growth between 2008 and 2026 Do Minimum.

8.8 Factors underlying the maintenance of higher levels of delay are indicated by the change in the total distance travelled as measured by the volume of pcu-kms. In the two peak periods, only one-third of the growth between 2008 and 2026 Do Minimum is represented by the reduction through the smarter choices and public transport measures; there is still a significant volume of additional travel compared with the current situation. In the inter-peak, the reduction due to other measures is just 18% of the growth in vehicle-kms between 2008 and the 2026 Do Minimum.

Table 8.2 – Network Performance Following Smarter Choices and Public Transport Measures

	Base (2008)	Do Minimum (2026)	With SC and PT (2026)
Morning Peak Hour			
pcu-kms	688,501	871,954	810,996
pcu-hours	16,340	25,117	21,224
Average speed (km/hr)	42.1	34.7	38.2
Delay (hours)	5,133	10,709	7,944
Inter-Peak Hour			
pcu-kms	476,959	639,980	611,268
pcu-hours	10,140	14,203	13,283
Average speed (km/hr)	47.0	45.1	46.0
Delay (hours)	2,422	3,896	3,496
Evening Peak Hour			
pcu-kms	647,784	843,041	774,728
pcu-hours	14,852	23,440	19,329
Average speed (km/hr)	43.6	36.0	40.1
Delay (hours)	4,269	9,512	6,635

8.9 So, although the number of trips by car has been cut by introducing the smarter choices and public transport measures, there remains a significant increase in the volume of car travel on the highway network, as measured by the vehicle-kms and consequently delays remain at specific points on the network.

8.10 This analysis provides the backdrop to the development of the highway measures designed to create further benefits to the operation of the overall transport system in South East Dorset in the future.

8.11 Although the other measures had made large inroads into resolving the problems, there were still residual areas of significant congestion which remained. Highway improvement measures were

therefore designed to solve the remaining congestion and delays across the study area. Figure 8.2 and Figure 8.3 indicate the junctions which still experience significant delays in the 2026 morning and evening peak hours respectively, following the introduction of the smarter choices and public transport improvements within the overall strategy.

8.12 These figures concentrate on those junctions that are represented by a single node in the mode and hence do not show the delays at complex grade-separated junctions or signalised roundabouts. Nevertheless, the diagrams demonstrate the continuing congestion in the morning peak at:

- Merley;
- A31 at Ringwood;
- Queen Anne Drive;
- Longham;
- Parley Cross;
- Hurn;
- A338 Blackwater;
- Castle Lane West;
- Bear Cross;
- Wallisdown Road, including Mountbatten Arms, Boundary Road and University Roundabout;
- Tower Park;
- Redhill Roundabout;
- Stony Lane, Christchurch; and
- Ringwood Road, Ferndown.

8.13 Many of these locations also experience delays in the evening peak hour, with additional delays at:

- Chapel Gate on B3073;
- Trickett's Cross; and
- Ashley Road.

Figure 8.2 – Junctions with Delays in 2026 after Smarter Choices and Public Transport Measures (a.m. peak)

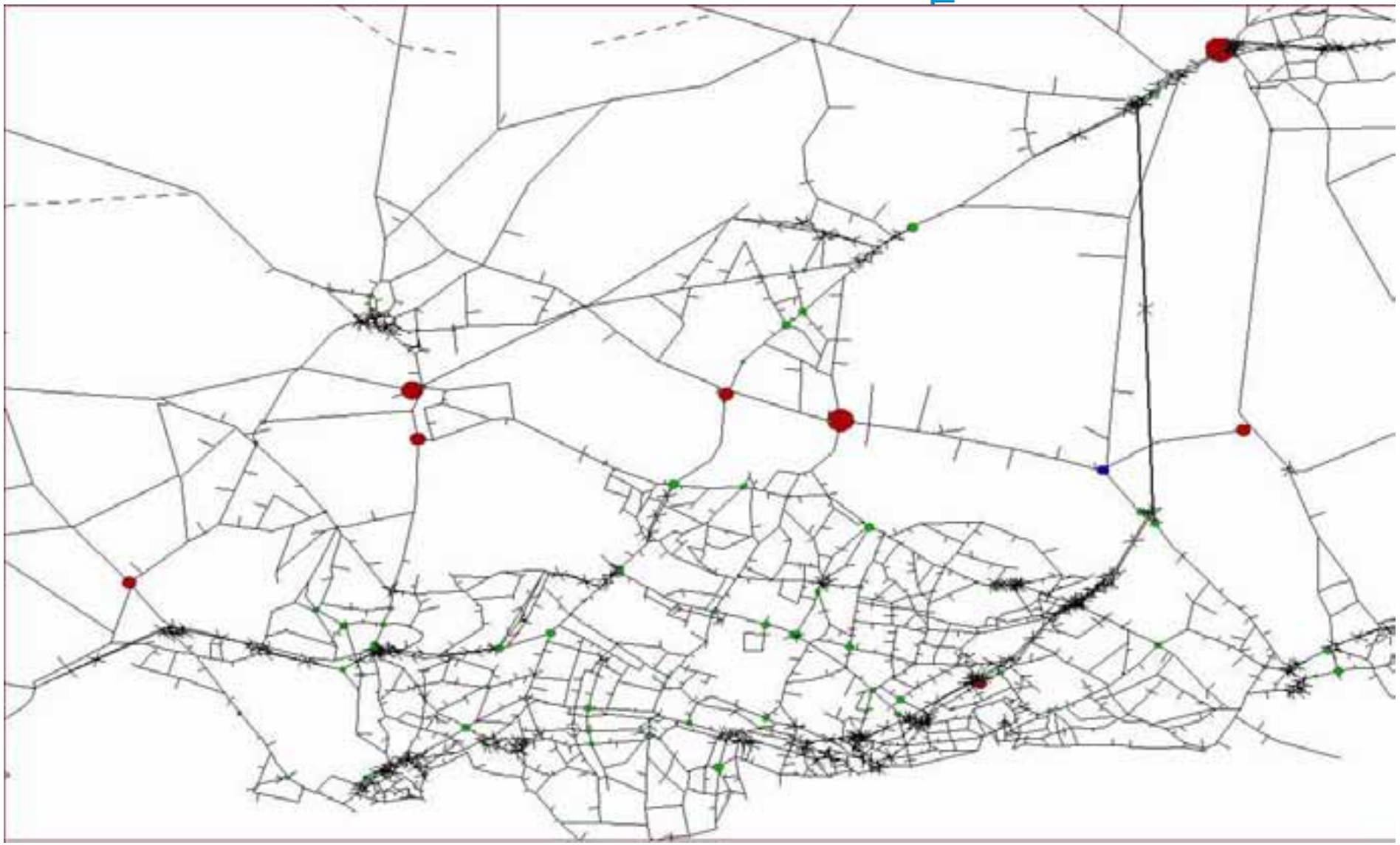
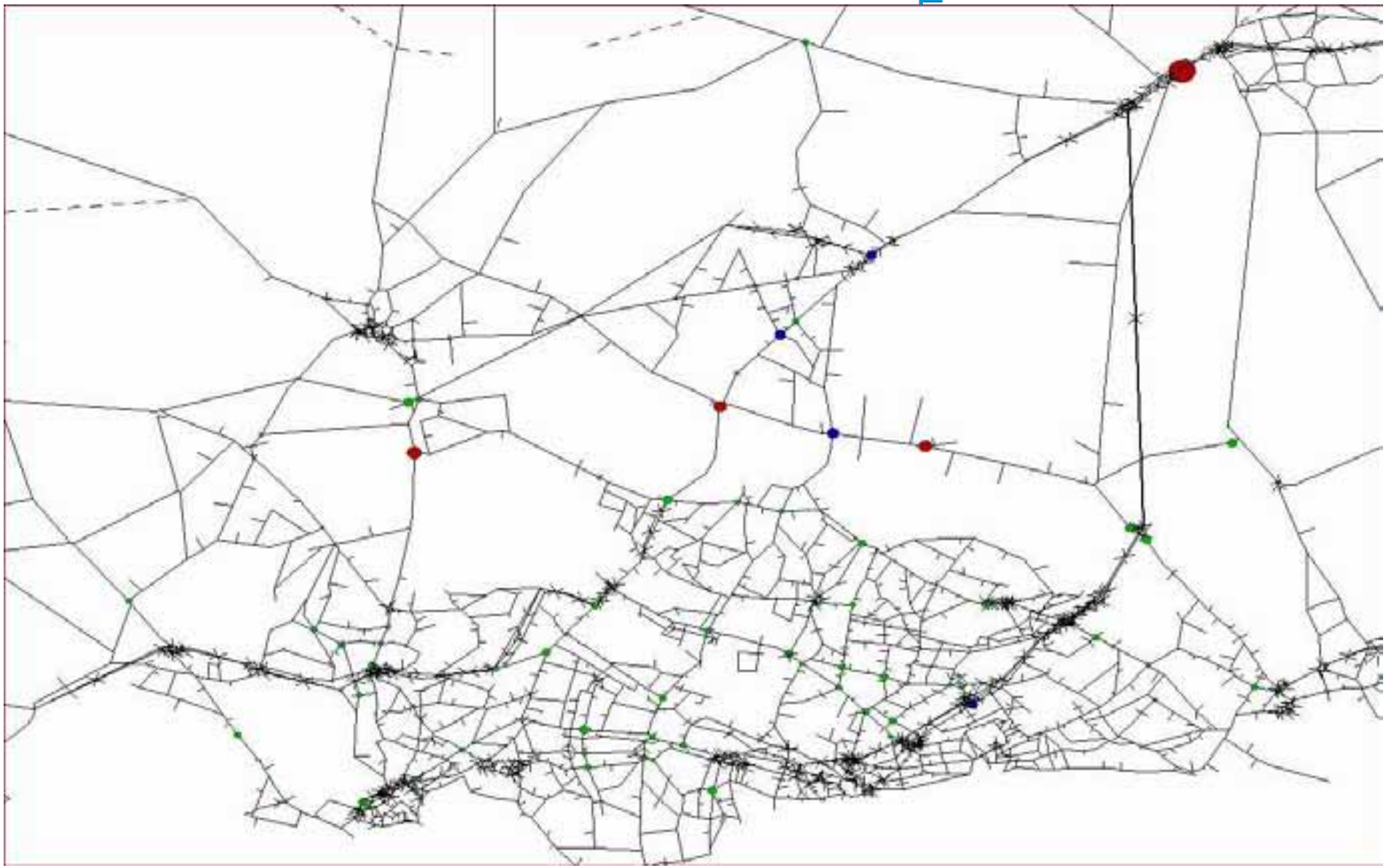


Figure 8.3 – Junctions with Delays in 2026 after Smarter Choices and Public Transport Measures (p.m. peak)



8.14 The consideration of highway measures followed a similar pattern to the overall process adopted throughout the study. Firstly, opportunities to make better use of the existing highway capacity were assessed before considering small-scale junction improvements and then the potential of enhancements to the highway capacity, with emphasis on the strategic highway network. This process is reflected in the format used to describe the highway measures in this chapter.

Making Best Use of the Strategic Highway Network

8.15 Before embarking on extensions to the highway network in the study area, it is important to ensure that the best use is being made of the existing infrastructure and capacity across the strategic highway network, operated by both the Highways Agency and the South East Dorset local authorities. This may be achieved through a wide range of potential measures which are outlined below. In concentrating on the strategic road network, there is emphasis on the measures designed to resolve issues on the major trunk roads. However, many of the measures are also appropriate to the rest of the main road network in the study area.

Combined Traffic Control Centres

8.16 A key element of managing South East Dorset's road network is the development of a joint or network-wide traffic control centre (extending across the wider Dorset area), maximising the use of technology to inform, respond to and manage highway issues, including incidents on the network and changes in weather conditions, with an aim of maintaining or enhancing journey time reliability. The centre would provide real time information on Dorset's road network to road users, allowing them to plan routes and avoid congested areas. In the Intelligent Transport Systems Strategy report for South East Dorset, prepared in March 2009, the need for a Network Control Centre was identified as part of a package which would include the appointment of a single Traffic Manager with responsibility for coordination and direction of traffic management policy across the three authorities. Benefits from the centralisation of operations would be an improvement in communications on traffic management operations across the sub-region by bringing them into a single organisation; an increased clarity of policy; clearer directions; a stronger influence across the region; and the potential to enhance expertise and accelerate innovation. The Network Control Centre could also become a focus for the distribution of information about the real-time operation of the transport system for existing or potential users.

8.17 Such an operation would conveniently sit within an Integrated Transport Authority, introduced in Chapter Six, which would extend the benefits identified above across the wider transport system, with the authorities gaining efficiencies and economies through joint operation across the whole area. However, it is appreciated that, despite the benefits, such a change in working may be felt by individual authorities to be transferring responsibility and influence and hence there would need to be discussions on the structure of such an organisation. It is likely that a strong degree of independence would be required if the authority is to achieve its potential.

8.18 It is understood that the existing traffic control systems operated by the local authorities are approaching their capacity and that initiatives such as the Bus Showcase Corridors, which are a central element of the study's transport strategy, will put significant additional pressure onto the existing system, to the extent that the introduction of bus priority measures at signalised junctions could not be implemented without capacity increases to the existing system.

8.19 The Joint Network Traffic Control Centre is estimated to cost £3.74 million[33]. It has been assumed that staffing for the control room will be managed through the use of existing council

[33] Source: Development of the South East Dorset Intelligent Transport Systems Strategy (SEDITS) ITS Package Report and Deployment Plan (2009)

staff, thus there will be no additional revenue costs in this respect. However, ongoing costs for the operation and maintenance of the control room itself have been estimated at £150,000 per annum[34], which would cover items such as utilities, facility upkeep, security, etc. There are opportunities for revenue savings through joint working, such as combined maintenance agreements, rationalisation of staffing and equipment, shared communications infrastructure, and reduced operational overhead (e.g. the time taken in coordinating between the councils in managing incidents and congestion).

8.20 In addition to the Joint Network Traffic Control Centre, further improvements under the heading of Intelligent Transport System (ITS) would contribute to a more effective operation of the existing road network. Some ITS initiatives have already been considered within other elements of the transport strategy, particularly in association with the availability of real-time information on public transport services.

8.21 As far as improvements to information on the operation of the highway network is concerned, there are significant advances in the available technology, especially through the development of mobile phone applications, such that conventional means of transferring information to drivers (e.g. through in-car satellite navigation systems) may become superseded in the near future.

8.22 Hence, the attention in areas such as Variable Message Signs (both permanent and portable), and in upgrading the Urban Traffic Control (UTC) system would be in enhancing the local authorities' infrastructure and systems such that information on congestion, availability of parking spaces, etc can be made available through a range of media. In addition, within the Bus Showcase Corridors and elsewhere within the public transport operation, there would be merit in extending and upgrading the facilities for the enforcement of bus lanes, for example through the expansion of CCTV (for congestion and incident monitoring) and Automatic Number Plate Recognition cameras (for journey time monitoring).

Planned Maintenance

8.23 Planned maintenance can help to minimise disruption on the road network. Maintenance works, particularly those requiring lane possessions, should be programmed to avoid periods when traffic volumes are greatest in order to minimise the disruption to traffic, with an emphasis on works taking place overnight. With significant levels of holiday traffic to/from west Dorset, Devon and Somerset passing through the study area, the HA is adopting a policy of no maintenance on its network during the summer. A further strategy, recently tested by the HA, has been to promote hybrid improvement and major maintenance schemes in order to combine new works and maintenance operations within a single contract.

Reductions of Incidents

8.24 An important factor in the causes of congestion on the strategic road network is the occurrence of accidents and incidents. A number of measures could be implemented to reduce the occurrence of incidents, particularly on the trunk and major roads:

- increased police activity on the network to identify drivers behaving in such a way as to cause incidents;
- use of CCTV to identify poor driving;
- stricter enforcement of penalties for drivers who are found behaving dangerously; and
- use of variable message signs to control speeds, and to warn motorists of accidents, incidents and other hazards ahead.

[34] Source: Development of the South East Dorset Intelligent Transport Systems Strategy (SEDITS) ITS Package Report and Deployment Plan (2009)

8.25 The above measures would complement ongoing initiatives, such as accident hotspot identification, being operated by the HA and local authorities.

Incident Management

8.26 Incident management is vital for minimising the impact of:

- accidents;
- breakdowns;
- spillages;
- shedding of loads;
- removal of debris; and
- fires.

Figure 8.4 – Incident in Central Bournemouth

8.27 As vehicle flows on the network increase, incidents are likely to become more frequent and to lead to significant reductions in capacity. Any incident that reduces the capacity below traffic demand creates queues, particularly on the trunk road network operated by the Highways Agency. Although the issue is not seen as a particular problem in the study area, there are significant benefits from clearing up incidents quickly. However, this is becoming more difficult with increasing legislation governing procedures that must be carried out at the scene of the incident. Such procedures include extensive investigation, particularly in the case of a fatality, and the increasing possibility of litigation by those involved in the incident if, during clearance of the incident, the authorities inflict damage on vehicles, goods or property. Continued partnership working between the HA, local highway authorities, the police and other authorities is key to the management of incidents in the study area. In general, the HA and police are seeking ways of speeding up the clearance of incidents; in other parts of the country, trials are underway in the use of satellite navigation systems and digital recording in order to accelerate the re-opening of roads following major incidents.

Incident Occurrence

8.28 Fast detection of an incident on its own reduces the response time by only a few minutes and its direct impact on the total duration of an incident is therefore limited. However, there may be a significant indirect effect e.g. by the avoidance of secondary accidents. Also, a few minutes earlier medical treatment can significantly affect survival rates.

8.29 The introduction of incident detection systems will have a range of effects, including:

- reducing the duration of the incident;
- increasing the hourly vehicle flow;
- reducing the consequent delays experienced by traffic; and
- reducing the severity of injury experienced by those involved.

8.30 Traditional practice in the introduction of incident detection systems has tended to concentrate the initiatives on the national motorway network in alerting a police vehicle on patrol to attend the scene of the incident immediately. There are fewer issues associated with the trunk road network in the study area. The scale of the incident can be assessed and any additional resources can be called upon. The need for patrol attendance for validating the initial report before all the necessary resources can be mobilised contributes significantly to the response time.

8.31 The use of standard diversionary signs should minimise the level of police effort necessary to achieve the benefits of significant traffic diversion. However, in practice, it can be time-consuming for the police to gain access to and operate the diversion route trigger signs, and these resources could often be better employed in dealing with the incident itself. With the increasing deployment of higher technology solutions, electronic VMS would be preferable. Often the impacts of diversions on the local road network produce significant levels of congestion which take long periods to dissipate. This is particularly true on sections of the network in the study area where there are limited alternative routes, e.g. for the A31. The increased availability of in-car satellite navigation and mobile phone systems will help in the wider use of alternative routes without the need for additional signing.

Signing, Surveillance and Automated Systems

8.32 Recent advances in technology have led to the potential to introduce more ‘intelligent’ signing/traffic control systems that can provide information in response to changing traffic conditions. These are available elsewhere in the UK, and there would be merit in extending their availability across the study area. The systems more commonly available are:

- driver information systems which use variable message signs (VMS) and can reduce journey times for some traffic when there is congestion;
  - real-time response to incidents, enabling immediate activation of lane control signals, incident warning signs, and advisory alternative route signs;
  - reduction in congestion, which lowers the chances of additional secondary accidents occurring and eases the route for emergency services; and
  - reduced need for manual resources, with staff concentrating more on directing emergency services and road crews.
- communicating road side information direct to drivers about carbon emissions and driving techniques, including the potential for real-time emissions measurements;
- incident warning systems with roadside displays designed to reduce accidents by highlighting congestion, obstructions or incidents ahead; and

- car park guidance signs to direct drivers to the nearest car park with available spaces, as shown in Figure 8.6, although the number of these signs in South East Dorset is limited at the moment.

Figure 8.5 – Local Advance Warning Sign

Figure 8.6 – Parking Space Availability

New Highway Schemes

8.33 As identified at the start of this chapter, the improvements to the highway network were considered after the range of alternative policy measures. They were designed to resolve residual congestion on the strategic road network.

8.34 At the outset, it is necessary to understand the importance of the interface between the local and strategic networks. On occasions, problems on the strategic network, primarily the A31, are caused by capacity constraints on the local network and hence measures may be necessary on the local network to resolve the problems on the strategic network. At the same time, the reverse effect may also be encountered, in which constraints on the strategic network have impacts on the local network; this is particularly true through the heavy traffic volumes on the A31 in the summer.

8.35 There would be merit in identifying potential junctions in Poole, Bournemouth or Christchurch at which a scheme on the lines of the recently introduced Oxford Circus initiative could be introduced in order to demonstrate a keenness to explore innovative solutions. However, due to the preponderance of roundabouts and grade-separated junctions across the conurbation, the opportunities for such initiatives are limited to locations such as Cemetery Junction which would probably not be the most beneficial location for such a scheme, due to the relatively low pedestrian volumes.

Junction Improvements

8.36 A number of key junction across the South East Dorset area were assessed to identify a variety of detailed junction improvements, extending from changes to traffic signal settings or to priorities through to the reconfiguration of the junction, see Figure 8.7. An indicative annual cost of has been included in the strategy programme to allow for ongoing improvements to key junctions across South East Dorset and associated traffic management/local safety schemes, e.g. Bear Cross, Ensbury Park, Queen Anne Drive, Cemetery Junction, Pottery Junction, etc. Details of the specific proposals are outlined for the individual junctions below.

Cemetery Junction

8.37 Due to the proximity of frontage developments to the junction, the entrance to the cemetery and the rail line running through and below the junction, there is limited scope for widening without land-take. The current phasing of the signals is effective with left turn filters in operation wherever possible. For pedestrians, there is a fairly short phase which means that, for heavy movements (e.g. across the north-west arm), pedestrians often cross before receiving the ‘green man’. The junction is part of the North Bournemouth Bus Showcase Corridor (see Chapter Six) with the scheme including bus pre-signals on the approaches on the A347 Talbot Avenue from the north-west.

Figure 8.7 – Location of Proposed Junction Improvements

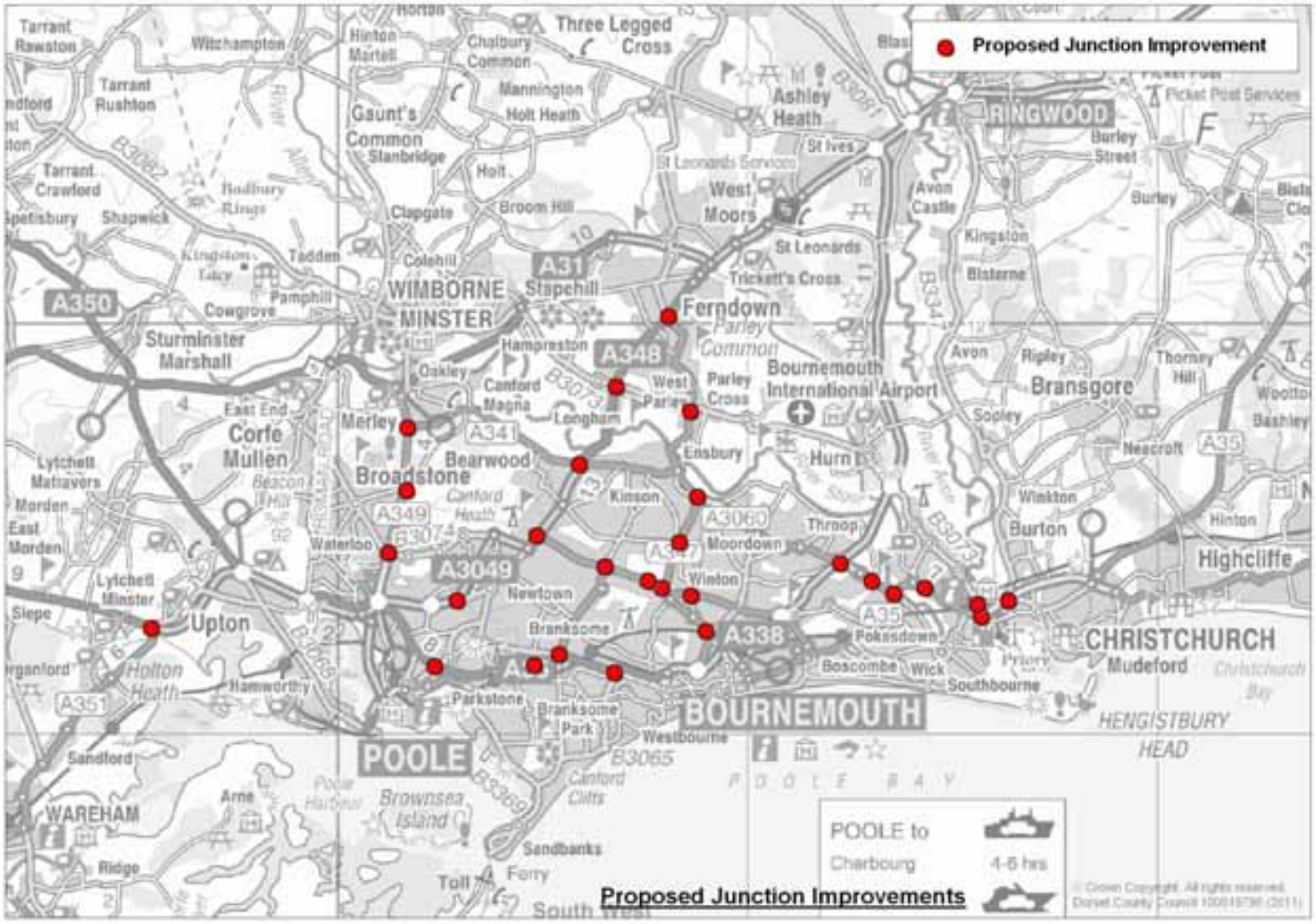


Figure 8.8 – Cemetery Junction

Wallisdown Crossroads

8.38 The junction of Wallisdown Road (A3049), Alder Road (A3040) and Kinson Road is formed by a small roundabout with short sections of two lanes in width on each approach. There is no land available for significant improvements to the roundabout due to the number and proximity of buildings surrounding the junction. One option might be to signalise the roundabout for peak periods to provide some control for the operation of the junction, with alternate arms operating in an anti-clockwise direction to minimise the magnitude of inter-green time. The inter-peak and off-peak traffic volumes would probably not justify a full-time operation of the signals.

8.39 An alternative approach would be to convert the roundabout to a signalised crossroads but this would be unlikely to create significant additional capacity with only one lane in each direction apart from a very short flare to two lanes close to the junction, with some minor widening. The junction is not included in either of the A35 or North Bournemouth Bus Showcase corridor and hence only small-scale bus priority improvements would be considered in the short term.

Bear Cross

8.40 The junction comprises a small roundabout with short sections of two lanes on the approaches from Wimborne Road (A341) and Ringwood Road North (A348) but with a dual carriageway approach from Ringwood Road South (A348) while Magna Road (A341) from the west has two lanes on the approach for about 90 metres. It is difficult for pedestrians to cross at the junction, although pedestrian volumes are low. The is limited scope for significant improvements because of the shortage of available land – the Bear Cross public house and commercial property occupy the north-west and south-east corners while mature trees limited opportunities in the north-east. The scope is therefore restricted to the south-west quadrant where a limited grass verge is potentially available.

8.41 A possible approach would be to signalise the junction, at least in the peak periods, to provide some control to the operation. Converting the junction to a signalised crossroads would have limited benefits although there would be the potential to improve the opportunities for pedestrians. Although the junction forms the start of the North Bournemouth Bus Showcase Corridor described in Chapter 6, there are no specific measures includes in the package for the junction itself.

Figure 8.9 – Bear Cross

Mountbatten Arms

8.42 The junction operates as a signalised roundabout with signals on three of the arms, with pedestrian facilities only on the Ringwood Road North (A348) arm; it appears to operate effectively. The central island contains a number of mature trees. There is scope for widening the approach to the junction from Ringwood Road South (A348) and there is potential to reduce the size of the central island to create an additional carriageway although this may require the removal of some of the trees.

Figure 8.10 – Mountbatten Arms

8.43 Other alternative approaches could be to convert the junction into a signalised crossroads or two signalised T junctions, which could offer improved pedestrian facilities and provide the potential to introduce bus priority measures. The longer term Bus Showcase Corridor measures include the Mountbatten Arms junction within the Wallisdown Road and Ringwood Road corridors. Within the BSC, the measures include the linking of the Mountbatten Arms with a signalised Alderney Roundabout to the south using UTC with bus priority and with an additional northbound offside bus lane on the approach to the Mountbatten Arms from the south.

Pottery Junction

8.44 The junction is formed by two roundabouts of 28 metre and 46 metre Inscribed Circle Diameter (ICD), linked by 60 metres of dual carriageway. The junction of Bournemouth Road (A35) and Poole Road (A35) contains the larger roundabout with two lanes on each approach and spiral markings on the circulatory carriageway. There are signalised pedestrian crossings on two of the arms with the Poole Road crossing causing considerable delays to traffic due its proximity to the roundabout exit and the regularity that it is called. The smaller roundabout at the junction of Ashley Road (B3061) and Alder Road (A3040) has short two lane approaches on two arms with the other arm being the dual carriageway link between the junctions.

8.45 The junction lies within the A35 BSC corridor which includes a range of potential measures which could be used to enhance bus operations, with each option including the introduction of bus lanes in each direction on the section between the two junctions:

- adjustments to the existing puffin crossing to reduce the length of time that traffic is held at the crossing;
- signalisation of the eastern Bournemouth Road/Poole Road roundabout and the replacement of the western Ashley Road/Alder Road roundabout with a signalised junction incorporating pedestrian crossings and linked MOVA; and
- replacing the two roundabouts with signalised junctions, incorporating linked MOVA.

Bournemouth Road/St Osmunds Road

8.46 This four arm signalised crossroads has cycle lanes and advanced cycle stop lines on both sections of Bournemouth Road (A35) and pedestrian facilities on all arms. All approaches are two lanes with a right turn and combined left turn and straight ahead lane. There would be little scope for improvement without land take and the current signal phasing operates effectively. The limited scope for improvement could be the introduction of right turn filters for other movements.

Ensbury Park Gyratory

8.47 Particular issues are caused at two of the priority nodes on the gyratory (Colombia Road and Ensbury Park Road) where vehicles are unable to merge into the gyratory from the minor road. The timings at the junction on Boundary Road (A347) could be adjusted to provide a longer inter-green time to enable vehicles to exit from Colombia Road or to signalise the Columbia Road junction.

8.48 The junction forms part of the North Bournemouth BSC and proposals for Wimborne Road include junction layout amendments at Ensbury Park Road to improve Wimborne Road traffic movements and bus manoeuvres into/out of Ensbury Park Road.

Wimborne Road/Alma Road/Talbot Road

8.49 This staggered four arm signalised crossroads has pedestrian facilities operating within their own phase. There is little scope for improvements involving widening the junction due to the proximity of buildings. The stop lines are positioned so as to minimise inter-green times while enabling large vehicles to turn at the junction. Some problems occur when buses visit the stop on Alma Road (A3049) as the following traffic queues back into the junction. In addition, at times, delivery vehicles to the public house can cause delays to traffic. In additional to the enforcement of parking restrictions, the main measure would be to adjust the signal timings. The junction forms part of the North Bournemouth BSC scheme which contains a proposal for the introduction of Selective Vehicle Detection at the junction. Furthermore the general increase in stored value ticketing would help to minimise the dwell times of buses at stops near to the junction.

County Gates Gyratory

8.50 The large gyratory is signalised on three of the arms with two further priority junctions and a further arm operating as a bus only exit. Problems are created by the queues on the approach

roads to the gyratory together with blocking back from Wessex Way (A338). The signal timings would benefit from a review, at times the traffic on approaches is held even when the circulatory carriageway is clear; the signals may therefore be operating on fixed timings rather than on demand. There is very limited opportunity to widen the circulatory system or the approach roads without land take due to the frontages and mature trees. Lindsay Road has only a short length of two lanes on the approach to County Gates; this could be remedied by considering a reduction in the length of the cycle lane and altering the centre line to provide a more extensive two lane section. In addition, the possibility should be explored to establish whether the eastbound two lane section of Wessex Way could be lengthened so that the merge to one lane is further from the junction and on the straight section rather than the bend – this would require widening on the north side of the A338.

Figure 8.11 – County Gates

8.51 The operation of the gyratory is linked with the operation of Wessex Way and the adjacent large Westbourne town centre gyratory system. Each of the three elements is included in the BSC schemes for the A35 corridor. For the County Gates, the BSC proposes the operation of MOVA while alternatives are proposed for the Westbourne Gyratory, either the creation of a new system using Poole Road in the eastbound direction and Seamoor Road in the westbound or the conversion of Poole Road into a two direction bus-only road with Seamoor Road carrying two-way general traffic. Although enhancing bus operation, the latter option would have an impact in the access of general traffic to Westbourne town centre.

Boundary Roundabout

8.52 This three arm roundabout lies at the junction of Wallisdown Road (A3049) and Boundary Road (A347) and has extensive hatching on the circulatory section. There are uncontrolled crossing points on each of the arms which appear adequate, although the volume of student activity may be irregular. There are large numbers of trees on the roundabout and surrounding the junction which will impact on the scope of any alterations. Peak time traffic signals would seem to be the most suitable way of treating peak period delays; the signals would be unnecessary in the inter-peak periods.

8.53 The potential for a westbound bus lane on Wallisdown Road towards the University should be explored; it could be achieved from the bus stop to the south-west of the junction on Talbot

Avenue and the dedicated lane could run through the Boundary Roundabout, although this may require widening and the possible removal of mature trees. Widening would also be required on the exit of the Boundary Road roundabout for the merge with general traffic to be achieved safely.

University Roundabout

8.54 This four arm roundabout has a pedestrian crossing at the University entrance and a pedestrian subway on Wallisdown Road (A3049) to the west of the junction. The eastbound Wallisdown Road approach to the junction has three lanes which are very short in length; one possible approach to increasing the capacity would be to remove the subway and provide bus priority from the bus layby to the junction. The pedestrian crossing activity would be transferred to an at-grade crossing. The removal of the subway would also enable the provision of two straight-ahead lanes with two lanes on exit through the widening of Wallisdown Road using the nearside verge. Similarly the westbound approach from the Boundary Road junction could operate with the nearside lane operating as left and ahead with the exit widened to provide room for two lanes emerging from the roundabout.

8.55 As an alternative, the roundabout could be converted to peak time signals; these would not need to operate in the inter-peak as the junction operates satisfactorily at these times.

Queen Anne Drive

8.56 This three arm signalised junction has pedestrian crossing facilities on the northern arm on Gravel Hill (A349), which are only called on demand. There is no room at the junction for any significant improvements to increase capacity without land-take. Any widening would probably be achieved on the west side where it would be necessary to rebuild the existing retaining wall with the existing verge being used further north. On this basis, there would be the potential to create two northbound straight ahead lanes although there is little opportunity to increase the southbound capacity.

Harbour Lights/Shah of Persia

8.57 This four arm signalised crossroad has uncontrolled pedestrian crossing activities on three of the arms. There are long designated right turn lanes on all four approaches to the junction which should be reviewed – there may be the potential to ban the right turn in some instances and provide an additional lane for straight ahead movements. There is no land available the junction for improvements to widen the junction.

8.58 The bus stops on Longfleet Road (B3068) cause some blocking back into the junction at peak times. Improved boarding times through the introduction of stored value ticketing should ease the problem in the future. Longfleet Road is included in the BSC proposals for a south-eastbound bus lane in the A35 corridor package of measures.

Poole Civic Centre

8.59 This large signalised gyratory has pedestrian crossing facilities on all major approaches. A contra-flow bus lane has recently been introduced between Fernside Road (A35) and North Road. Consideration should be given to a bus lane on Park Road (which is included in the BSC proposals for the A35 corridor) and Sandbanks Road. Such schemes may require some widening.

Figure 8.12 – Contra Flow Bus Lane at Poole Civic Centre

Tower Park

8.60 Tower Park is a three arm roundabout with dual carriageways on each of the three approaches, with a dedicated lane for north-east bound traffic continuing on Dorset Way. The high volume of traffic making the right turn from the northbound A3049 Dorset Way onto the B3061 Old Wareham Road delays the southbound traffic on Old Wareham Road from obtaining access onto the roundabout. Potential solutions to the problem would include signalising the north-eastbound arm of Dorset Way to provide gaps for the southbound traffic to access the roundabout; signalising the whole roundabout; or converting the junction to a signalised priority junction.

Parley Cross

8.61 This four arm signalised crossroads has pedestrian facilities on three of the arms which are called on demand; there are no pedestrian facilities on the give way left turn from the B3073 Christchurch Road to A347 New Road. Long queues are evident on all arms in the peak period and hence, within the existing infrastructure, there is little opportunity for significant improvements apart from adjustments to the staging and timing of the traffic signals. With restrictions on the land take on all quadrants except the south-east, the main opportunity for a local solution to the delays is through the creation of a gyratory system based on the south-east quadrant, tied in with other developments in the area. As shown in Figure 8.13, there are several mature trees in this section which could have an impact on the design of any scheme. A scheme including a major gyratory system has been developed by the authorities although it is possible that a smaller scheme could be designed which requires less land-take. In the longer term, other highway measures described later in this chapter would provide relief to the junction.

8.62 The junction is included in the longer term proposals for the extension of the package of BSC measures to provide improved links for bus services to the north of the conurbation including longer distance routes. The BSC proposals include bus priority for north-south movements through the junction.

Figure 8.13 – Parley Cross

Redhill Roundabout

8.63 This five arm roundabout comprises three major roads (A3060 Whitelegg Way, A3060 Wimborne Road and A347 Redhill Avenue) with two minor roads (Redhill Drive and Park Lane). Pedestrian crossing facilities on all arms are uncontrolled.

8.64 In the evening peak, there are often delays entering the roundabout from Redhill Avenue (A347) due to the volume of traffic from Wimborne Road through to Whitelegg Way. It may therefore be necessary to signalise the Wimborne entry, at least in the peak periods, in order to create gaps. The timings of signals at the Wimborne Road and Whitelegg Way junction just to the west of the Redhill Roundabout would need to be reviewed in order to control any queues back onto the roundabout. It does not appear to be feasible to convert the complete roundabout to signalisation due to the size of the roundabout and the complexity of the operation. Similarly, with five arms to the junction, it would not be feasible to convert it from a roundabout to a signalised junction.

8.65 The North Bournemouth BSC proposals include a scheme for an eastbound bus lane from Whitelegg Way through the roundabout to Wimborne Road, possibly with a bus gate to give priority onto the roundabout. It is anticipated that the scheme would be introduced in phases with the west side of the roundabout being introduced before the east side.

Iford Roundabout

8.66 This four arm roundabout at the junction of the A35 Christchurch Road, the A3060 Castle Lane East and the minor Iford Lane experiences significant congestion. Bournemouth BC has plans to convert the roundabout into a signalised crossroads and this scheme has been incorporated into the BSC proposals for the A35 corridor.

Figure 8.14 – Iford Roundabout

Bakers Arms Roundabout

8.67 The Bakers Arms roundabout forms the junction between the A35 which connect the conurbation with Dorchester and West Dorset, the A351 to Wareham, Swanage and the Isle of Purbeck and the B3067 local route to Lytchett Minster and Upton. On the east side of the roundabout, the A35 is a dual carriageway which reduces to a single carriageway on the western side. The Purbeck Transportation Strategy has examined a range of measures to modify the junction with the aim of encouraging traffic travelling west from the conurbation to use the A35 to Wool, Lulworth and beyond and hence discourage non-local traffic from using the A351 through Wareham. The measures considered included:

- dual carriageway A35 flyover, costing about £10million with associated environmental impacts and visual intrusion;
- new roundabout 300 metres to the west of the existing junction costing £5-£10million with A351 traffic on a flyover with associated environmental impacts and visual intrusion;
- A351 closed at Holton Heath with traffic from the south diverted onto B3075 to join the A35 at Morden Park Corner with improved junction and online improvements to the B3075 and A35 but would result in increases to journey times, would sever Holton Heath industrial estate and have environmental impacts;
- create ‘hamburger’ style junction with A35 running through the junction but would involve an extension of the dual carriageway to the west of the junction with subsequent issues over the merging of traffic when it reverts to single carriageway;
- signalisation of the junction costing up to £1million but with potential for increased delays on the A35 and safety concerns for the introduction of signals on a high speed road;
- revisions to the route signing strategy – although would be unlikely to change the routeing of local drivers;
- traffic calming within Sandford but was not expected to have a significant impact on the desired diversion of traffic; and

- minor changes to the existing junction to reduce the width of the A351 entry width – but not considered to have a significant impact on traffic diversion.

8.68 The study concluded that it would be difficult to discourage local drivers from using the A351 and that none of the options represented a satisfactory solution to the objective of encouraging traffic to use the A35 as an alternative to the A351. The conclusion reached was that any major works at the Bakers Arms roundabout would be unlikely to provide good value for money and that a combination of traffic calming on the A351 at Sandford together with a modification of the traffic signing in the Purbeck area might offer the best compromise solution.

Poole Regeneration Gyratories/Links

8.69 The current Poole Bridge represents a constraint to the access of the port due to the combination of the limited capacity, especially as times when there is a high level of goods vehicle activity to the port and to service Hamworthy (see Figure 8.15), together with the periods when the bridge is lifted. The completion of the Twins Sails Bridge will create direct relief to the existing structure, even though the operation of the new bridge will still need to incorporate times when traffic will not be able to cross when the bridge is lifted.

Figure 8.15 – Poole Bridge Traffic

Figure 8.16 – Poole Twin Sails Bridge

8.70 The initial design and implementation of the Twin Sails Bridge does not include the full extent of the access roads on the Poole bank. The design of the gyratory systems and additional links are show in Figure 8.17. The cost of the remaining gyratories/links associated with the Poole Bridge Regeneration Initiative (PBRI) is estimated to cost around of £14.5 million. Delivery will be spread out from 2012 to 2017, and includes the following elements shown in Table 8.3.

8.71 An alternative approach for the design of the gyratory on the Poole bank has been identified within the study. This is shown in sketches contained in two sections with the southern section in Figure 8.18 and the northern section in Figure 8.19. The operation of these alternative designs would need to be assessed using a detailed simulation model, which is outside the scope of the current study.

Table 8.3 – Poole Regeneration Gyratories/Links

	Cost (£m)
Old Town gyratory improvements. Includes lay-bys and widened pavements.	2.4
West Street/West Quay/Marston Road/Bay Hog Lane signalled gyratory.	6.1
New access to Dalgety Site and Holes Bay Road improvements. New Quayside walkway and multi storey car park.	3.0
New Town side Quayside, RNLI site to The Quay, with two improved slipways.	3.0
Total	**14.5**

Figure 8.17 – Poole Twin Sails Bridge Approach

Figure 8.18 – Poole Twin Sails Bridge – Alternative Approach (Southern Section)

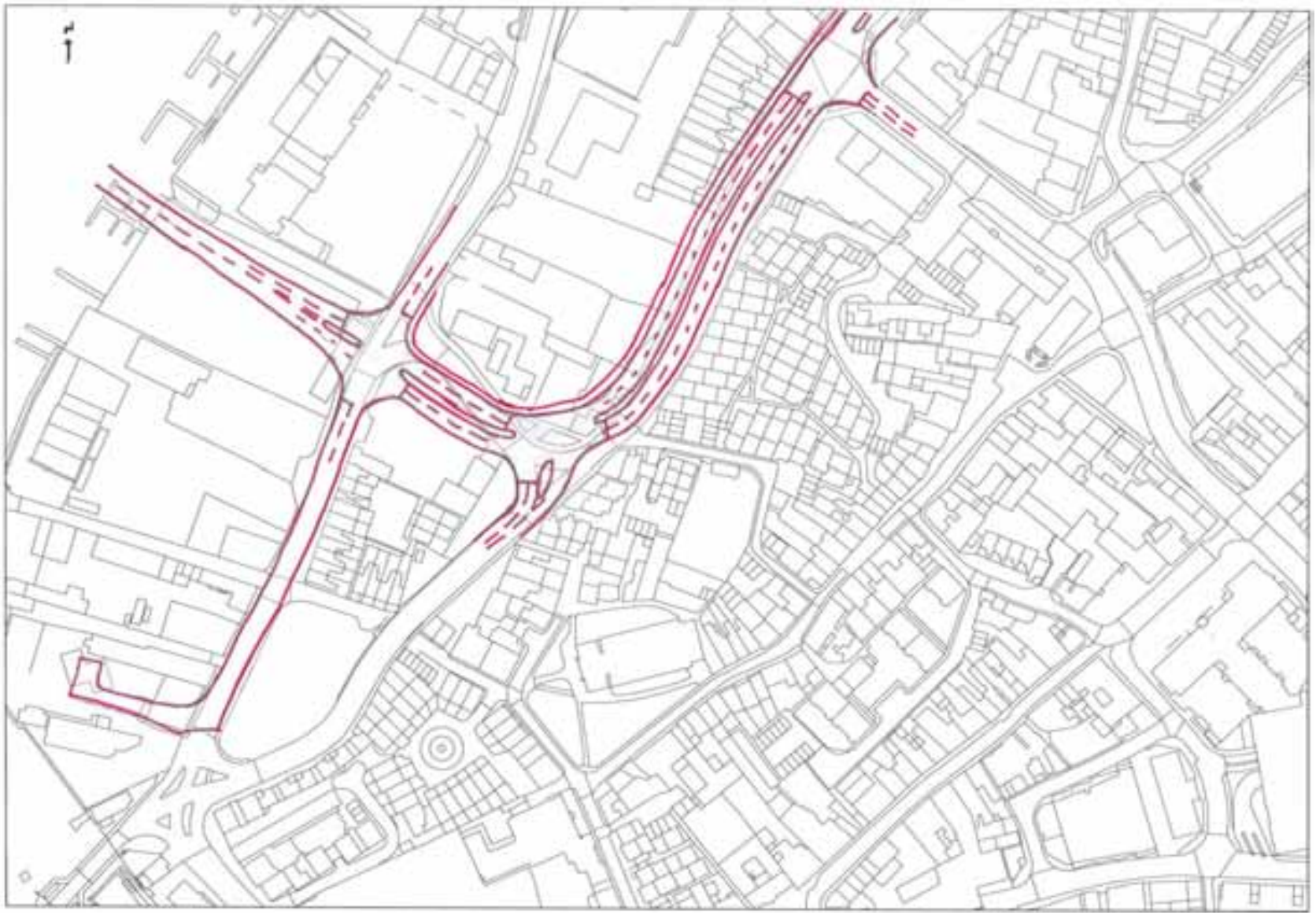
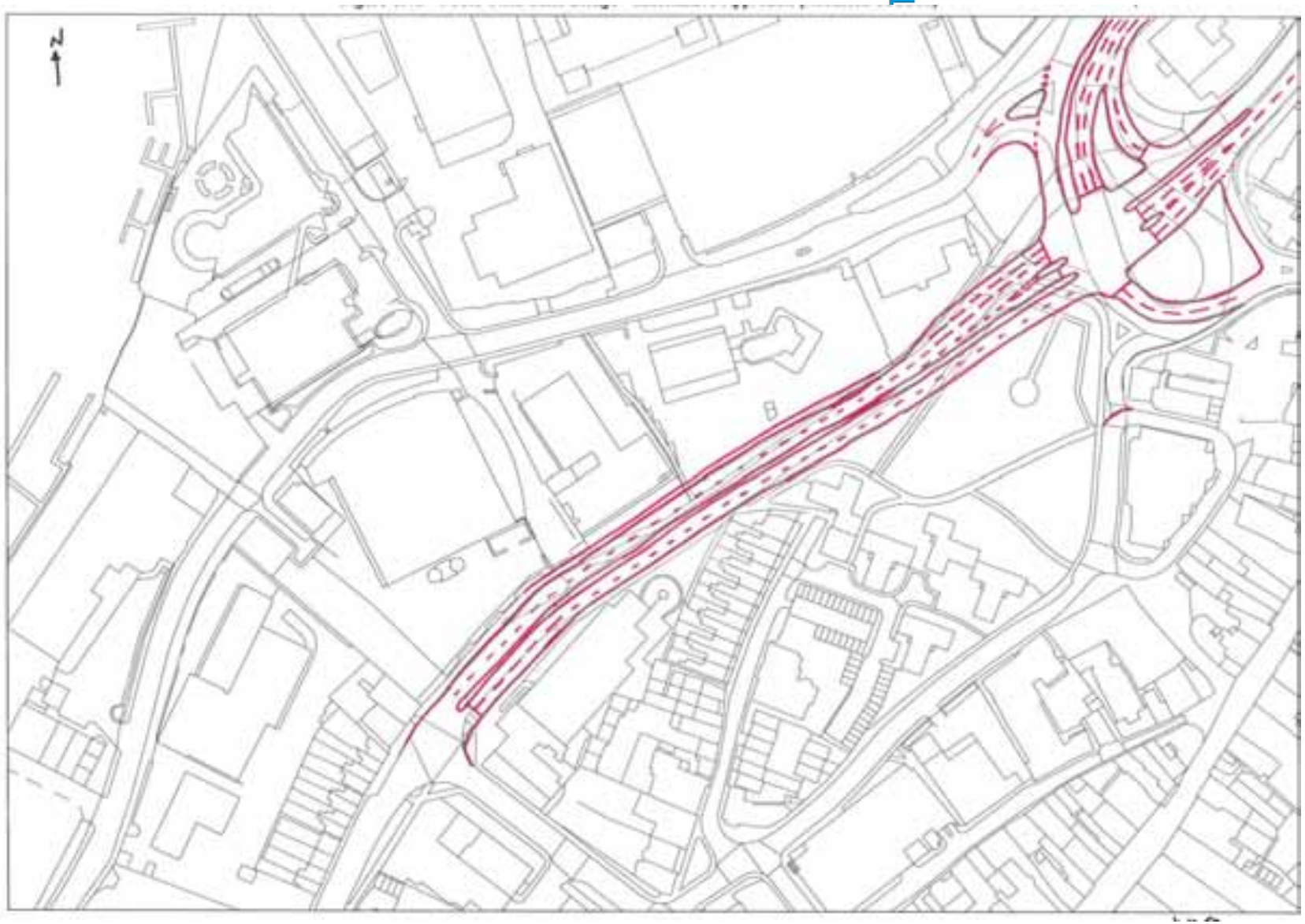


Figure 8.19 – Poole Twin Sails Bridge – Alternative Approach (Northern Section)



A31 Improvements

Highways Improvement at Canford Bottom

8.72 The six arm roundabout on the A31 Trunk Road at Canford Bottom is the source of considerable congestion particularly at peak times and throughout the summer holiday period. The photographs in Figure 8.20 and Figure 8.21 show aspects of the existing junction while Figure 8.22 shows the existing detailed layout. The Highways Agency has considered a series of immediate remedies for the junction, with particular emphasis on those measures that could be introduced in advance of the Olympic Games sailing event at Weymouth in summer 2012, with the A31 representing a section of the recognised formal Olympic Route to the event. The HA identified the preferred solution as the conversion of the existing six arm junction into a hamburger format as shown in Figure 8.23 with the A31 traffic running through the junction and other movements using the circulatory section.

8.73 The HA study established that the hamburger arrangement would reduce congestion and journey times on the A31 corridor. The design and the assessment of the hamburger option has included the consideration of a variety of sub-options including the closure of local network arms, full / partial signalisation, and a single or dual carriageway width for the through-road. In addition, the possibility of temporary arrangements including a temporary fly-over using a 'Bailey Bridge' type structure was assessed in the identification of alternative designs.

8.74 The introduction of traffic signals at Canford Bottom will alter the nature of the circulatory system. The existing spiral markings are inadequate and attention is needed to ensure optimal stacking capacity at each stop line. It is assumed that traffic approaching the junction from local roads will be divided according to their existing route patterns. Lane markings and lane designation signs around the circulatory section will then provide safe traffic movements throughout. In the HA's appraisal of the scheme, it recorded a strong BCR of greater than 15 and, following an initial environmental impact assessment, no significant risks / issues were identified.

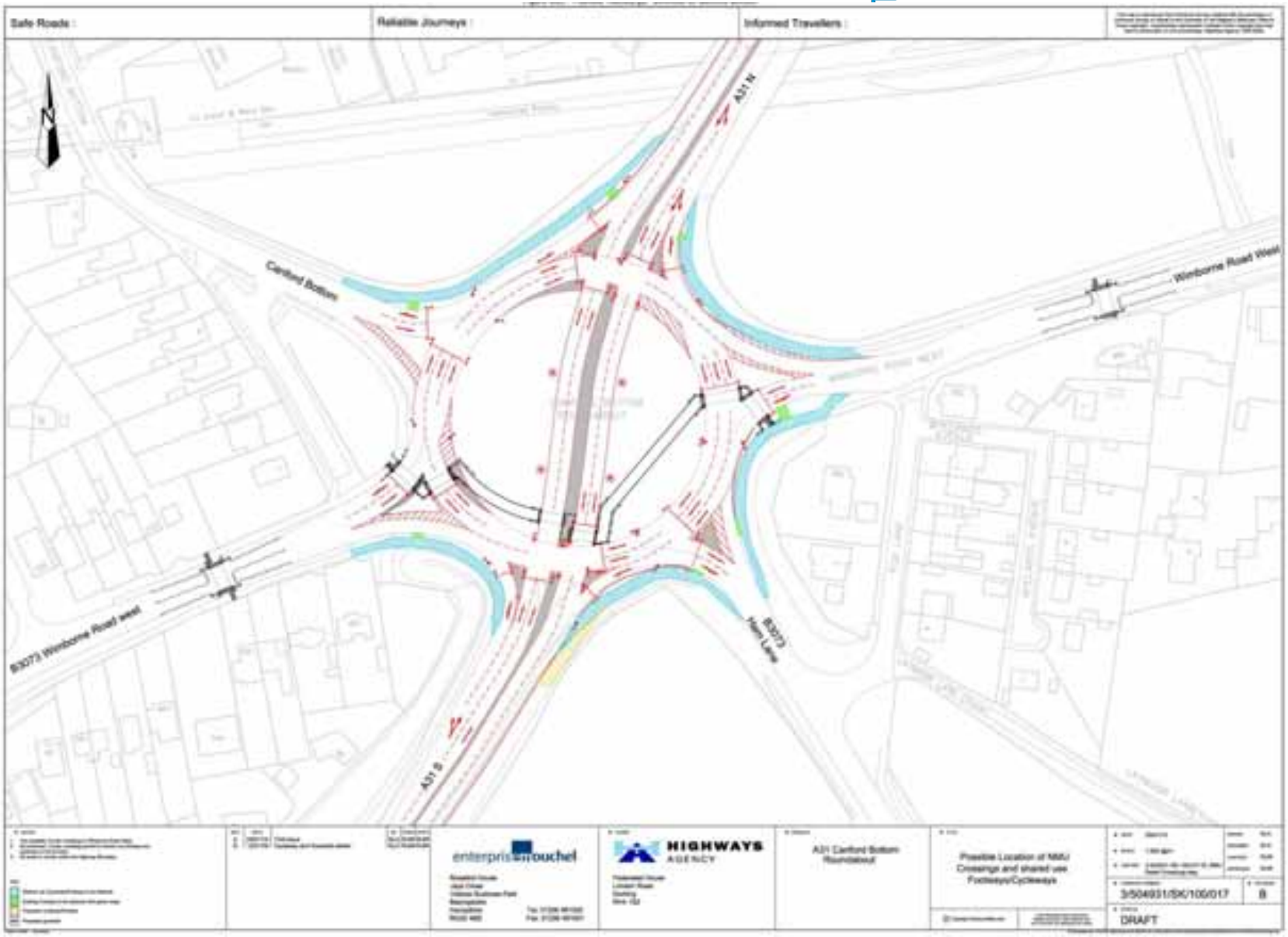
8.75 The HA has since obtained approval for the implementation of the scheme and initial works are in progress with the main construction occurring after the 2011 summer holiday period is over.

Figure 8.20 – A31 at Canford Bottom looking south-west

Figure 8.21 – A31 at Canford Bottom looking north-east

Figure 8.22 – Existing Layout at Canford Bottom

Figure 8.23 – Planned 'Hamburger' Junction at Canford Bottom



A31 Ringwood – Westbound Widening

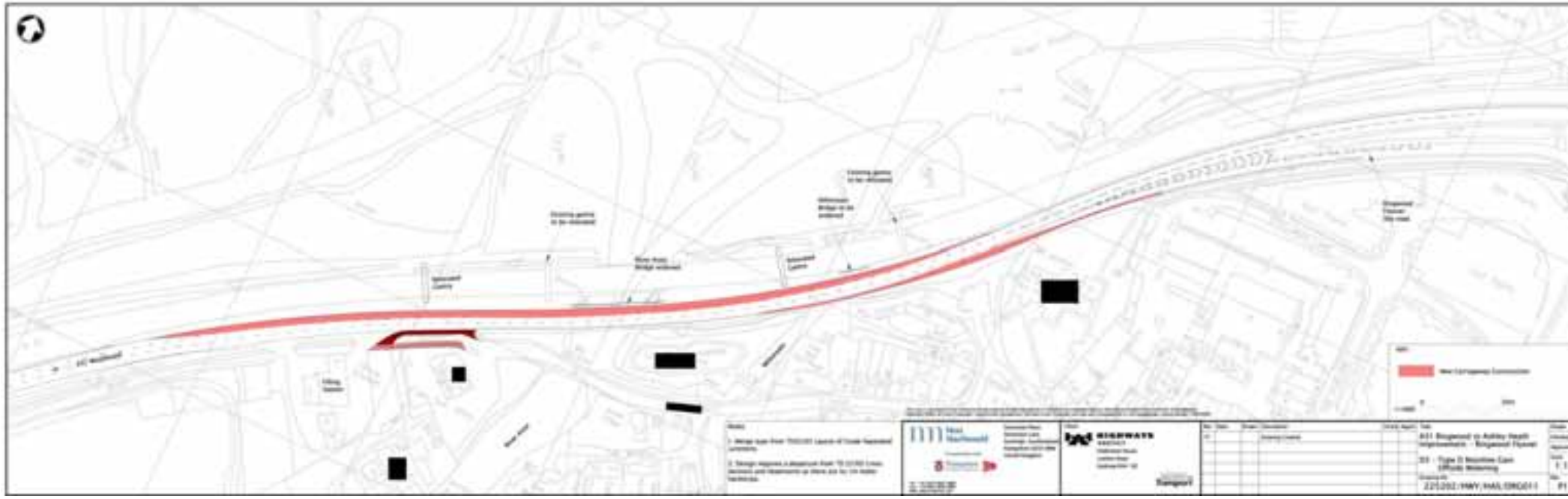
8.76 The A31 trunk road in the study area carries strategic traffic between London and the South East to South East Dorset conurbation, the rest of Dorset and south Devon, as well as local traffic to/from developments along the route. On the approaches to South East Dorset the A31 runs through Ringwood where it is constrained by developments to the north and south of the alignment which limits the scope for widening. At the same time, in the vicinity of Ringwood there are a number of junctions including, from east to west, Picket Post, central Ringwood, A338 (to/from Fordingbridge and Salisbury), the B3081 (to Verwood) and the A338 (to/from Bournemouth and the airport). The closeness of the junctions, the design of the route (particularly at the junction with the A338 Salisbury Road) and the volume of weaving combine to limit the capacity of this section of the route and create significant delays which is exacerbated because the section forms the viaduct over the River Avon and the Bickerley Mill Stream.

8.77 Although the scheme is on the border of the study area for the SEDMMTS, the improvement of the A31 to the west of Ringwood would represent a significant increase in capacity on the main trunk road through the study area. The HA has developed a scheme for the widening of the section of the A31 between the junctions with the A338, in the westbound direction, shown in Figure 8.26. The three lane scheme would involve widening bridges over the River Avon and the Bickerley Mill Stream, and blocking off access from West Street onto the A31. Due to the current estimated cost of the scheme, at £10million, the HA is not currently progressing the scheme in the current climate of funding constraints. However, the study would recommend that, in view of the benefits created to the operation of the A31 through the study area, the scheme should continue to be included in the HA development pool.

Figure 8.24 – A31 at Ringwood looking west

Figure 8.25 – A31 at Ashley Heath junction looking east

Figure 8.26 – A31 Westbound Widening at Ringwood



A31 Trunk Road Dualling – Ameysford to Merley

8.78 The A31 between Ameysford roundabout and Merley roundabout is a 6.6 km single carriageway all purpose trunk road managed by the Highway's Agency. To the east of Ameysford roundabout, the A31 is at dual carriageway standard. Between Ameysford and Merley there is a single intermediate junction at Canford Bottom; this has been the subject of a separate assessment, described above, concerning potential interim improvements involving the construction of a 'Hamburger' style junction.

8.79 The full section between Ameysford and Merley has been the subject of a number of studies, the most recent being the 2008 study by Mott MacDonald for the HA which identified a number of engineering solutions to the congestion on the A31 between Ameysford and Merley. The principle points of congestion are at Canford Bottom and Merley.

8.80 At Canford Bottom, with six arms to the roundabout, the combined inbound flows into the junction exceed the capacity at peak periods, thus creating queues on one or more of the roads entering the junction. The most extensive queues on the A31 itself form during the summer periods when westbound traffic on Friday or Saturday may queue 5km back to Ameysford while westbound traffic on Sunday may queue back to Merley.

8.81 At Merley, the junction comprises three major arms (A31 and A349) together with a minor road to Merley House Lane. The major movements between A349 and A31 create conflicts due to turning movements – A349 northbound to A31 eastbound), A31 westbound and A31 eastbound to A349 southbound.

8.82 In addition to the three roundabouts at Merley, Canford Bottom and Ameysford, there are nine structures that would be affected by any widening of the A31; these include a combination of:

- Oakley Hill (B3073) overbridge;
- bridge over River Stour;
- Ham Lane Underpass; and
- six underpasses or bridges to serve farms and other developments.

8.83 Other constraints to the design and implementation of improvements to the A31 are the range of environmental designations and land uses in the immediate vicinity of any widening of the road or junction improvements:

- as shown in Figure 8.29, there are SPA, SAC and Ramsar designations adjacent to Ameysford roundabout, on the south and east sides of the existing road which would have an impact on any redesign of the junction and the design of a widening to dual carriageway standard to the immediate west of it;
- Figure 8.30 shows the locations of SSSIs where again the main issues are associated with Ameysford roundabout;
- Figure 8.31 indicates the areas of woodlands along the corridor are concentrated in the section between Ameysford and Canford Bottom; and
- there are no other designations, including ancient monuments, which would impact on the design of the scheme.

8.84 Within the constraints above, between Ameysford and Canford Bottom it appears that a band of land to the north of the A31 is available to accommodate the widening. Widening to one side rather than about the centre line would reduce costs, make traffic management much simpler and reduce delays to motorists.

8.85 Any widening would need to take account of the under and overbridges identified above, most of which are associated with local access arrangements.

8.86 The Canford Bottom to Merley section could be widened on either the north or south side for the most of the section but there are a few locations where this would not be the case:

- near Canford Bottom the widening should be on the southern side away from the residential area;
- on the southern side where the road crosses the River Stour away from the sewage treatment works; and
- on both the northern and southern sides under the Oakley Hill B3073 overbridge to minimise land take.

Figure 8.27 – A31 at Uddens Drive looking north-east

Figure 8.28 – A31 at Merley looking north-east

Figure 8.29 – A31 Corridor Environmental Designations – SPAs, SACs and Ramsar Sites

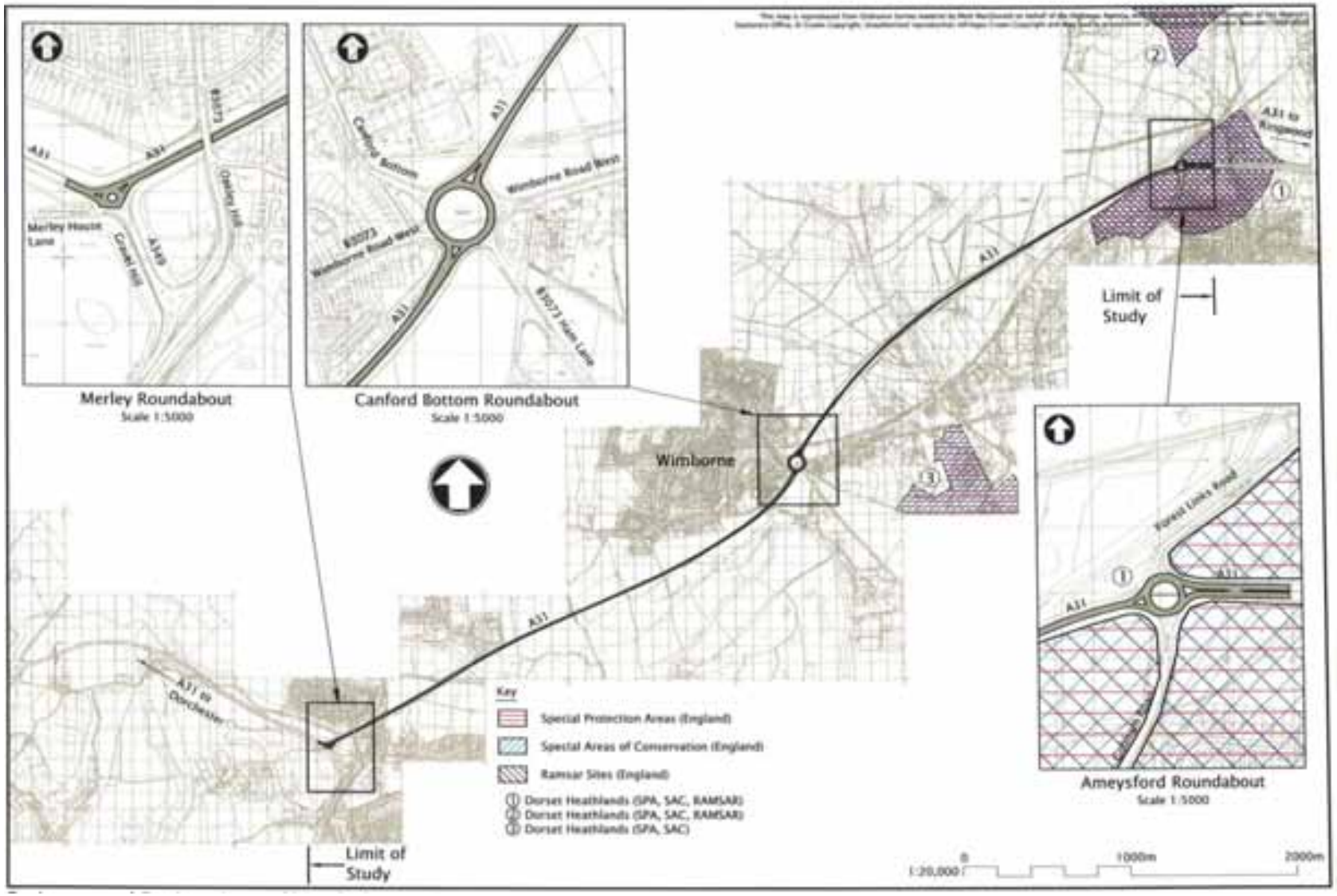


Figure 8.30 – A31 Corridor SSSIs

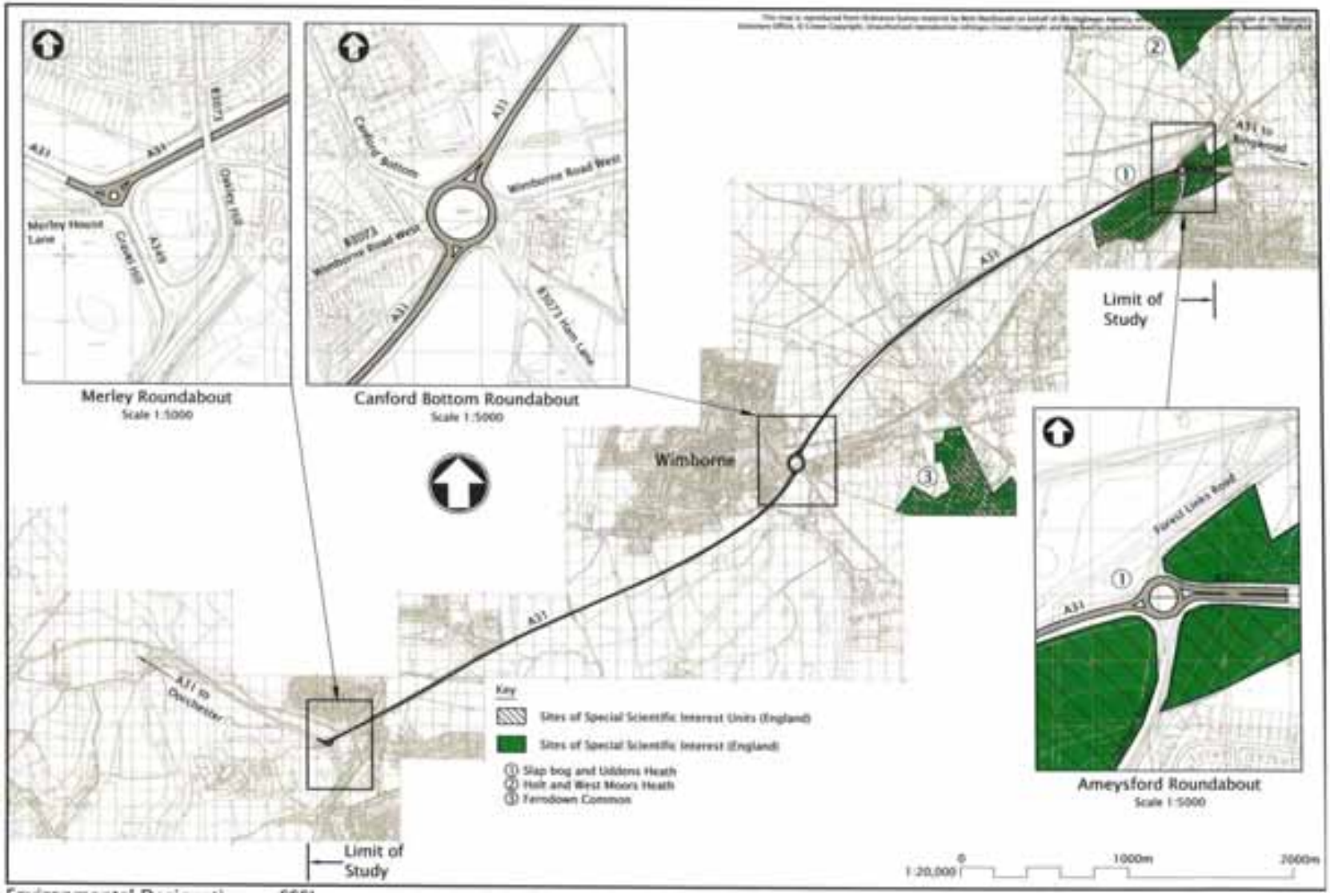


Figure 8.31 – A31 Corridor Woodlands

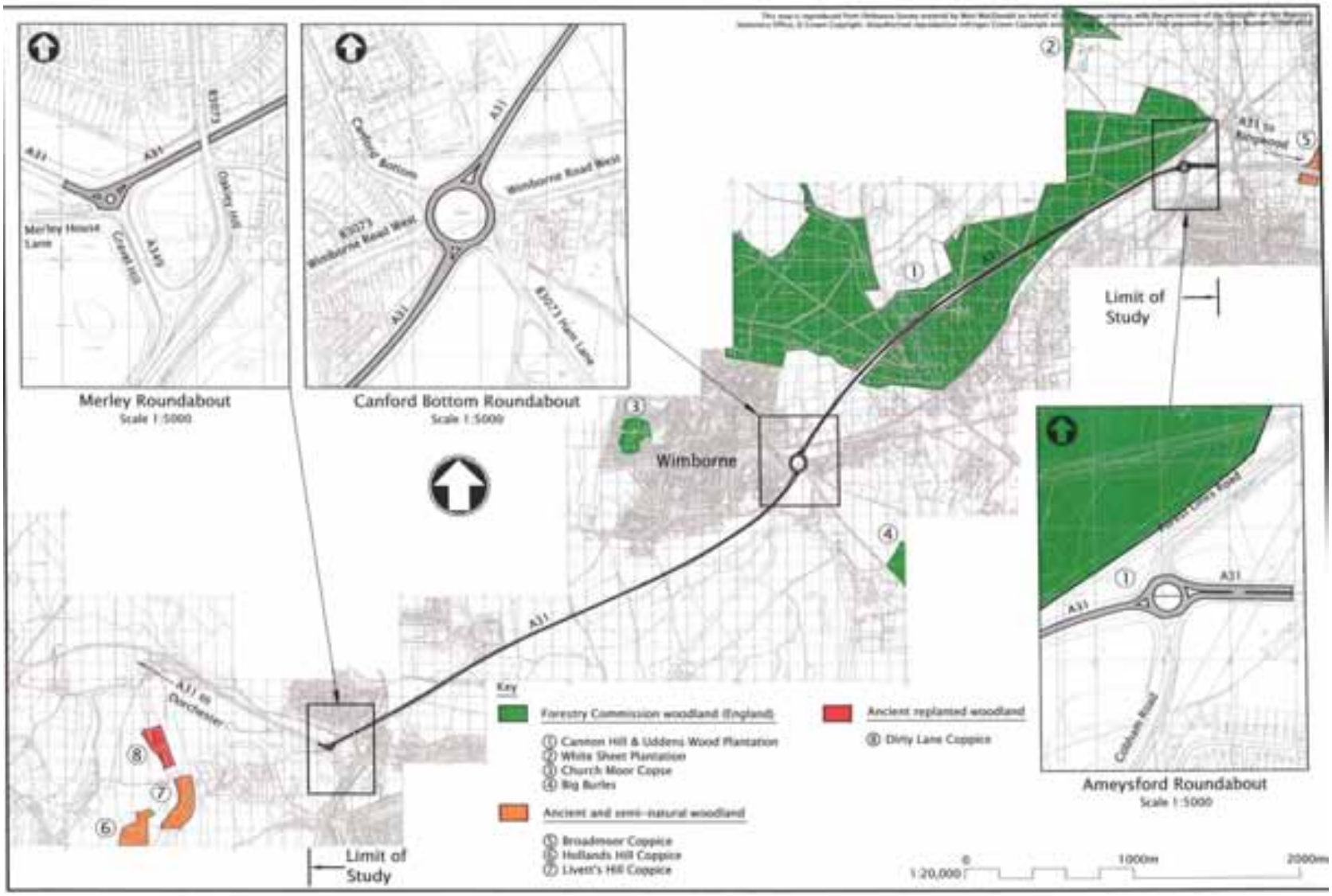


Table 8.4 – A31 Improvement Costs (£millions)[35]

	Canford Bottom	Ringwood	Ameysford to Merley
(A) Works Cost - Sub-Total	See footnote	See footnote	£71.1
(B) Supervision, Design, Traffic Management and Client Cost *(2.5%, 5%, 6% for online/3% for offline sections, and 7.5% on top of works costs respectively)*	-	-	£18.4
(C) Total Capital Cost = (A)+(B)	-	-	£89.5
(D) Total Scheme Cost (includes allowances for Preparation and Optimism Bias/Risk)	**£3.5**	**£11.0**	**£143.3**
(E) Preparation and Capital Cost Split:			
• Preparation:	-	-	£14.4
• Capital Cost:	-	-	£128.9

A338 Widening – Blackwater to Cooper Dean

8.87 The scheme involves widening from 2 to 3 lanes along this length of the A338 with lane drops/lane gains at both junctions and only north-facing merge/diverge slips at the new Riverside junction (described below).

8.88 The bridge over the river at Blackwater will need to be widened/rebuilt unless the central reserve and hard shoulders can be narrowed sufficiently to provide room for the third lane in each direction. The footbridge just north of the Cooper Dean junction (location of Figure 8.32) will be removed if the new Riverside junction is to be constructed since the footbridge is located on the site of the new junction. It is believed that the widening could be accommodated in the existing highway boundary although it may be necessary for the widening to encroach into the central reserve as well as the verges; Figure 8.32 and Figure 8.33 demonstrate the availability of land for the widening, particularly for sections of the central reservation.

8.89 Widening of the A338 between Blackwater and Cooper Dean has previously been costed at £5million, based on incorporating it into the major maintenance which is required.

[35] Costs for Canford Bottom Hamburger and Ringwood widening are based on existing scheme costs.

Figure 8.32 – A338 looking south towards Cooper Dean junction

Figure 8.33 – A338 looking north towards Blackwater Junction

Improvements including New Highway Links

Overview

8.90 The analysis of the locations of residual delays across the highway network identified earlier and summarised by the junctions suffering continuing delays, which are shown in Figure 8.2 and Figure 8.3, demonstrated a string of junctions requiring relief. These included (from east to west) the junctions at Blackwater, Hurn, Chapel Gate, Parley Cross and Longham, and extending to the north to involve Ringwood Road in Ferndown. Many of these junctions experience delays at the

moment and, although smarter choices and public transport measures will contribute to a general reduction in car travel across the study area, many of the reductions will tend to be concentrated on journeys to and from the town and local centres in the conurbation. Although there would be improved bus services to the Airport and other local centres outside the main towns, the diversity of origins and destinations will mean that many journeys to out of town locations such at Ferndown and the Airport, would involve one or more transfers within a public transport journey and hence the use of the private car will continue to dominate the volume of travel to/from these locations in the future. With the growth in passenger demand anticipated at the Airport and the expansion of the industrial estates to the north-west of the runway, together with the growth in industry and employment at Ferndown there will continue to be pressure for improvements to the string of junctions within the corridor.

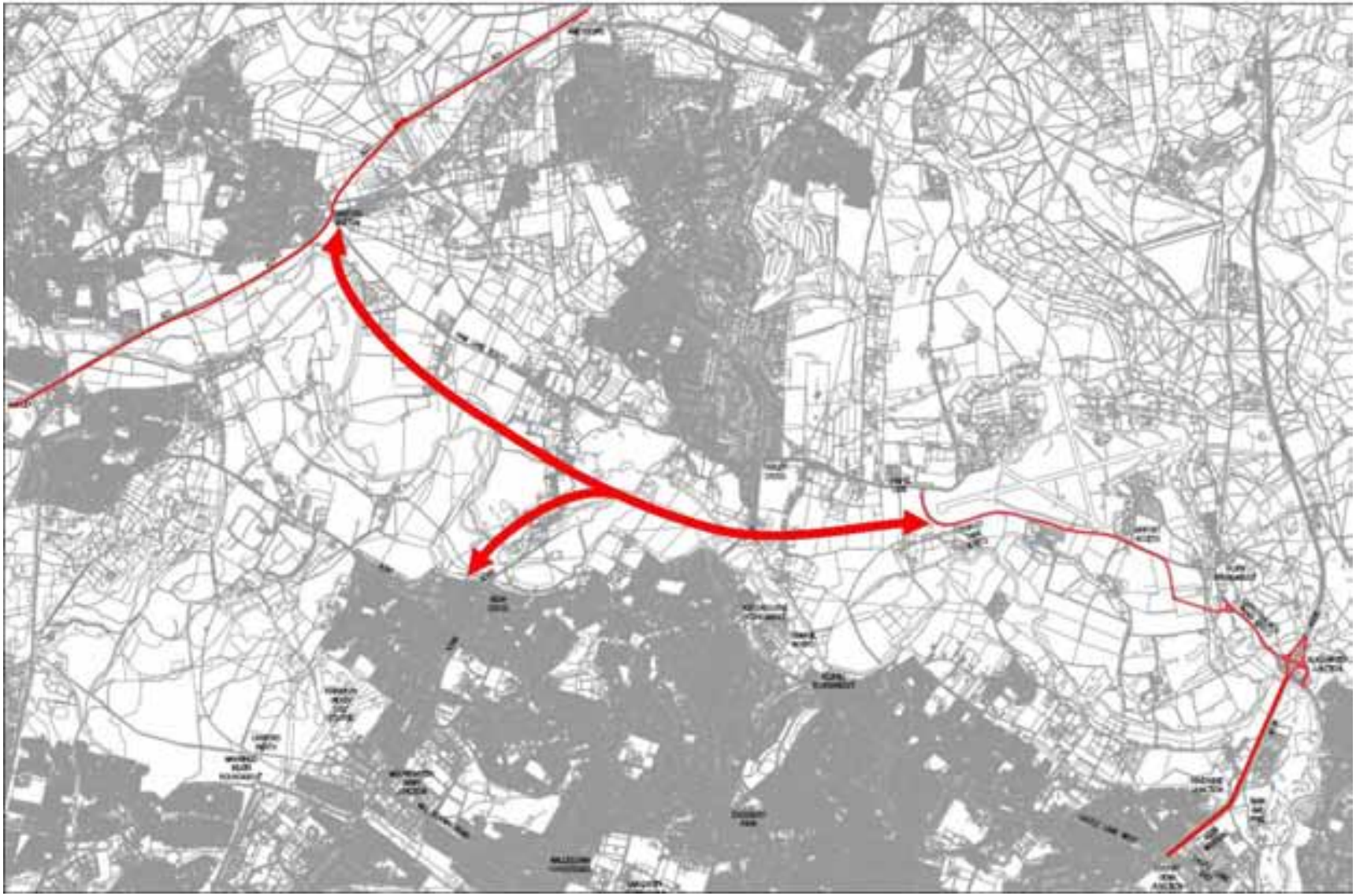
8.91 In exploring the potential remedies to the problems at the series of junctions, it was identified that improvements to individual junctions would be unlikely to solve the underlying problem created by a lack of capacity for the major east west movement across the conurbation. A series of east-west corridors were considered, including the Castle Lane and Kinson corridor which is considered below. However, the key to the creation of a comprehensive corridor was the felt to be an improvement to those areas such as the broad Airport site and Ferndown which, as indicated above, would be unlikely to be covered by a non-highway solution. Hence, the scheme shown in Figure 8.34 was developed which was designed to solve the immediate problems at individual junctions by creating an holistic solution.

8.92 In outlining the contents of the east-west scheme, it has been broken down into three main sections:

- Blackwater Junction;
- Blackwater to Chapel Gate including the Airport entrance;
- Chapel Gate to Magna Road; and
- Magna Road to Canford Bottom.

8.93 Each of the sections is considered separately below.

Figure 8.34 – Alignment of East West Route



Blackwater Junction Improvement

8.94 The Blackwater grade-separated junction between the A338 Wessex Way and B3073 Christchurch Road/Hurn Road represents a significant congestion point, particularly for traffic travelling circumferentially between Christchurch, Bournemouth Airport and East Dorset. A detailed study of the junction has been undertaken by Buro Happold in 2009 which identified a series of options for the re-design of the junction.

8.95 In reviewing the options identified by the Buro Happold study, there are a number of significant constraints, including the topography of the elevated Blackwater Hill area; the proximity to the River Stour which runs immediately to the south of the junction below the A338 and B3073; a number of properties, including some currently located within the boundary of the junction; significant traffic flows on the B3073; anticipated growth at Bournemouth Airport; and potential environmental constraints.

8.96 From the review of the Buro Happold schemes, and taking into account the constraints identified above, two different options were developed – one formed by an expansion of the existing signalised junction and the other containing a pair of dumb-bell roundabouts. Both options allow the retention of the residential properties adjacent to the junction and their accesses to the highway network.

8.97 The signals option is to provide increased capacity at the two existing signalised junctions giving access to the A338. In each case, the aim would be to have two straight ahead lanes in each direction plus a dedicated left or right turn lane. This would require the construction of a new bridge adjacent to the existing one over the A338 with land take between Hurn Road and the River Stour. This is likely to be difficult, probably involving a new retaining wall or an extended bridge with piers in the northern bank of the River Stour. The Environment Agency would need to be consulted on this arrangement.

8.98 An alternative roundabout option has been identified which involves a pair of dumb-bell roundabouts linked by a length of dual carriageway on a new bridge to the north of the existing junction and residential properties. Dedicated left turn movements would be created to the northbound on-slips and from the southbound off-slips of the A338. This option means the existing Hurn Road bridge could either be removed or possibly turned into a public transport/cycle link.

Figure 8.35 – B3073 at Blackwater Junction

Figure 8.36 – A338 at Blackwater Junction

Parley Lane Improvements – Blackwater to Chapel Gate

8.99 Parley Lane improvements comprise a combination of on-line improvements involving the widening of the B3073 between Blackwater Junction and the construction of new off-line sections of route. From Blackwater Junction the route would follow the existing north-westbound alignment along Christchurch to the junction with Hurn Court Lane (Figure 8.37); Christchurch Road would be widened to dual carriageway standard. The route would head west along the new alignment from a roundabout junction with Christchurch Road; the precise alignment would be designed to avoid existing woodland and cross the Moor's River at a point distant from the existing weir. The alignment would then head north to join Parley Lane to the east of the existing Airport entrance

(Figure 8.38). This section of the route would relieve the existing significant bottleneck at Hurn Roundabout with the restricted capacity junction and adjacent hump-backed bridge (Figure 8.39).

8.100 In addition to the anticipated continued growth in air travel in the future, as outlined earlier in Chapter Six, the airport is also seen as the focus for expanded public transport activity, including the creation of a public transport hub combining park and ride operations with increased levels of local bus and regional/national coach services serving the site. Improved orbital access to the airport from the major radial routes into the conurbation will facilitate the increased public transport provision.

8.101 The Airport entrance would be improved with the creation of a new signalised junction. The improvement would follow the existing alignment on Parley Lane past the junction with Merritown Lane through to the existing roundabout at Chapel Gate (Figure 8.40 and Figure 8.41). The widening would be to dual carriageway standard with combined pedestrian and cycling facilities on one side.

Figure 8.37 – B3073 at junction with Hurn Court Lane looking south

Figure 8.38 – B3073 at Airport Entrance looking east

Figure 8.39 – B3073 at Hurn roundabout

Figure 8.40 – B3073 at Merritown Lane looking east

Figure 8.41 – B3073 between Merritown Lane and Chapel Gate

East West Road Link – Chapel Gate to Magna Road

8.102 The existing Aviation Business Park contains a number of businesses with both airport services and non-airport related activities. The site to the north-west of the existing runway is projected to increase considerably in size in the future with an additional 15 hectares of development by 2026. As a result the existing roundabout (Figure 8.43) would need to be redesigned, probably ultimately with peak period signalisation, in order to accommodate the anticipated growth.

8.103 To facilitate the growth in activity at the site together with the increase in airport-related travel, the on-line improvement of the B3073 to the south of the airport perimeter would be extended west along Parley Lane before a short distance before taking a new alignment across existing agricultural land to connect with the A347 New Road to the north of the existing Ensbury Bridge over the River Stour, with an intermediate priority junction with Church Lane. An indicative alignment for this section of the route is shown in Figure 8.34 which takes into account the location of existing properties on overhead electricity supply pylons. Following an at-grade

roundabout junction with the A347, the route would continue west, crossing the River Stour on a new bridge and passing to the north of existing developments to reach the A348 Ringwood Road at a new at-grade roundabout to the south of the River Stour. The roundabout would include connections with the A348 and the adjacent civic amenities site.

Figure 8.42 – Aviation Business Park at Chapel Gate

Figure 8.43 – B3073 at Chapel Gate looking east

North South Road Link – Magna Road to Canford Bottom

8.104 The North South link road forms an extension to the wider East West shown in Figure 8.34, extending from A341 Magna Road to A31 at Canford Bottom. From A341 Magna Road, the indicative scheme runs north-east before joining the East West Road at a roundabout to provide the junction for the northern link towards Canford Bottom and the eastern link towards Parley. From here, the North South Road runs across open fields with a new bridge over the River Stour onto a new roundabout junction with the B3073 Ham Lane. From this new junction to Canford Bottom the scheme follows the existing B3073 which is a good quality single carriageway road.

Table 8.5 – Improvements including New Highway Links Costs

	Parley Lane[36]	Blackwater[37]	E-W Link[38]	N-S Link[39]
(A) Works Cost - Sub-Total	33.4	34.4	50.0	18.1
(B) Supervision, Design, Traffic Management and Client Cost *(2.5%, 5%, 6% for online/3% for offline sections, and 7.5% on top of works costs respectively)*	8.3	8.9	11.7	4.2
(C) Total Capital Cost = (A)+(B)	41.7	43.3	61.7	22.3
(D) Total Scheme Cost (includes allowances for Preparation and Optimism Bias/Risk)	**66.8**	**69.4**	**98.8**	**35.7**
(E) Preparation and Capital Cost Split:				
• Preparation:	6.7	6.9	88.9	3.6
• Capital Cost:	60.1	62.44	9.9	32.1

Castle Lane Relief Road and Kinson Relief Road

8.105 Four different schemes that have been identified for assessment (described from east to west):

- **CLRR:** single carriageway road between a grade-separated junction with A338 at Riverside Avenue and existing Northbourne Roundabout (A341/A347/A3060) (Figure 8.44);
- **Partial CLLR** – single carriageway road between a grade-separated junction with the A338 at Riverside Avenue and Muscliffe Lane north of Aragon Way, before taking over Muscliffe Lane south to its junction with A3060 (Figure 8.45);
- **KRR:** single carriageway road south of the A341 Wimborne Road, between east of Graycot Close and a new roundabout on A341 to the west of Summers Avenue (Figure 8.46); and
- **Combination of full CLRR and KRR schemes** (Figure 8.44 and Figure 8.46).

8.106 The impact was evaluated in comparison with the 2026 Do Minimum (DM).

[36] Blackwater to Airport Entrance, and Airport Entrance to Chapel Gate sections.
[37] Blackwater junction improvement and associated online dualling of Christchurch Road from Hurn Court Lane to Blackwater junction (600m long).
[38] Chapel Gate to New Road, New Road to Ringwood Road, and Ringwood Road to Magna Road sections.
[39] Magna Road to Ham Lane and Canford Bottom section.

Figure 8.44 – Castle Lane Relief Road

Figure 8.45 – Partial Castle Lane Relief Road

Figure 8.46 – Kinson Relief Road

8.107 The 5.1 km CLRR single carriageway scheme would provide a new east-west road link, north of (and parallel with) the A3060 Castle Lane West. The proposed route lies within Bournemouth Borough and Christchurch Borough. It was originally planned as part of a wider network of roads across the conurbation, and has been in successive local plans for around 30 years.

8.108 The following junctions are assumed, from east to west, along the CLRR:

- Grade-separated junction with A338, with no exit to proposed Riverside Avenue Park & Ride;
- Roundabout junction with Yeomans Road;
- Roundabout junction with Muscliffe Lane – four arms; and
- Northbourne Roundabout with four arms.

8.109 It is assumed that the Partial CLRR would be constructed as a single carriageway road, with the junctions with A338, Yeomans Road and Muscliffe Lane as for the full CLRR scheme.

8.110 The 1.8 km KRR scheme would bypass the retail and commercial centre of Kinson which straddles the A341 Wimborne Road. The scheme was originally envisaged as a dual carriageway, but was assessed for the Structure Plan Deposit Plan July 2004 as a single carriageway scheme to reduce the negative impacts. The KRR has 'on line' improvements from an enlarged Bear Cross Roundabout before leaving the existing carriageway alignment just west of Summers Avenue. The new section of road would include junctions with Kinson Road and Leybourne Avenue. The route then returns to the existing highway alignment east of Graycot Close with a signalised priority junction with The Broadway and then follows the existing alignment to the Northbourne Roundabout.

8.111 The proposals have a large effect on traffic flows on the routes they are designed to relieve, for example in the AM peak hour:

- CLRR – reduction of up to 53% on Castle Lane West (westbound), west of Castlepoint;
- Partial CLRR – reduction of up to 38% on Castle Lane West, eastbound from the A338; and

- KRR – reduction of up to 81% on Wimborne Road between The Broadway and Kitscroft Road; and
- Combined CLRR and KRR scheme – similar reductions compared with modelling the schemes in isolation.

8.112 The CLRR causes traffic to be diverted away from Castle Lane West and there is a reduction in traffic on other east-west local routes. With the KRR, re-routed traffic causes slight increased flows on roads nearby, for example on Wimborne Road to the south of Redhill Roundabout (+250 pcus southbound), The Grove (+100 pcus northbound), Broadway Lane (+125 pcus northbound) and Chesildene Drive (+400 pcus).

8.113 The traffic flows on the Partial CLRR are lower when compared to the full CLRR, in particular the westbound direction in the AM and eastbound direction in the PM peak hour – up to 77% less.

8.114 More traffic is re-routed from Throop Road (-500 pcus eastbound in AM Peak) onto the Partial CLRR compared with the full CLLR scheme. The full CLRR attracts more east-west longer distance trips than the Partial CLRR since the CLRR terminates at the Northbourne roundabout rather than at Muscliffe Lane.

8.115 The KRR, due to the closure of East Howe Lane, causes northbound and southbound traffic to be rerouted away from The Broadway and East Howe Lane (southbound reductions of 200 and 150 pcus respectively) and onto the alternative route Kinson Park Road – Horsham Avenue – Wimborne Road – Kinson Road. The KRR carries up to 450 pcus (westbound) at its western extent (Anstey Road to Roundhaye Road). The KRR caries slightly more traffic when modelled with the DM on this section (525 pcus) as a result of the higher congestion on the network.

8.116 Flows on the CLRR are very similar with/without the KRR, highlighting the limited interaction between the two schemes.

8.117 The scheme capital costs as used in appraisal comprise:

- costs from existing sources (e.g. Bournemouth, Dorset and Poole Replacement Structure Plan Deposit Plan July 2004); and
- uplifts for preparation and site supervision, optimism bias uplift (+44%) and inflation between 2003 and 2010.

8.118 In 2010 prices, the estimated capital costs for each scheme were:

- CLRR – £76m;
- Partial CLRR – £50m;
- KRR – £20m; and
- Combined CLRR and KRR scheme – £96m.

8.119 The appraisal of the schemes is summarised in Table 8.6. The table highlights the good performance of the CLRR schemes and to a lesser extent the partial CLRR scheme. The KRR is demonstrated to generate low benefits and therefore a poor value for money.

Table 8.6 – Summary of Economic Assessment of CLRR and KRR Schemes

	Appraised Against 2026 Do Minimum:			
	CLRR	Partial CLRR	KRR	CLRR and KRR
Capital Cost	112	74	29	141
Operating Costs (60 years)	51	33	13	64

	Appraised Against 2026 Do Minimum:			
	CLRR	Partial CLRR	KRR	CLRR and KRR
2) PVC (£ mill, 2002 prices & values, 60 year appraisal period, 2016 to 2075)				
a) Public sector capital & operating costs	55	36	14	70
b) Public sector revenue (parking & road charges)	0	0	0	0
c) Total PVC (a-b)	**55**	**36**	**14**	**70**
3) PVB (£ mill, 2002 prices & values, 60 year appraisal period, 2016 to 2075)				
d) Travel time benefits	198	77	-2	204
e) Vehicle operating cost benefits	11	5	-1	11
f) User charge benefits	2	2	2	2
g) Private sector revenue	-2	-1	-0	-2
h) Indirect tax	-4	-1	0	-4
i) Accidents*	16	10	2	17
j) Carbon	2	1	-0	2
k) Total PVB (d+e+f+g+h+i+j)	**223**	**92**	**0**	**231**
4) NPV (k-c)	**168**	**56**	**-14**	**161**
5) BCR (k/c)	**4.04**	**2.55**	**0.03**	**3.31**
6) BKR([k-b-h]/[c-b-h])	**4.04**	**2.55**	**0.02**	**3.31**

*Accident benefits are based on those calculated for the 2004 Structure Plan Review

Assessment of Highway Schemes

Car Sharing and High Occupancy Lanes

8.120 Any increases in capacity on the highway network, either on links or at junctions, will produce benefits to highway users through reduced journey times and improved reliability. However, it is important that these benefits are not eroded through additional traffic which is induced or generated by the increase in capacity. Hence, measures designed to maintain or 'lock in' the benefits should be introduced in parallel with the other enhancements. The need to lock in the benefits is particularly important where local (short distance) commuting trips could be the main users of the additional capacity.

8.121 One of the most appropriate techniques to achieve the desired effect is the allocation of any additional lane for the use of car sharing or high occupancy vehicles (HOVs) for part or all of the day.

Potential Implementation Programme

8.122 An implementation programme for the highway elements of the strategy could include:

- in the short term (2011-2014):
  - ITS improvements, including extending UTC/Joint Traffic Control Centre/VMS;

- Junction improvements; and
- Highways improvement at Canford Bottom [awaiting decision].

- in the medium term (2014-2020):
  - Improvement of key junctions, e.g. Bear Cross, Ensbury Park, Queen Anne Drive, etc;
  - Poole Regeneration gyratories/links;
  - A31 Ringwood – westbound widening.
  - Parley Lane improvements – Blackwater to Chapel Gate;
- in the long term (2020-2026):
  - A31 trunk road dualling between Ameysford and Merley.
- beyond 2026:
  - East West road link – Chapel Gate to Magna Road; and
  - North South road link – Canford Bottom to Magna Road;
  - A338 3 lane widening – Blackwater to Cooper Dean.

8.123 The precise timing of the schemes will need to take into account a number of factors including the state of preparation of the scheme, the timing of residential and employment developments associated with the scheme and the necessary stages within the statutory planning process. For the larger schemes, the preparation time could be significant and hence although they are allocated to the medium or long term, work to develop the schemes may need to start at an early date. In some circumstances, it will be vital that the scheme is in place before developments can be introduced. Hence, it would be necessary to accelerate the highway scheme. Further refinement of the programme will therefore be necessary as the individual schemes are progressed.

Summary

8.124 The approach adopted within the study for the development of the transport strategy concentrated on examining and promoting alternatives to the private car before considering improvements to the highway network. This was designed to ensure that highway measures are only considered after all other possibilities have been explored. Within the highway improvements themselves, the emphasis was placed on making best use of the existing infrastructure before examining the need for schemes which increase highway capacity.

8.125 The examination of highway improvements was undertaken against the background of significant growth in the demand for travel in line with the rise in population and growth in employment by 2026. The identification of enhancements to highway capacity took direct account of the location, scale and timing of these developments; in some cases, additional highway infrastructure is necessary to connect new developments into the existing network.

8.126 The emphasis in identifying measures to make best use of the highway network in the study area concentrated on the existing infrastructure and capacity on the motorway and major trunk roads, although many of the measures are also suitable for the local network:

- **planned maintenance** should continue to be programmed to minimise disruption by avoiding periods of peak daily and seasonal flows, including the main summer holiday periods;
- wider measures to **reduce incidents** through better driving training, increased enforcement, stricter penalties and greater use of advanced warning signs;
- continued development of **incident management** by speeding up detection, evidence collection and documentation, incident clear-up and the initiation of diversionary routes; and

- wider application of **signing, surveillance and automated systems** including active traffic management techniques.

8.127 The assessment of capacity enhancements across the study area's highway network considered a number of potential new schemes and appraised the full range of impacts before developing a preferred package of improvements. The identification of schemes concentrated on those which would have a direct impact on the strategic highway movements across the study area. The schemes within the strategy would not be the only highway measures which would generate potential enhancements; local measures, outside the scope of SEDMMTS, could also have merits but would need to be progressed separately by the local authorities. Hence, the schemes identified in the strategy are concentrated on the strategic highway network in the area.

9. Freight

Introduction

9.1 As a general multi-modal transport study, SEDMMTS was not designed to examine specific freight issues in detail. However, a number of components of the transport strategy would benefit freight operations as well as general traffic, particularly improvements to the highway network. Nevertheless, there are some aspects of the study which have direct implications on freight operations and these are brought together in this chapter. The strategy for freight comprises for key measures:

- improving connectivity;
- Freight Quality Partnerships;
- implementing a freight route network;
- components of an interventions 'toolkit':
  - education and awareness;
  - positive signing (directional);
  - restrictions to freight vehicle operation.

9.2 A major issue raised by the WRG workshop attendees was external connectivity from the study area to locations such as the Bristol urban area, the Midlands and London. It was considered to be a necessity to improve the links to ensure economic sustainability in the region. Connectivity between parts of the study area was also identified as an issue – the north-south links were considered to be particularly poor.

9.3 Freight 'hotspots' raised in the WRG consultation are shown in Figure 9.1. A particular issue in relation to freight activity is the location of routes followed by heavy goods vehicles particularly through sensitive areas. Locations that were mentioned in the consultation as having a particular problem with a large amount of HGV use included:

- Ferndown;
- Highcliffe; and
- Longham Bridge.

9.4 Many of the measures examined within SEDMMTS are designed to cater for general transport problems across the study area involving a wide range of transport users. For example, improvements to the capacity of the highway network will reduce the journey time and improve reliability for all users, irrespective of whether the user is driving a private car or a heavy goods vehicle. Similarly, the removal of potential blockages on the rail network by capacity enhancements will increase general capacity levels and hence improve the operational efficiency of both passenger and freight services.

9.5 Although this is true for many of the measures within the SEDMMTS transport strategy, there are, of course, specific measures of direct relevance to the movement of freight to, from and within the study area. At the same time, there are particular locations where freight related movements are the dominant activity (e.g. in the neighbourhood of the Port of Poole) and hence changes to the form and content of developments in these locations are important to the future levels of demand for freight movements across the study area. The completion of the Poole Twin Sails Bridge should help to relieve some of the congestion associated with the Port of Poole, see Figure 9.2.

Figure 9.1 – Freight Hotspots in South East Dorset

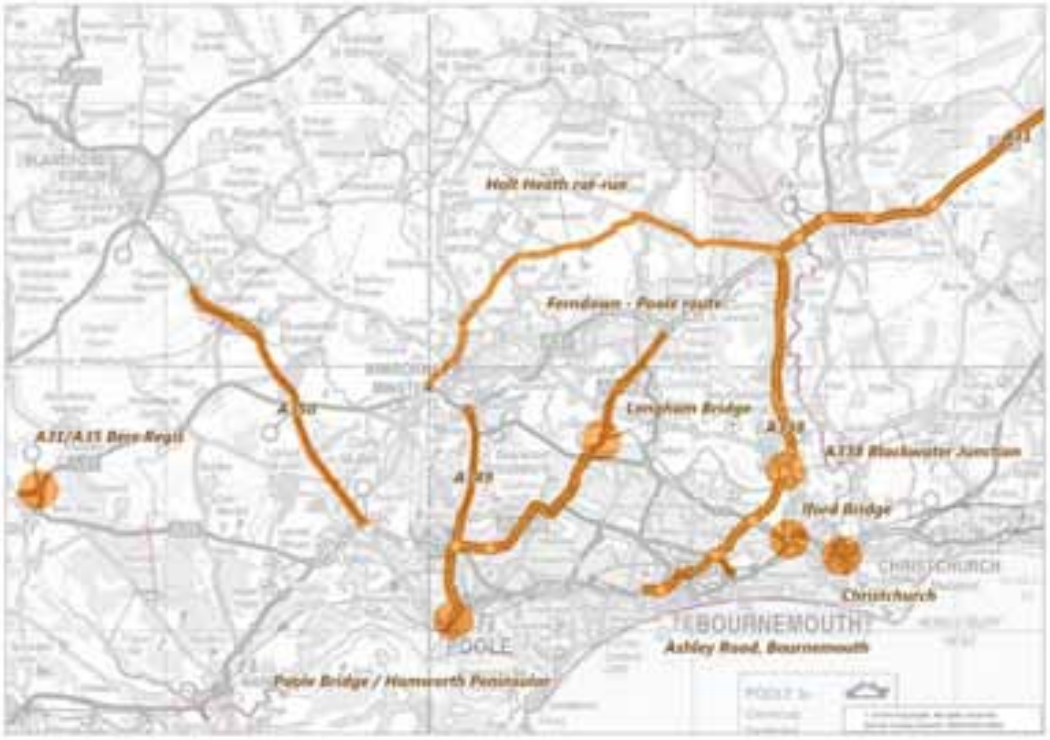


Figure 9.2 – Poole Bridge Traffic

Improving Connectivity

Road – Regional Connectivity

9.6 Road is the most dominant mode for transporting freight in the area, and there is much scope for improving the existing strategic road network in order for freight to be transported in a safer and more appropriate manner. The WRG workshop attendees highlighted the poor external

connectivity from the study area to locations such as the Bristol urban area, the Midlands and London. It was considered important to improve the links to ensure economic sustainability in the region. Connectivity within the study area was also identified as an issue, with north-south links considered to be particularly poor. However, many of the improvement required to resolve the freight issues are outside South East Dorset.

9.7 Lobbying for improvements to the strategic transport infrastructure serving South East Dorset will take place at a variety of levels, including with Government departments and Network Rail. Joint working between the local authorities is essential to ensure that LDFs secure improved connectivity. It is important for the local authorities to lobby for improvements to the strategic transport network outside of the study area, in order to be able to deliver freight in a more sustainable and reliable manner.

Figure 9.3 – Linkages from South East Dorset to the National Corridors

Port

9.8 The Port of Poole is part of the Trans-European Network System. It offers conventional cargo handling and containerised (roll–on, roll-off) cargo handling as well as cross-channel ferry services. The Port is ideally placed to become a regionally significant feeder port, which would see more goods imported and exported via Poole. With a dedicated rail link, the port also has the potential to increase rail freight handling. There is also opportunity to offer the provision for lorry parking facilities which would be compatible with the Port's freight handling role.

9.9 There is potential for Government funding to assist with the move towards the sustainable distribution of freight at the Port of Poole if it can be demonstrated that there would be a reduction in lorry movements, for which new or upgraded facilities would be required.

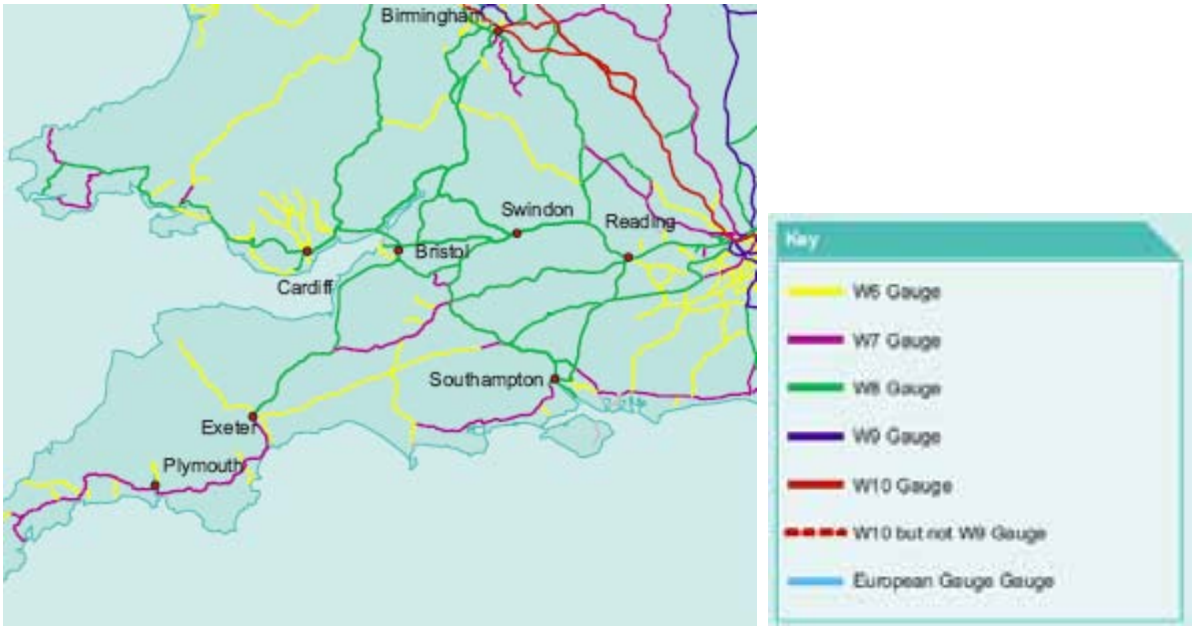
Rail

9.10 Although there are relatively few opportunities for transporting freight on rail in South East Dorset, the potential exists, and therefore should be explored and promoted where feasible. Whilst supporting the principle of transporting freight sustainably by rail, the local authorities have no statutory responsibility for rail, and therefore receive no funding towards major schemes that

would facilitate the transfer of freight onto rail. Therefore, it is especially important for the local authorities to work with the rail and freight industry to progress any schemes which would increase the potential for more freight movement by rail.

9.11 The loading gauge reflects the height and width restriction across the rail network taking into account line-side and overhead structures (see Figure 9.4). Whilst improvements are being made between Southampton and the Great Western Mainline, the larger hi-cube containers (W10 and larger) pose a problem for transporting rail freight from Poole towards Southampton due to some low bridges. The gauge clearance between Southampton and Poole is W8 and there are no plans to increase this. There are no significant plans to increase rail freight facilities or general activity in the area.

Figure 9.4 – W10 Gauge Priorities[40]



9.12 Presently there is no cargo being handled through the Port of Poole by rail although the infrastructure exists to do so. Poole Harbour Commissioners would support investigation into the delivery of ball clay by rail if this could be economically viable over such a short distance.

Air Freight

9.13 There is a proposal to expand facilities on the Bournemouth Airport site as a freight distribution centre including the provision of facilities for HGV drivers, thus acting as a sub-regional freight distribution centre and potentially reducing the volume of HGVs travelling into the conurbation. Bournemouth Airport is the busiest freight airport in the South West but is fairly poorly served by the road network, although plans to improve the B3073, described in Chapter 8 would resolve this to a large extent. There are no rail links to the site. The proposal to expand the freight activity may be constrained by land side access which would need to be improved.

Dorset Freight Quality Partnership

9.14 The Dorset Freight Strategy has been revised for LTP3. In order progress the interventions which are most appropriate to alleviating wider freight issues in South East Dorset, it is important for relevant organisations, authorities, operators and local community representatives to work together. The most effective and efficient way this can be achieved is through further development of the Dorset Freight Quality Partnership (FQP). Dorset has a Freight Quality

[40] Extract from the Freight RUS. Note this is indicative and based on 2004/05 information.

Partnership which had not met for a few years, but has been meeting again for the past year. Members comprise two haulage companies and representatives from the three highway authorities. It is proposed that the FQP incorporates representatives from relevant organisations, and that this will establish the approach taken to prioritising and addressing localised issues.

9.15 The use of low carbon goods vehicles and efficient fleet management should be encouraged through the FQP. The authorities will support voluntary schemes such as 'EcoStars'. This includes supporting Freight Hauliers to use ITS to maximise efficient freight movements and minimise the proportion of 'empty load' trips, for example through Intelligent Data Management, GPS tracking systems and cargo load monitoring.

Freight Route Network

9.16 A draft Regional Freight Map (RFM) was produced for the Regional Assembly setting out the regional road-based freight network in the South West as part of the Draft RSS. However, the Draft RSS was not approved by the Secretary of State, and subsequently the RSS has been abolished by the coalition Government. However, it is still the most recent freight map covering South East Dorset and the wider area. The map gives guidance to the haulage industry as to suitable routes, and aims to influence the signing of routes undertaken by the Highways Agency and DfT. The map defined freight routes as national, regional or county routes:

- National Freight Routes – longer distance freight routes from other parts of the country;
- Regional Freight Routes – routes used for inter-regional travel where national routes are not appropriate and to provide access to major distribution centres from the national routes; and
- County Freight Routes – routes used to provide access to freight facilities not served by either national or regional routes.

Figure 9.5 – Extract from Regional Freight Map (Draft RSS)

9.17 It is important to identify an advisory Freight Route Network so that freight operators and drivers can understand which roads should be used when making collections or deliveries. There are currently many instances where freight vehicles use inappropriate routes to reach intended destinations. However, it is not clear to what extent some of these journeys require the use of some of these unsuitable routes for access purposes.

9.18 There is no defined HGV route network in Dorset to indicate the most appropriate routes for HGVs to use. In the absence of this, HGVs are encouraged to use the strategic highway network set out in the Bournemouth, Dorset and Poole Structure Plan, comprising trunk roads or other primary routes, together with county distributor roads. This strategy will be circulated to the Freight Transport Association and the Road Haulage Association for them to discuss with their freight operator members so that they are aware of the preferred freight routes. Also, partnership working will help address problems of inappropriate routes being taken by drivers, and advise on the preferred roads to be used, to provide an updated HGV Route Network for Dorset, Bournemouth and Poole. It is proposed that the local authorities should develop maps which show preferred routes for freight vehicles to use when accessing key sites for the benefit of drivers, businesses and local communities for Dorset, Bournemouth and Poole.

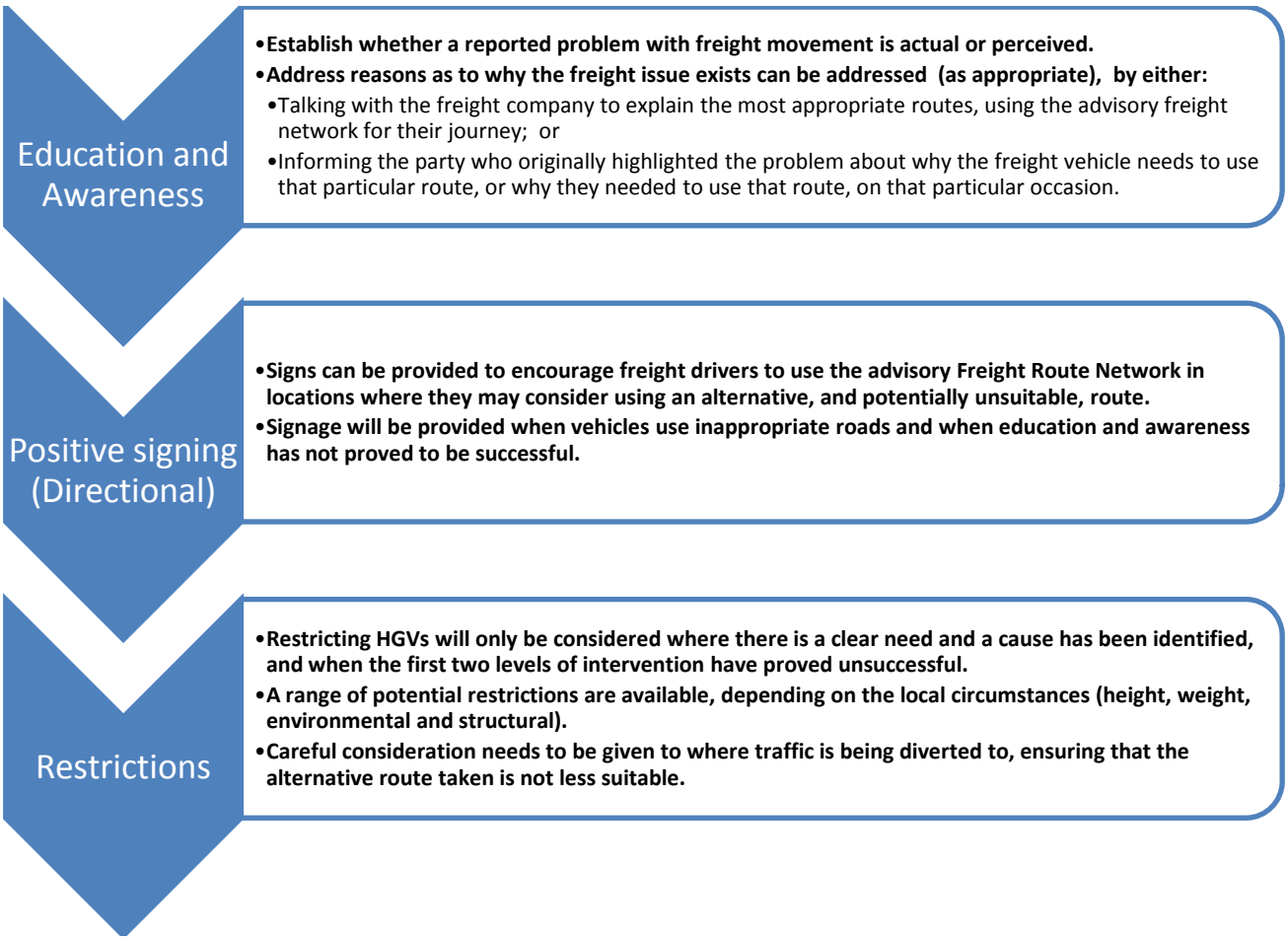
9.19 To be effective, there will need to be significant levels of enforcement to ensure that HGV drivers adhere to designated routes. It is proposed that Freight Incident Forms are developed as part of a process by which communities can raise concerns about freight issues and specific incidents.

9.20 In the long term, the introduction of an national HGV congestion charging scheme would help to control HGV movements, by varying the charge payable to selected vehicle types on specific routes so that the problems of enforcement are covered by the technical capability of the charging system. Originally the government planned to introduce satellite-based charging for goods vehicles by 2008. However, the delay to the government's plans for the national charging scheme for goods vehicles until after the medium term means that a potentially powerful policy tool for the local area has not been available, although the introduction of charging of freight vehicles is a stated policy of the Coalition Government. Hence, it will be necessary to await the introduction of satellite-based charging before the full benefit of the effective control of lorry routeing can be achieved.

Intervention Toolkit

9.21 A range of interventions is available in order to address and alleviate the problems caused by freight movements within South East Dorset, see Figure 9.6. The type of measures used and how they are implemented will depend on the problems being experienced, and the local characteristics of the area or road being affected. The 'toolkit' comprises a range of interventions, in order of preference for implementation, which can be used to address freight problems.

Figure 9.6 – Freight Intervention Toolkit



Freight Consolidation

9.22 The principle of freight consolidation is the use of a warehouse located outside the retail area(s) which acts as a consolidation and distribution point for different products intended for a range of retail outlets. The centre would receive multiple deliveries bound for the shops and consolidate them into a single load on one vehicle which then delivers to the retail area at pre-arranged times. The aims of such a scheme would be:

- to reduce the number of delivery vehicles operating in the town centres;
- to contribute to an improvement in air quality and reduction in carbon consumption;
- to reduce the conflict between vehicles in unloading areas and delivery bays;
- to provide an improved delivery service to retailers; and
- to offer the opportunity for added-value services to retailers including packaging collection/ removal and remote stock control.

9.23 A consolidation scheme is most relevant to medium sized businesses dealing in non-perishable high value goods – larger firms tend to have their own well-established distribution and delivery networks. It could serve retail outlets dealing in specific types of goods such as men's and women's fashions, shoes, mobile phones, household goods, cards and gifts. There are risks and costs associated with distribution centres, including high insurance, especially if a distribution centre is shared between a range of companies.

9.24 Although the local authority would need to provide some financial support to the scheme, it is expected that the level of funding would be reduced over time. If successful there might be further benefits from extending it further, in particular by:

- expanding the range of outlets – this might require an extension to the type of service, for example by the use of refrigerated vehicles for use with specific perishable products; and
- improving the efficiency of freight distribution.

9.25 It is therefore recommended that the local authorities explore further the potential for a freight consolidation centre within the overall Freight Quality Partnership approach. This would probably need to involve collaboration with an existing warehouse operator within access to Poole and Bournemouth town centres to identify the likely costs and operating arrangements before embarking on a survey of retailers to understand their views on the concept of consolidation and their likely participation in the scheme.

Summary

9.26 Although SEDMMTS has not been in a position to appraise these potential developments in detail, they represent the types of enhancement which will be necessary if the initial benefits of consolidation are to be expanded to a scale where they have a significant impact on the movement of goods vehicles in the area. Therefore the potential for freight consolidation centres could be investigated. Co-ordinated night-time deliveries would improve the efficiency of freight distribution.

9.27 Although the movement of freight was not identified as a major feature of the SEDMMTS, measures designed to relieve particular congestion locations will also generally benefit goods traffic whether on the road or rail network. The strategy for freight comprises for key measures:

- improving connectivity;
- active Freight Quality Partnerships;
- implementing a Freight Route Network;
- interventions ‘toolkit’:
  - education and awareness;
  - positive direction signing of freight routes;
  - restrictions to access in sensitive areas.

10. Appraisal of the Strategy

Introduction

10.1 A key aspect of the development of the SEDMMTS transport strategy was the appraisal of its performance against a range of key criteria. In this appraisal, the attention is concentrated on the impacts of the transport measures in the SEDMMTS strategy. The appraisal was carried out in accordance with the Government's Transport Analysis Guidance (TAG), which follows the principles of the New Approach to Appraisal (NATA).

10.2 The strategy has been appraised against the criteria set out in the DfT's Strategic Appraisal, which has been tailored for the study:

- Support economic competitiveness and growth;
- Tackle climate change;
- Better safety, security and health;
- Promote equality of opportunity; and
- Improve quality of life and natural environment.

10.3 Two further objectives have been added to the DfT goals – the strategy should also satisfy the following broader objectives in relation to the contents of the strategy: affordability and capable of being implemented:

- Affordability; and
- Implementability

10.4 The five DfT goals divided into further sub-objectives which the strategy is assessed against (see Table 10.1).

Table 10.1 – Strategic Appraisal Goals and Sub-Objectives

Goal	Sub-Objective
Support economic competitiveness and growth	• **Improve Connectivity** (impact on journey times and cost of travel) • **Improve Reliability** (impact on day to day variability and number of incidents) • **Wider Impacts** (cost greater than £20m, and fall partly or wholly within a Functional Urban Region) • **Delivery of housing** (facilitate or prevent new housing) • **Resilience** (against acts of terrorism, severe weather events or to the effects of climate change)
Tackle climate change	• **Reduce Carbon Emissions** (carbon intensity, volume of travel).
Better safety, security and health	• **Air Quality.** • **Improve health through physical activity** • **Reduce the risk of death or injury** • **Reduce vulnerability to terrorism** (does it meet the current security regulations or guidance). • **Reduce crime** (impact on crime and fear of crime).

Goal	Sub-Objective
Promote equality of opportunity	• **Social Inclusion** (accessibility, availability, affordability and acceptability). • **Accessibility** (in terms of bus journey times/areas served). • **Social and distributional impacts** (on low income and vulnerable groups). • **Regeneration** (impact on a targeted regeneration area, and any other areas). • **Sub-regional imbalance** (impact on weak regions).
Improve quality of life and natural environment	• **Traffic Related Noise.** • **Biodiversity.** • **Geodiversity.** • **Historic Environment.** • **Landscape Character and Open Space.** • **Land Resources.** • **Flood Risk.** • **Experience of travel.** • **Urban environment.**

10.5 The appraisal of the strategy is described in the following sections dealing with each of the over-arching aspects in turn:

- Support economic competitiveness and growth;
- Tackle climate change;
- Better safety, security and health;
- Promote equality of opportunity; and
- Improve quality of life and natural environment.

10.6 The overall appraisal for both the 2026 Strategy and the Full Strategy is summarised below and in the Appraisal Summary Tables in Appendix C. The assessment of individual schemes with the strategies is included in Appendix F using the strategic appraisal framework.

Support Economic Competitiveness and Growth

10.7 The appraisal of the SEDMMTS strategy against the DfT's Support Economic Competitiveness and Growth goal covers the following sub-objectives:

- **Improve Connectivity** (impact on journey times and cost of travel):
  - minimise cost to public accounts;
  - improve transport economic efficiency;
- **Improve Reliability** (impact on day to day variability and number of incidents):
  - improve reliability;
  - reduce dependence on the car.
- **Wider Impacts** (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)

- provide beneficial wider economic impacts;

Improve Connectivity

Transport Economic Efficiency and Cost to Public Accounts

10.8 The Transport Economic Efficiency (TEE) sub-objective refers to the economic impact of the strategy on transport users and the private sector, including travel time and vehicle operating cost savings along with changes in fares and other charges, and income and costs to the private sector. The economic impact of the strategy on the public sector, including capital and operating costs, revenue and indirect tax income is considered under the Public Accounts sub-objective. The two sub-objectives are therefore closely interrelated and need to be considered together through an assessment of the economic performance of the strategy.

10.9 The performance of the SEDMMTS transport strategy against the TEE and Public Accounts sub-objectives has been assessed using the DfT's TUBA program. In summary, the assessment process involved the comparison of the total monetised benefits generated by the strategy against the total monetised costs. The costs and benefits considered fall into the following categories:

- **Impacts of the strategy on travel times and costs** for trips made within and through the modelled study area, together with the associated impacts on revenue and indirect tax levels. These impacts were estimated on the basis of the forecast change in travel conditions caused by the strategy compared to the Do Minimum situation. Outputs from the South East Dorset Model were used within TUBA to estimate traveller user benefits, revenues and indirect tax benefits over a 60 year appraisal period.
- **Impacts of the strategy on road accidents** in the study area. Estimates were made using the COBA 11 methodology and the changes in traffic levels and patterns forecast by the transport model.
- **Capital and operating costs for the strategy**. Cost estimates were made on the basis of current scheme proposals and cost rates from previous similar schemes. Appropriate allowances were made for optimism bias. As noted in Chapter 7, the capital costs exclude the costs associated with land acquisition.

10.10 The summary results of the economic assessment are presented in Table 10.2 (with definitions provided in the box below). The entries under the Present Value of Benefits (PVB) summarise the impact of the strategy on transport economic efficiency whilst the entries under the Present Value of Costs (PVC) summarise its impact on public accounts.

Table 10.2 – Summary of Economic Assessment of SEDMMTS Strategy

	2026 Strategy	Full Strategy
1) PVC (£ mill, 2002 prices & values, 60 year appraisal period, 2016 to 2075)		
A1) Public sector capital costs	218.9	442.7
A2) Public sector operating costs	108.1	216.3
B) Public sector revenue (parking, etc)	-395.8	397.6
C) Total PVC (a+b)	**-68.9**	**261.4**
2) PVB (£ mill, 2002 prices & values, 60 year appraisal period, 2016 to 2075)		
D1) Travel time benefits – highway consumers	380.0	444.3
D2) Travel time benefits – highway business	418.2	492.8

	2026 Strategy	Full Strategy
D3) Travel time benefits – highway freight	188.7	224.1
D4) Travel time benefits – highway total	**986.9**	**1161.2**
E1) Vehicle operating cost benefits – highway consumers	80.6	88.7
E2) Vehicle operating cost benefits – highway business	17.4	20.8
E3) Vehicle operating cost benefits – highway freight	28.7	35.5
E4) Vehicle operating cost benefits – highway total	**126.7**	**145.0**
F1) User charge benefits – highway consumers	-436.6	-436.8
F2) User charge benefits – highway business	-129.5	-129.4
F3) User charge benefits – highway total	**-566.1**	**-566.2**
G1) Travel time benefits – bus consumers	78.7	172.6
G2) Travel time benefits – bus business	11.9	50.5
G3) Travel time benefits – bus total	**90.6**	**223.1**
H1) User charge benefits – bus consumers	0.8	2.4
H2) User charge benefits – bus business	0.2	0.6
H3) User charge benefits – bus total	**1.0**	**3.0**
I1) Travel time benefits – rail consumers	100.6	97.1
I2) Travel time benefits – rail business	20.6	18.5
I3) Travel time benefits – rail total	**121.2**	**115.6**
J1) User charge benefits – rail consumers	0.2	-2.6
J2) User charge benefits – rail business	0.0	-0.2
J3) User charge benefits – rail total	**0.2**	**-2.8**
K) Accident Benefits	**87.3**	**91.4**
L) Private sector revenue – bus	**241.9**	**275.0**
M) Private sector revenue – rail	**61.5**	**53.3**
N) Private sector operating & capital costs	**-123.6**	**-230.7**
O) Private sector parking revenue	**98.6**	**97.6**
P) Carbon	**29.2**	**32.3**
Q) Indirect Tax	**-120.5**	**-131.7**
R) Total PVB (D4+E4+F3+G3+H3+I3+J3+K+L+M+N+O+P+Q)	**1034.9**	**1266.1**
3) NPV (PVB-PVC)	**1103.8**	**1004.7**
4) BCR (PVB/PVC)	**15.0**	**4.8**

10.11 The explanation of the terms introduced in Table 10.2 is given in Table 10.3.

Table 10.3 – Definition of Summary Statistics

The Present Value of Costs (PVC) (1)	Represents the total value of the costs of the scheme over the 60 year appraisal period, discounted to 2002 values, using a discount rate of 3.5% for the first 30 years and 3.0% for the next 30 years. Costs are defined as the net impact of the scheme on the public sector.
The Present Value of Benefits (PVB) (2)	Represents the total value of the benefits of the scheme over the 60 year appraisal period, discounted to 2002 values, using a discount rate of 3.5% for the first 30 years and 3.0% for the next 30 years. Benefits are defined as the net impact of the scheme on transport users and the private sector.
The Net Present Value (NPV) (3).	Represents the value of the PVB less the PVC. For most purposes this is the key figure, with a more positive NPV representing a stronger economic case for a scheme.
The Benefit Cost Ratio (BCR) (4).	Represents the ratio of the benefits caused by the scheme to its costs and is calculated by dividing the PVB by the PVC. As the definitions of the PVB and PVC above show, this figure effectively represents the comparison of the impact of the scheme on users and the private sector with its impact on the public sector.

10.12 The following key points arise from the economic assessment of the SEDMMTS strategy:

- **Economic Performance:** The economic performance of the Full Strategy is very strong. The benefits that it generates considerably outweigh its costs over the 60 year appraisal period, resulting in an NPV of just over £1 billion and a BCR of greater than 4.8. With the 2026 Strategy, the NPV of £1.1 billion and a BCR of more than 15
- **Time savings:** The vast majority of the benefits generated by the strategy are time savings experienced by transport users. The implementation of the strategy would cause a step change in transport provision in the study area, alleviating congestion and providing more numerous, direct and frequent travel options. The average journey time for travel by each mode would therefore reduce considerably, generating large time savings, although, as noted below, to a large extent, the original congestion is caused by the large increase in population and employment between 2008 and 2026.
- **Revenue:** The Full Strategy causes a marked increase in public transport patronage, resulting in a substantial increase in revenue income (a present value of over £275 million for bus and £50 million for rail, over the 60 year appraisal period). With the 2026 Strategy, the corresponding values are £240 million for bus and £60 million for rail. The revenue received covers the ongoing costs incurred in operating the services provided.
- **Accident Savings:** As discussed under the safety sub-objective below, the strategy reduces the number of road accidents in the study area, leading to 6% fewer killed and seriously injured casualties than occur in the Do Minimum in 2026. The savings result from the reduction in overall traffic levels caused by the strategy and its encouragement of traffic to switch from older, lower hierarchy roads to newer and more strategic roads with higher design and safety standards. The accidents saved are worth over £87 million (present value) when considered over the full appraisal period.
- **Vehicle Operating Costs:** The net impact of the strategy is a small saving in vehicle operating costs worth only a few percent of the value of total time savings. This saving comprises a larger scale decrease in costs experienced by car trips and an offsetting increase in costs experienced by goods vehicles. The two components of vehicle operating costs are the fuel used and non-fuel costs (such as general 'wear and tear'). Both are

dependent on travel time and distance (and the associated travel speed). Up to a threshold speed of between 60 and 75 kph (depending on vehicle type), an increased travel speed reduces average fuel consumption and acts to decrease fuel costs. For car trips in the Do Minimum, average speeds are typically 40 to 50 kph (because of the high proportion of journeys occurring on slower, congested urban roads). They are therefore well below the efficiency threshold, and hence the increased average speed produced by the strategy improves fuel efficiency and reduces vehicle operating costs.

- **User Charge:** The strategy increases the charges paid by transport users. This is primarily the result of the increase in city centre parking charges in Bournemouth, Poole and Christchurch. The losses are offset, to an extent, by minor savings experienced by rail and park and ride passengers. These passengers are able to reduce the fare they pay by taking more direct and shorter routes made available by the changes in conditions and options provided by the strategy.
- **Indirect Tax:** The impacts of the strategy on indirect tax levels are directly related to its effects on vehicle operating costs and revenue. Expenditure by the user on various items of transport-related costs is subject to different levels of indirect taxation. For example, fuel incurs fuel duty and VAT whilst other vehicle operating costs and some parking charges incur VAT only. In contrast, public transport fares incur no taxation. Therefore, as the strategy alters the amount of travel and expenditure on each mode, it results in changes in the levels of indirect tax received by the government. The net effect is a decrease in indirect tax income resulting primarily from the increase in expenditure on public transport fares. The assessment takes account of the fact that, by spending more of their available income on fares, consumers would have less to spend on other, taxable items, thus leading to a reduction in indirect tax paid to the Government.

10.13 Both the Full Strategy and the 2026 Strategy performs very strongly in economic terms, mainly due to the contribution of travel time savings which arise largely because of the high levels of congestion in the 2026 Do Minimum situation. The Do Minimum shows significant increases in population (10%) and employment (12%) in line with TEMPRO with only limited improvements to the transport infrastructure. Thus, the transport system is under extreme levels of stress, which is perhaps unrealistic because there would need to be some improvement to the transport system in order to accommodate the additional population and employment. The strategy provides a significant improvement in transport supply, compared with the Do Minimum, and hence there are significant travel time savings.

10.14 The high levels of congestion in the Do Minimum situation result in the suppression of trips. The strategy provides additional transport capacity and therefore releases some of the suppressed trips. In the 2026 morning peak period, there are 2% more trips overall with the strategy than in the Do Minimum situation. The benefits from the release of suppressed trips are in addition to the benefits accrued by users of the transport system in the Do Minimum.

10.15 The economic assessment demonstrates a very strong case for the strategy, which would perform well even with lower levels of growth. In the base year (2008) situation, the transport system is already under stress, and many of the measures included in the strategy are needed to address current as well as future problems.

10.16 The majority of trips in the study area are made by car (for example, 91.4% of trips in the morning peak in 2026 in the Do Minimum situation which falls to 87.6% with the 2026 Strategy). It therefore follows that the majority of time savings generated by the strategy are experienced by road users, either private cars or freight. Nonetheless, around 17% of the total time benefits for the 2026 Strategy and 22%for the Full Strategy are experienced by journeys on public transport, despite these modes accounting for 13% of the total trips in the 2026 Strategy and 14% of the Full Strategy (see Table 10.4).

Table 10.4 –Time Benefits by Mode by Strategy (£000 discounted, full 60 year time savings)

Mode	2026 Strategy		Full Strategy	
	Time	%	Time	%
Highway - cars	798, 250	66.6	937,000	62.5
Highway – freight	188,750	15.7	224,000	14.9
Bus	90,500	7.6	223,000	14.9
Rail/RT	121,250	10.1	115,500	7.7
Total	1,198,500	100.0	1,499,750	100.0

10.17 The majority of trips made in the study area and the highest congestion levels occur in the weekday peak periods. Consequently, over 60% of the Consumer time savings generated by the 2026 Strategy are experienced during this time period, despite it accounting for less than 20% of total annual hours (see Table 10.5). The situation is more marked with the Business/Freight trips for which almost 75% of the time benefits are achieved in the peak periods. This pattern is the result of the larger number of trips made during this period which experience the benefits and the larger scale of the congestion alleviation impacts of the strategy in the more congested peak times. The picture is slightly different with the Full Strategy, with the inter-peak experiencing a greater proportion of the benefits, with over 40% of the Consumer time benefits and 33% of the benefits for Business/Freight. The greater benefits in the inter-peak may be attributed to the additional highway capacity which is contained within the Full Strategy.

Table 10.5 – Time Benefits by Time of Day, User Class and Strategy (£000 discounted, full 60 year time savings)

Mode	2026 Strategy		Full Strategy	
	Time	%	Time	%
Consumers				
AM Peak (3 hrs)	533,000	29.1	645,250	26.4
Inter-Peak (6 hrs)	674,000	36.7	1,042,000	42.6
PM Peak (3hrs)	627,500	34.2	757,500	31.0
Total	1,834,250	100.0	2,444,500	100.0
Business/Freight				
AM Peak (3 hrs)	716,250	36.9	836,250	33.2
Inter-Peak (6 hrs)	504,750	26.0	854,500	33.9
PM Peak (3hrs)	720,500	37.1	828,250	32.9
Total	1,941,500	100.0	2,519,000	100.0

10.18 Trip making patterns and high congestion levels in the study area also focus on the main urban areas. Consequently, as Table 10.6 to Table 10.9 show, a high proportion of the time savings generated by the two strategies are experienced by trips to, from or within the following areas:

- Poole;
- Bournemouth;

- Christchurch;
- East Dorset (part); and
- 'Rest of the World'.

10.19 Table 10.6 shows the distribution of time savings on the highway network and emphasises the significant of benefits achieved by trips within Bournemouth, within Poole, between Poole and Bournemouth, and between Poole/Bournemouth and the External area.

Table 10.6 – Highway Time Savings by Geographical Area – 2026 Strategy

Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	62.16	51.01	9.81	26.11	65.12
Bournemouth	62.14	94.26	20.51	25.66	66.62
Christchurch	10.71	24.99	10.79	3.42	9.26
East Dorset	52.29	56.31	14.89	25.55	35.67
Rest of World	86.37	70.45	14.25	23.19	64.49
Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	6.3%	5.2%	1.0%	2.6%	6.6%
Bournemouth	6.3%	9.6%	2.1%	2.6%	6.8%
Christchurch	1.1%	2.5%	1.1%	0.3%	0.9%
East Dorset	5.3%	5.7%	1.5%	2.6%	3.6%
Rest of World	8.8%	7.1%	1.4%	2.4%	6.5%

10.20 Table 10.7 shows the distribution of time savings on the bus network between the five areas. This highlights the significant benefits for bus travel within Bournemouth, between Poole and Bournemouth, between Poole and East Dorset; and Poole and the External area. These benefits follow the improvements to the public transport system within the 2026 Strategy.

Table 10.7 – Bus Time Savings by Geographical Area – 2026 Strategy

Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	3.21	5.39	0.48	15.52	8.50
Bournemouth	7.19	9.56	1.58	3.88	1.52
Christchurch	0.45	1.43	0.11	0.47	0.24
East Dorset	14.79	4.35	0.80	0.75	0.43
Rest of World	5.43	1.70	0.39	0.39	1.98

Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	3.6%	6.0%	0.5%	17.1%	9.4%
Bournemouth	7.9%	10.6%	1.7%	4.3%	1.7%
Christchurch	0.5%	1.6%	0.1%	0.5%	0.3%
East Dorset	16.3%	4.8%	0.9%	0.8%	0.5%
Rest of World	6.0%	1.9%	0.4%	0.4%	2.2%

10.21 Table 10.8 shows the distribution of time savings on the highway network within the Full Strategy. This highlights the significant benefits for car travel within Bournemouth, within Poole, between Poole and Bournemouth, and between Poole and the External area.

Table 10.8 – Highway Time Savings by Geographical Area – Full Strategy

Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	62.35	63.13	24.16	37.60	77.98
Bournemouth	72.72	118.36	26.10	31.07	73.76
Christchurch	21.48	33.22	10.37	6.18	11.05
East Dorset	59.66	63.68	18.54	28.16	37.38
Rest of World	89.24	72.44	19.37	28.62	70.49
Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	5.4%	5.5%	2.1%	3.2%	6.7%
Bournemouth	6.3%	10.2%	2.3%	2.7%	6.4%
Christchurch	1.9%	2.9%	0.9%	0.5%	1.0%
East Dorset	5.2%	5.5%	1.6%	2.4%	3.2%
Rest of World	7.7%	6.3%	1.7%	2.5%	6.1%

10.22 Table 10.9 shows the distribution of time savings on the bus network through the Full Strategy. This highlights the significant benefits for bus travel within Bournemouth, within Poole, within Christchurch, between Poole and Bournemouth, and between Bournemouth and Christchurch. The locations of these benefits mirror the significant improvements to the public transport services along the main Poole – Bournemouth – Christchurch corridor.

Table 10.9 – Bus Time Savings by Geographical Area – Full Strategy

Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	19.65	27.46	4.79	13.17	7.52
Bournemouth	29.98	52.91	16.01	3.52	1.51
Christchurch	4.15	16.02	0.89	0.45	0.17
East Dorset	13.26	4.15	0.78	0.77	0.44
Rest of World	5.52	1.39	0.00	0.39	1.98
Origin	Destination				
	Poole	Bourne mouth	Christ church	East Dorset	Rest of World
Poole	8.7%	12.1%	2.1%	5.8%	3.3%
Bournemouth	13.2%	23.3%	7.1%	1.6%	0.7%
Christchurch	1.8%	7.1%	0.4%	0.2%	0.1%
East Dorset	5.8%	1.8%	0.3%	0.3%	0.2%
Rest of World	2.4%	0.6%	0.0%	0.2%	0.9%

The Impact of 'Smarter Choices'

10.23 The 'Smarter Choices' component of the strategy has an important impact on the strategy's overall economic performance. The exclusion of 'Smarter Choices' reduces the NPV for the Full Strategy by around 22% or £200 million. The associated change in BCR is a decrease from 4.8 to around 4.4.

10.24 The change in NPV is mainly the consequence of reduced road travel time savings. The impacts of 'Smarter Choices' are focussed on congested urban areas and these measures are therefore very effective at alleviating highway congestion and reducing highway travel times. If 'Smarter Choices' are excluded from the strategy, average highway time savings decrease markedly, reducing the value of highway time saving benefits by around 26%.

10.25 A second impact of the exclusion of 'Smarter Choices' measures from the Full Strategy is an increase in the indirect tax revenue received by central government from drivers. Other more minor impacts of the exclusion of 'Smarter Choices' include a drop in public transport patronage (and therefore revenue), and reductions in the vehicle operating savings (due to the reduced improvements in average travel speed and therefore vehicle fuel efficiency). The decrease in traffic reduction also halves the accident savings generated by the strategy.

Improve Reliability

Delay and Journey Time Reliability

10.26 The volume of delay across the network provides an indication level of congestion and the impact that the strategies have on the performance of the highway network. Figure 10.1 demonstrates that the growth in trip-making between the 2008 Base and the 2026 Do Minimum creates significant increases in delays across the highway network. In the morning peak period, between 2008 Base and 2026 Do Minimum, the levels of delays more than double, with a rise of 108.6%.

In the evening peak period the increase in congestion is more significant, with the rise of 122.8%; in the inter-peak, with lower levels of traffic, the increase in delay is 60.9%.

10.27 The 2026 strategy has the effect of reducing the delays, although the levels are still higher than the 2008 Base, reflecting the increase in the volume of traffic. For the three time periods, the delays in the 2026 Strategy are 49.3% (morning peak), 44.6% (inter-peak) and 56.5% (evening peak) higher than the 2008 Base. When compared with the Do Minimum, the delays in the 2026 Strategy show a significant drop in the two peak periods with 28.5% in the morning peak and 29.8% in the evening peak; in the inter-peak with lower traffic volumes the reduction in delays with the strategy is 10.2%.

10.28 The congestion has additional impacts on the total vehicle-kms travelled across the highway network (as drivers lengthen their journeys in order to avoid points of congestion), time spent travelling and average journey speeds. Figure 10.2 presents the change in the distance travelled on the highway network and demonstrates that, between 2008 and the 2026 Do Minimum, the inter-peak shows a higher proportional growth of 34.2% than with the peaks (26.6% in the morning and 30.1% in the evening). The contents of the 2026 strategy produce a higher reduction in the distance travelled in the peaks (6.8% in the morning and 7.8% in the evening) compared with the inter-peak.

10.29 As far as total travel time is concerned, the greater delays in the peak periods continue in the travel time increases, as shown in Figure 10.3. Between 2008 and the 2026 Do Minimum, the morning peak travel time rises by 53.7%, with the evening peak growing at a slightly higher rate of 57.8%; this compares with the inter-peak level of 40.1%. The introduction of the strategy has a more marked on travel time that distance travelled, with reductions in the peaks of 16.3% and 17.0% for the morning and evening respectively, and the lower 6.2% in the inter-peak.

10.30 Taking into account the changes in journey times and distances, the resulting reductions in average travel speeds shows a larger fall in the peak periods than the inter-peak; between 2008 and 2026 Do Minimum, the speeds in the peak periods are predicted to drop by around 17% in the peaks (17.7% in the morning and 17.5% in the evening) with a fall of just 4.1% in the inter-peak. The 2026 Strategy has little impact on the inter-peak speeds, producing a rise of just 1.6%, although the increase in the peak periods is more marked, at 11.5% in the morning and 10.8% in the evening, as shown in Figure 10.4.

Figure 10.1 – Delay Time across the Highway Network

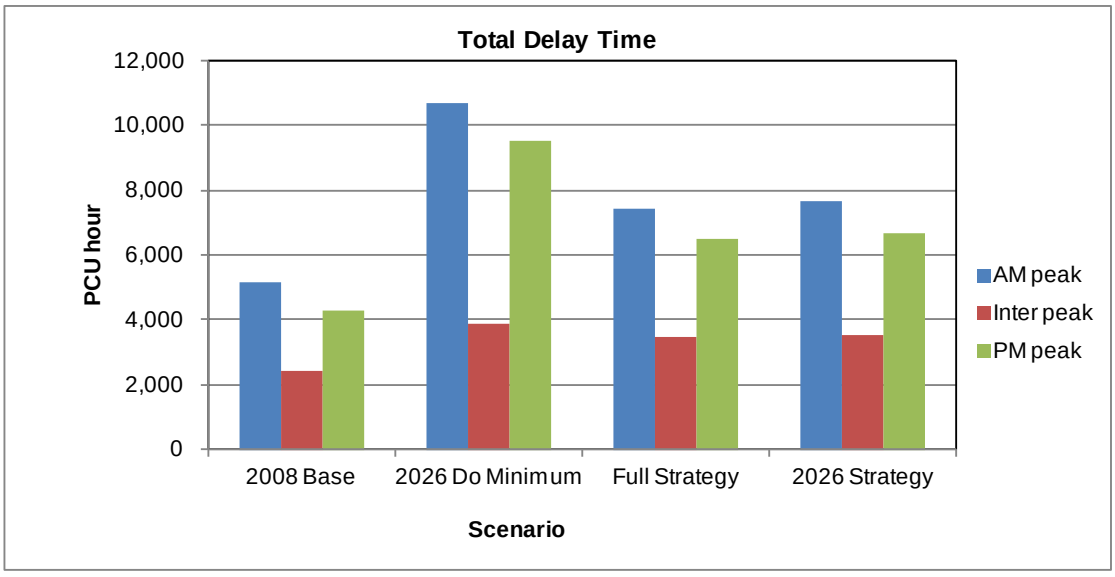


Figure 10.2 – Total Distance Travelled across the Highway Network

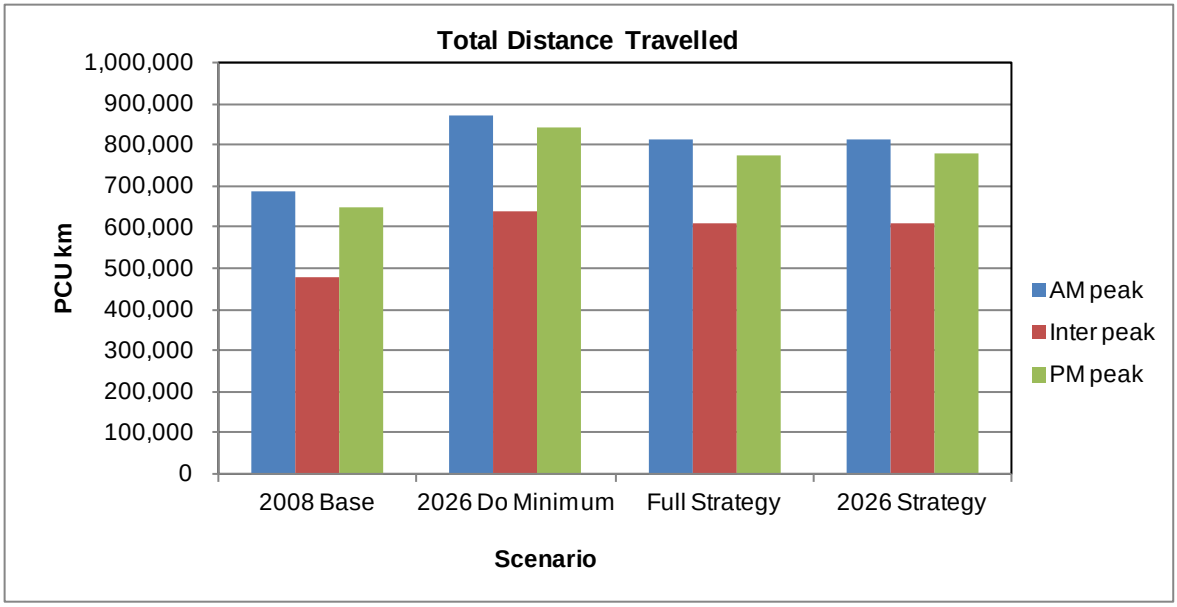


Figure 10.3 – Total Time Travelled on the Highway Network

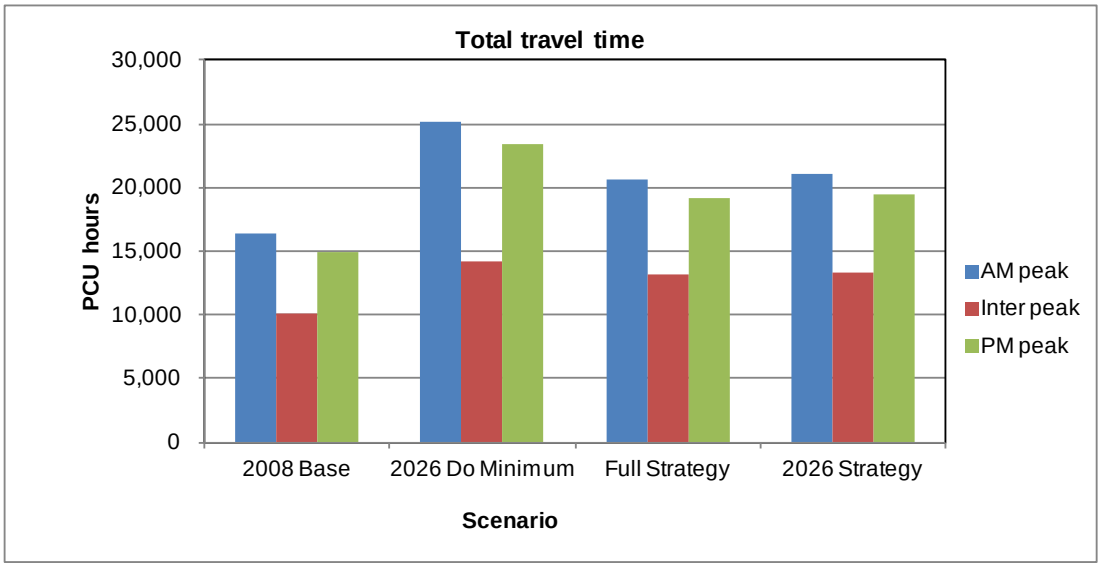
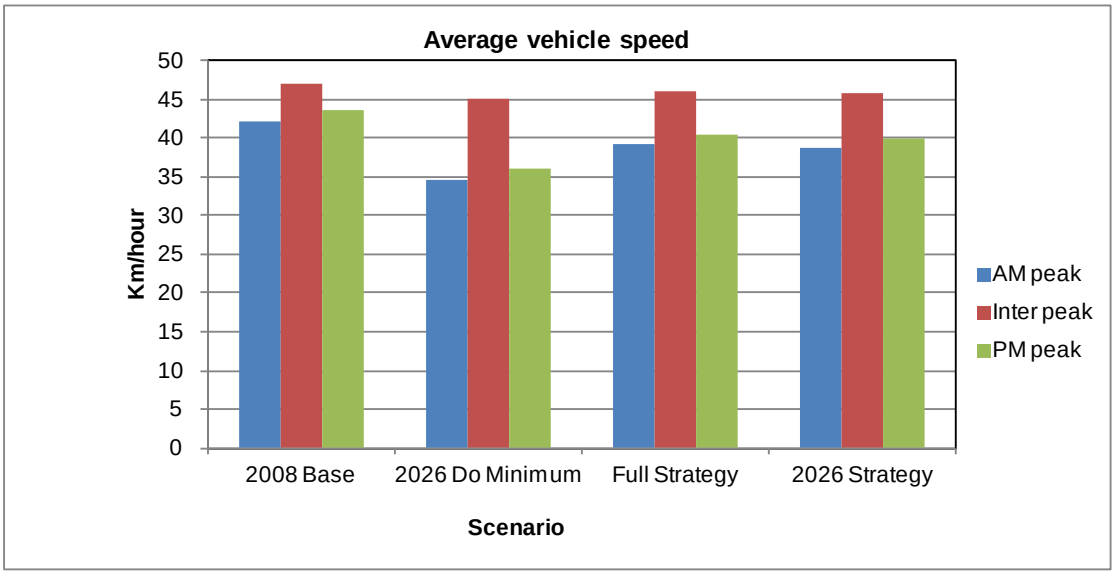


Figure 10.4 – Average Speeds across the Highway Network



10.31 The assessment of reliability has considered the changes in route stress (congestion) in the 2026 morning peak period as this represents the period of greatest congestion. Reliability is difficult to quantify directly, but a useful measure is the extent of the highway network that is below, approaching, at, and over capacity. This takes the analysis of the overall congestion level to a more detailed level. The greater the proportion of the network below capacity, the less the risk of network instability leading to delay and unreliable journey times. Table 10.10 presents the proportion of vehicle-kilometres in each category in the morning peak period in 2026, with the equivalent 2008 figures shown for comparison. The results indicate a considerable worsening of reliability between 2008 and 2026 in the Do Minimum situation, with the proportion of links comfortably below capacity falling from 86% to 72%. The Full Strategy brings this measure back up to 80% with the 2026 Strategy having a slightly lower impact at 79%.

Table 10.10 – Proportion of Vehicle-kilometres on Congested Links (2026, morning peak)

	Base (2008)	2006 Do Minimum	2026 Strategy	Full Strategy
Below capacity	86%	72%	79%	80%
Approaching capacity	6%	13%	9%	9%
At capacity	5%	7%	6%	6%
Significantly over capacity	4%	8%	6%	5%

10.32 The SEDMMTS strategy provides significant improvements to reliability when compared to the Do Minimum case, and is judged to have a **large beneficial** impact overall.

Reduce Dependence on the Car

10.33 The strategy has a significant impact on reducing dependence on the car within the South East Dorset area, with a step change in the frequency, coverage and quality of public transport services. This is reflected in a reduction in car mode share, from 91.4% in the Do Minimum to

87.6% with the 2026 strategy in the morning peak period, from 88.2% to 84.7% in the inter-peak period and from 90.6% in the Do Minimum to 86.8% in the evening peak period (see Table 10.11).

10.34 As well as providing improvements to public transport infrastructure, it is important to give people incentives to reduce their dependence on the car. The measures included within 'Smarter Choices' are a key component of the strategy – without these, even with the improved public transport services in place, the morning peak car mode share would be 90.1%, compared with 87.6% with the 2026 strategy.

Table 10.11 – Impact of Strategy on Mode Share

Mode	2008 Base	2026 Do Minimum	2026 Strategy	Full Strategy
Morning Peak (average hour)				
Car	91.4%	91.4%	87.6%	87.1%
Bus	6.6%	6.6%	9.0%	7.7%
Rail	2.0%	2.0%	3.4%	3.2%
Rapid Transit	0.0%	0.0%	0.0%	1.7%
Park & Ride	0.0%	0.0%	0.1%	0.4%
Inter Peak (average hour)				
Car	87.1%	88.2%	84.7%	84.2%
Bus	11.5%	10.6%	13.4%	11.4%
Rail	1.4%	1.2%	1.9%	1.7%
Rapid Transit	0.0%	0.0%	0.0%	2.6%
Park & Ride	0.0%	0.0%	0.0%	0.1%
Evening Peak (average hour)				
Car	90.5%	90.6%	86.8%	86.4%
Bus	7.6%	7.6%	10.3%	8.7%
Rail	1.9%	1.9%	2.9%	2.8%
Rapid Transit	0.0%	0.0%	0.0%	2.0%
Park & Ride	0.0%	0.0%	0.0%	0.1%

10.35 The consideration of the impact on mode share, however, masks the impact of the overall increase in demand between the 2008 Base year and the 2026 future year levels. Figure 10.5 to Figure 10.7 demonstrate the change in the absolute number of trips by each mode in the three time periods. These highlight that in the morning peak hour the number of car trips rises by 9.6% between the 2008 Base and the 2026 Do Minimum; the impact of the 2026 Strategy is then to reduce car trips to a level which is 0.3% **below** the 2008 level. For the inter-peak, the levels of congestion in the peak periods cause a switching in trip-making into the inter-peak period, such that the 2026 Do Minimum is 28.1% above the 2008 Base. Even with the range of measures in the 2026 Strategy, the volume of car trips with the Strategy is 17.5% above the 2008 Base level. In the evening peak, the picture is similar to the morning peak, with the 2026 Do Minimum car trips being 11.7% above the 2008 Base but with the 2026 Strategy cutting this to a small rise of 1.5%.

10.36 When comparing the change between the 2026 model runs in Figure 10.5 to Figure 10.7, the 2026 Strategy shows a 9.0% drop in morning peak car trips compared with the Do Minimum. These are comparable levels of 8.3% and 9.1% for the inter-peak and evening peak hours, respectively.

Figure 10.5 – Person Trips by Mode – Morning Peak Hour

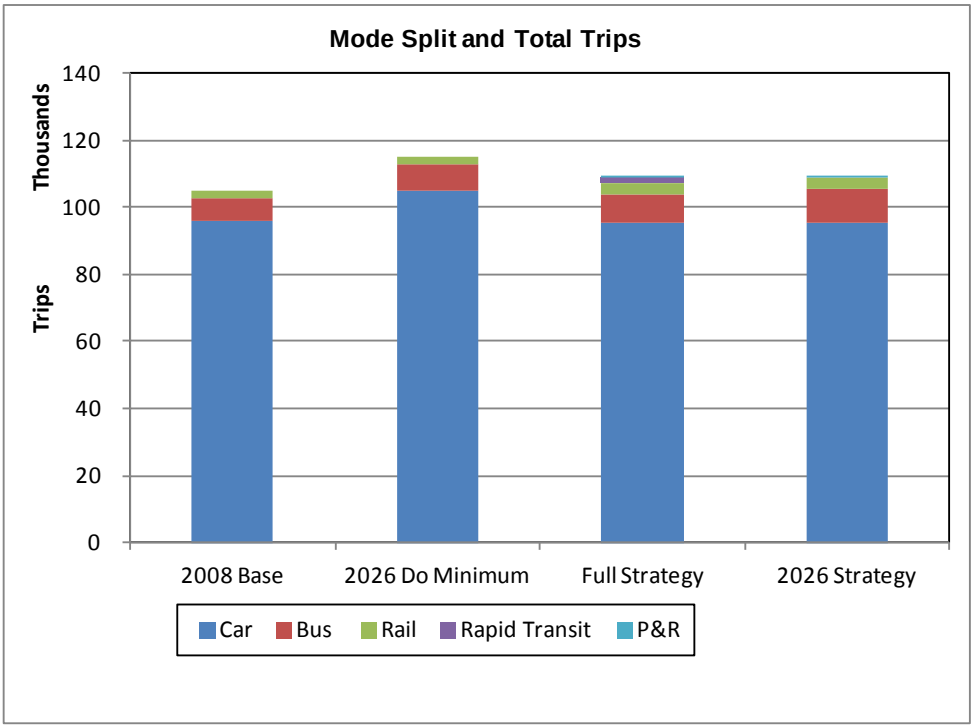


Figure 10.6 – Person Trips by Mode – Average Inter-Peak Hour

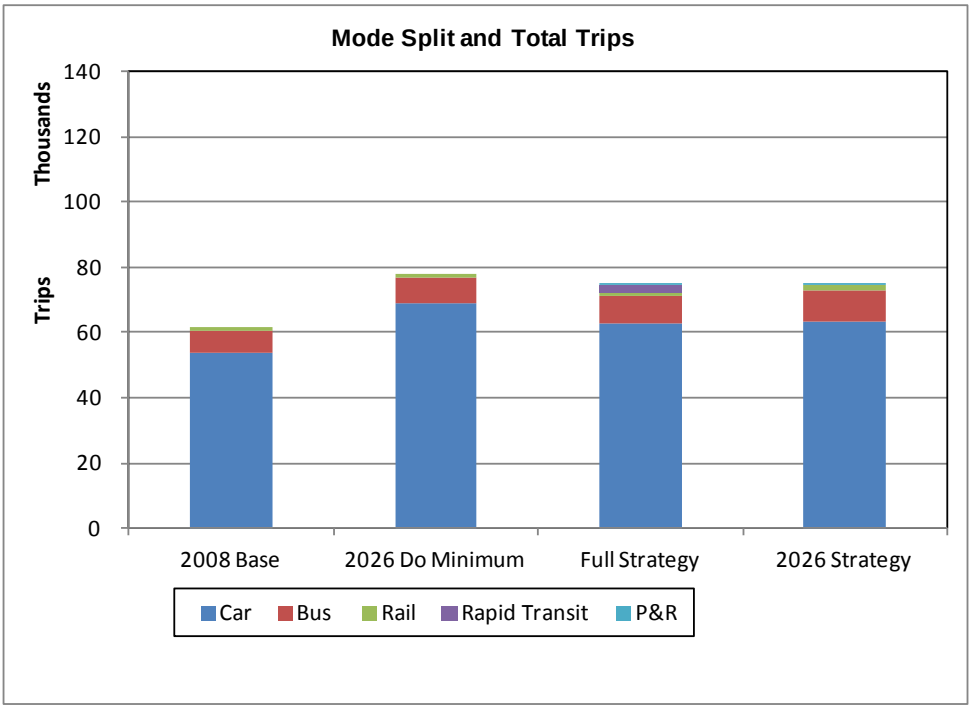
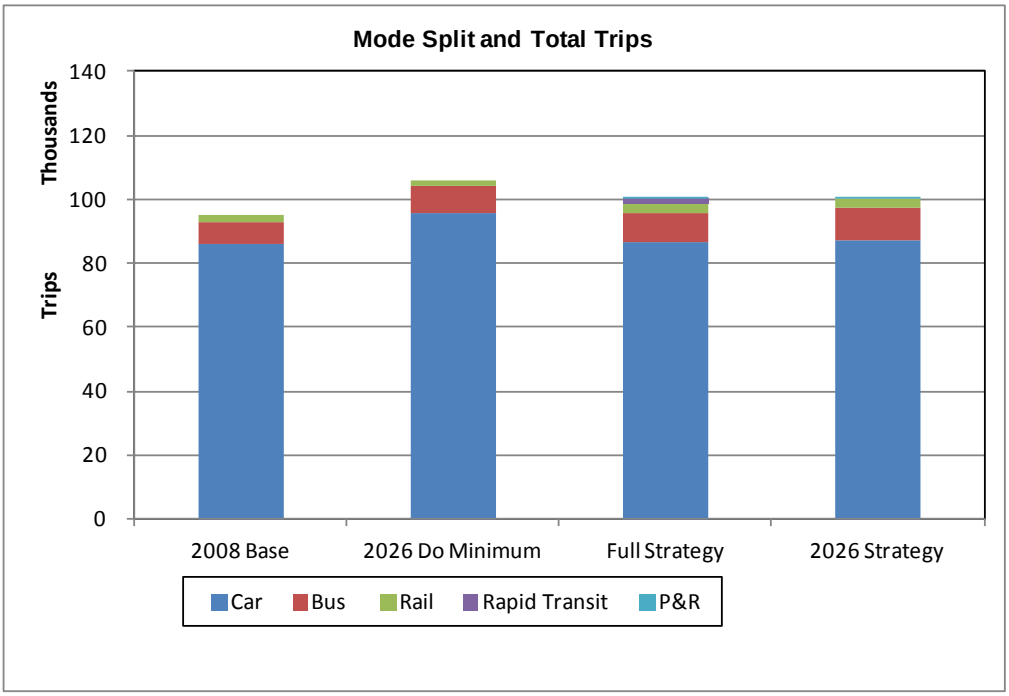


Figure 10.7 – Person Trips by Mode – Evening Peak Hour



10.37 Overall, the impact of the strategy on changing dependence on the car is assessed as **Moderate Beneficial.**

Wider Economic Impacts

10.38 The assessment of potential wider economic benefits provides an estimate of the scheme, area specific and cumulative wider impacts of the transport proposals in the strategy. The analysis shows that, overall, the wider economic impacts of the proposed SEDMMTS strategy are significant.

- The strategy improves current and future accessibility of residential populations to workplaces in the region, although this is complicated to some extent by the polycentric nature of employment locations across the conurbation. Schemes in the 2026 Strategy which make a particular contribution including cross-Bournemouth rail services, the Bus Showcase Corridor measures and other public transport improvements. These are enhanced in the Full Strategy by the DARTS scheme and highway improvements to the B3073 corridor to Bournemouth and its wider development plans. These enable the transfer of working populations in predominantly residential locations to employment centres such as central Bournemouth and Poole and the Bournemouth Airport and Ferndown industrial areas.
- The impact of the transport proposals on the nature and form of business activity varies by scheme and the sectors affected. A literature review showed that, generally, it is the manufacturing, retail and office based sectors that are most greatly impacted by transport scheme improvements. Bus and rail schemes assist primarily in widening customer and labour catchments with little impact on supplier relationships with business. Road-based schemes can improve the relationships of business with suppliers, customers and workforce. The SEDMMTS strategy, in providing for a range of public transport and highways based improvements, will have a positive overall impact on the business activity as relationships with customers, suppliers and workforce are assisted.
- Overall, proposals contained within the SEDMMTS transport strategy have an impact on the South East Dorset area as a whole with the main effects on sub-areas in the central

Bournemouth, with lesser impacts in Christchurch and central Poole. Some of the proposals (e.g. A31 widening) have a greater impact on the effective operation of the strategic road network rather than other local roads within the sub-region and therefore have a less noticeable local impact.

- The impact of the transport proposals on areas of unemployment and deprivation focus on the Bus Showcase Corridors and other public transport improvements. The Bus Showcase Corridors in particular, by linking Poole, Bournemouth and Christchurch (and intermediate locations) as well as Kinson and other areas in North Bournemouth.
- The SEDMMTS strategy will have an overall positive impact on inward investment in the South East Dorset area. The impacts will be higher where they are associated with those schemes which facilitate better strategic road movements (A31 measures, etc) and access to Bournemouth Airport. However, it should be noted that demand from inward investors is likely to remain in the South East Dorset conurbation (including Bournemouth Airport) and that the potential for this area in the long term is unclear given limited additional site availability.
- Overall, the assessment estimates that the SEDMMTS strategy has the potential to encourage the development of a range of employment sites which together provide for about 20,000 jobs, of which approximately 2,000 are not redistributed or displaced jobs. This is in addition to the assistance the strategy provides in enabling improved accessibility for sites earmarked for major mixed use development.
- The SEDMMTS strategy will have a positive wider economic impact on the South West region as a whole. This would be achieved in three main ways:
  - it will improve economic activity in the sub-region and therefore will improve the overall economic prosperity of the South West region as a whole;
  - it will improve inward investment opportunities for the South East Dorset sub-region, which in turn will have a positive impact on overall wealth of the South West region; and
  - by improving the capacity for the strategic highway network and relieving traffic congestion, it will improve accessibility to other parts of the South West region with potential positive economic impacts for businesses elsewhere in the region.

10.39 Thus, overall the transport strategy is considered to have a **moderate beneficial** effect on the wider economic benefits across the South East Dorset area.

Resilience

10.40 The ability of the transport network to resist major external ‘shocks’ to the system is a factor which has been added quite recently to the government’s criteria for the appraisal of investments. In terms of the transport system, the appraisal considers the ability of measures contained in the strategies to enhance the way in which the transport system withstands impacts such as terrorism, flooding, etc. One of the principal ways in which this can be achieved is through the widening of alternative ways of travelling, such that if one part of the network is affected by the external event, there are other ways in which people are able to complete their journeys, and hence continue to go to work, school, etc. In general, by increasing the range of means of making a journey, either by adding to the capacity of the road network, or widening the availability of public transport alternatives, the resilience of the transport system is enhanced. Some features of the public transport system in the South East Dorset, particularly the single rail line through the area, mean that there are limits to the extent to which the resilience of the rail network can be enhanced within the scope of the study. Nevertheless, the impact of the strategy is a **slight beneficial** impact on resilience.

Reduce Transport's Emissions of Carbon Dioxide

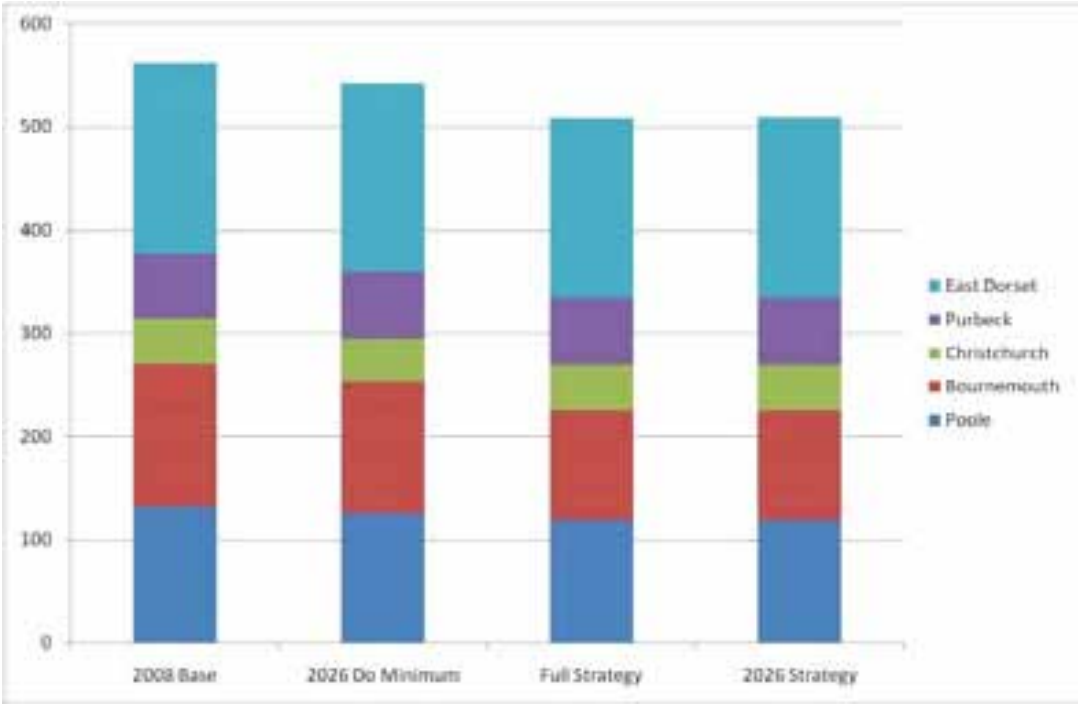
Reduce Carbon Emissions

10.41 Global warming is an important international environmental issue and transport is a major source of UK greenhouse gas emissions, in particular carbon dioxide (CO_2). The UK government has committed to reducing CO_2 emissions as part of the international programme to stabilise global warming. In the Carbon Plan developed by the Department of Energy and Climate Change and published in March 2011, the Coalition Government set out its approach to meeting the challenge of climate change. The Carbon Plan has at its heart the Climate Change Act, 2008, which requires the Government to reduce greenhouse gas emissions by at least 34% by 2020 and 80% by 2050 which would bring it to a level below the 1990 baseline.

10.42 While transport is an engine of economic growth moving people and goods around the country, it is also a major source of greenhouse gas emission, accounting for 22% of total UK greenhouse gas emissions. The vast majority of this comes from road transport which accounts for 20% of the emissions. Measures to slow or reverse this increase in road transport emissions are therefore necessary if the Government's objectives are to be achieved. There is a focus on the development and introduction of new vehicle and fuel technologies, such as electric and other Ultra-Low Emission vehicles, and continuing improvements in the fuel efficiency of all modes of transport. The DfT forecasts for the growth in the take-up of vehicles powered by alternative fuel sources are implicit within the traffic forecasts in WebTAG and TUBA guidance. In parallel with these initiatives, the Government is also keen to support sustainable travel choices and alternatives to travel, which form a significant element of the strategy developed by the study.

10.43 The DfT appraisal methodology uses the change in emissions of CO_2 to assess the impact of transport measures upon global warming. The net change in transport emissions of CO_2 within the study area in 2026 is shown in Figure 10.8.

Figure 10.8 – Annual Vehicle Carbon Emissions by area (K Tonnes)



10.44 In the 2026 Do Minimum situation, there is a 3.7% decrease in transport emissions of carbon dioxide within the study area between 2008 and 2026. Although there is a significant increase in population and employment in the area and an improvement in general wealth, with the associated generation of trips, the reduction between 2008 and 2026 is in line with the Government forecasts for changes in alternative fuels.

10.45 The SEDMMTS 2026 Strategy reduces CO_2 emissions in 2026 by 6.0% compared with the Do Minimum situation, and by 6.2% for the Full Strategy. This represents a decrease in transport emissions of carbon dioxide of 9.5% and 9.7% in the period from 2008 to 2026 for the 2026 and Full strategies respectively. Taking into account the effects of the 10% population growth, the SEDMMTS strategy reduces CO_2 emissions **per person** by 18% from 2008 levels.

10.46 East Dorset contributes the greatest share of carbon emissions, partly due to the larger geographical area and the location of the A31 trunk road and partly due to higher levels of car ownership and use across the District. The highest reductions in carbon emissions are predicted in Bournemouth as a result of this area having the greatest potential transference to more sustainable modes.

10.47 Strategic Environmental Appraisal (SEA) Objective 12 relates to the mitigation of climate change – considering whether the option will reduce CO_2 emissions for the transport sector. A number of proposals are assessed to have no impact on this SEA objective. The following were assessed to have an impact:

- Large scale targetted improvements to the strategic road infrastructure which strengthens connectivity and supports regeneration and growth: in the long term, this encourages car dependency and may increase carbon emissions without some form of demand restraint (e.g. tolling new roads) counteracting the reductions from the other LTP3 measures (*Widespread Net Negative Impact*);
- Widening opportunities for healthy lifestyles through integrating active travel into people's everyday lives and providing supporting infrastructure (*Widespread Net Positive Impact*);
- High quality surface access to Bournemouth Airport, provide reliable access to the sub-regions ports, rail schemes to increase capacity of passenger and freight services, supporting role of tourism in the sub-region: Long term positive benefits: CO_2 emissions will reduce (*Widespread Net Positive Impact*);
- Establishment and review of freight map: Positive – efficient freight movement will assist with climate change mitigation (*Widespread Net Positive Impact*);
- Freight Quality Partnership and freight measures: Positive – efficient freight movement and the promotion of low carbon transport will assist with climate change mitigation (*Widespread Net Positive Impact*;
- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively)): long term encourages car dependency (*Widespread Net Negative Impact*);
- New roads will only be constructed where it can be demonstrated that there is a strategic need that meets corporate priorities and will be subject, where necessary to further Appropriate Assessment to consider potential impacts on SACs and SPAs. Design and construction shall take into account impacts on the environment and provision for alternative modes to the car: Positive to climate change mitigation/adaptation (*widespread positive impact*);
- Strategic Park and Ride: Reducing local congestion and CO_2 emissions from congestion; however not reducing overall car dependency (*Local net positive impact*); and

- Park and Ride journeys by Rail: Reducing local congestion and CO_2 emissions from congestion; however not reducing overall car dependency (*Local net positive impact*).

10.48 Overall, the strategy slows the increase in emissions of carbon dioxide and hence has a **slight beneficial** impact on greenhouse gases.

10.49 CO_2 emissions could be reduced further by measures outside the scope of SEDMMTS, which require national rather than local initiatives in order to be effective, including the more widespread use of alternative road transport fuels and improvements to the efficiency of conventionally fuelled vehicles. For example, the European Renewable Energy Directive requires the UK to source 10% of transport energy from renewable sources by 2020. Biofuels are expected to form the major contribution to this target, although electric vehicles and the electrification of rail will play a part. At a local level, the authorities would be able to influence the take-up of electric vehicles in the sub-region through the funding of charging points.

Better Safety, Security and Health

Air Quality

Local Air Quality

10.50 The Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets Government targets for eight pollutants. Transport, especially the operation of road vehicles, is an important source of several of these pollutants, most notably oxides of nitrogen (NO_X) and particulate matter (PM_{10}), for which stringent targets have been set. The local air quality sub-objective focuses on these two pollutants.

10.51 The impact of the SEDMMTS strategy on emissions of PM_{10} and NO_X has been estimated following DfT guidance. Table 10.12 shows annual emissions of NO_X and PM_{10} in 2026, comparing the impact of the SEDMMTS strategy with the Do Minimum situation.

10.52 Table 10.12 shows reductions in emissions of NO_X and PM_{10} of 45% and 53% respectively between 2008 and 2026 as a result of the increasing use of cleaner, more efficient engines and improved fuels. These are based on standard DfT projections about future changes in the characteristics of the vehicle fleet. In comparison, the SEDMMTS strategy in 2026 achieves a further 2% reduction in NO_X emissions and a 4% reduction in PM_{10}. Thus, the impact of the strategy is small compared with the changes already taking place between 2008 and 2026.

Table 10.12 – Changes in Annual Emission Levels (tonnes)

	2008	2026 Do Minimum	2026 Strategy	Full Strategy
NO_x	5213	2860	2792	2750
PM_{10}	166	78	75	73
Change from 2008 Base				
NO_x	-	-2353 -45%	-2421 -46%	-2463 -47%
PM_{10}	-	-88 -53%	-91 -55%	-93 -56%
Change from 2026 Do Minimum				
NO_x	-	-	-68% -2%	-110 -4%

	2008	2026 Do Minimum	2026 Strategy	Full Strategy
PM_{10}	-	-	-3 -4%	-5 -6%

10.53 The geographical spread of the changes in emissions is shown in Figure 10.9 and Figure 10.10 for NO_X and Figure 10.11 and Figure 10.12 for PM_{10}; in each case the first figures covers the whole study area while the second figure concentrates on the conurbation. These figures show that, as would be expected, the increases in emissions are focused on the new road links and on the approaches to the new links where changes in traffic levels are significant.

10.54 Overall, the strategy has a **slight beneficial** impact on local air quality.

Key Pollutants in AQMAs

10.55 Locations of the study area do not meet current national air quality targets and have been declared Air Quality Management Areas (AQMAs) by the appropriate local authority with Air Quality Action Plans setting out what measures need to be undertaken to improve the position. The AQMAs cover:

- **Bournemouth AQMA No.1 -** An area encompassing a stretch of Wimborne Road between the junctions with Calvin Road to the north and Bryanstone Road to the south.
- **Poole AQMA -** An area encompassing part of Commercial Road between its junctions with Station Road and Curzon Road.

10.56 Table 10.13 shows the estimated changes in emissions of NO_X and PM_{10} within AQMAs between 2008 and 2026.

Table 10.13 – Changes in Emissions within AQMAs (tonnes)

AQMA	NO_X			PM_{10}		
	2008 Base	2026 Do Min	2026 Strategy	2008 Base	2026 Do Min	2026 Strategy
Bournemouth AQMA (Wimborne Road)	0.129	0.101	0.096	0.005	0.004	0.004
Poole AQMA (Commercial Road)	0.801	0.463	0.448	0.032	0.020	0.019

10.57 SEA Objective 11 considers whether measures maintain and where possibly improve air quality, by answering the questions:

- Will the option assist with reducing the number of AQMAs?
- Will the option reduce NO_x or PM_{10} levels?

Figure 10.9 – Location of Changes in NO_X Emissions – 2026 Strategy vs 2008 Base (Full Area)

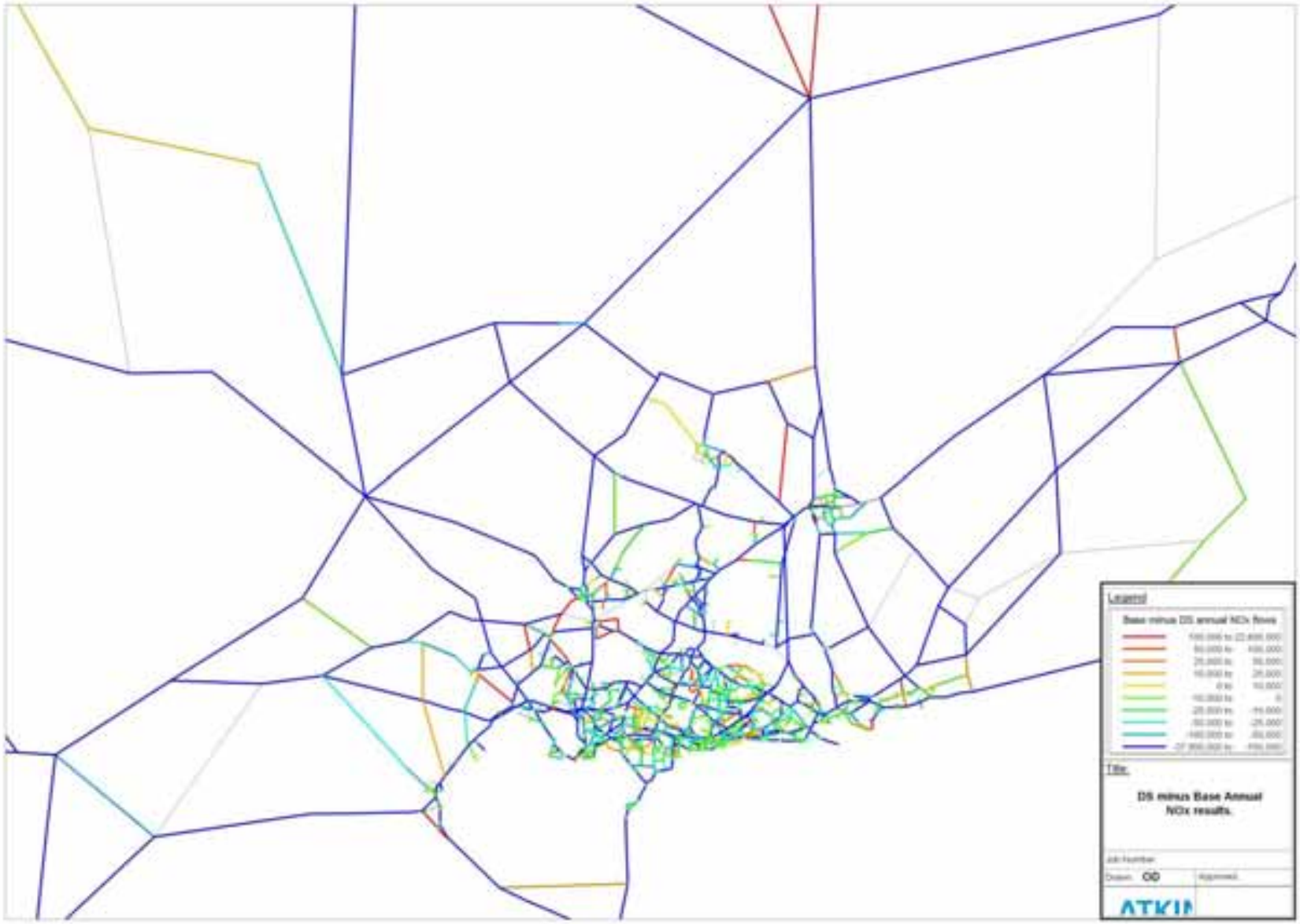
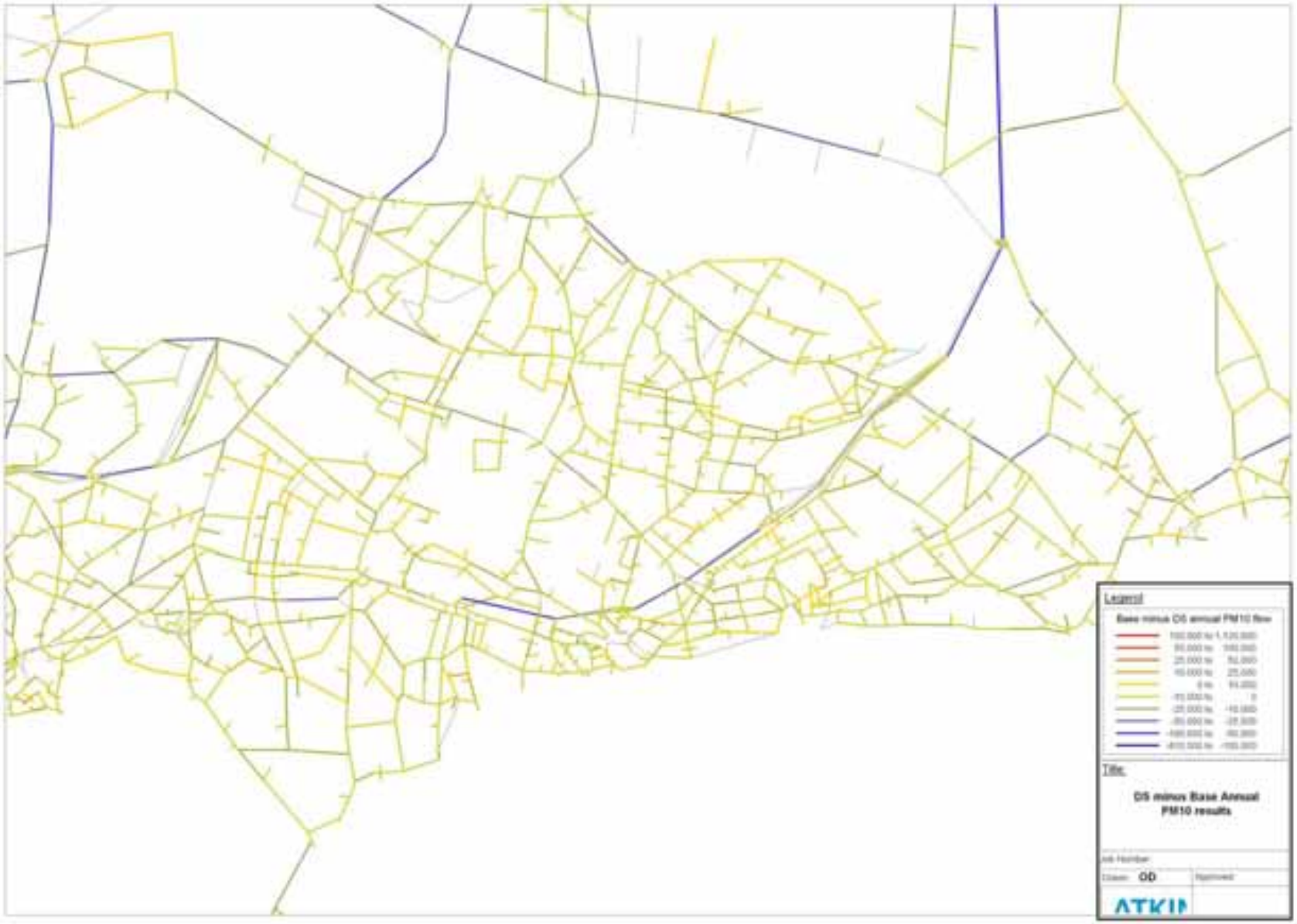


Figure 10.10 – Location of Changes in NO_X Emissions – 2026 Strategy vs 2008 Base (Central Area)

Figure 10.11 – Location of Changes in PM_{10} Emissions – 2026 Strategy vs 2008 Base (Full Area)

Figure 10.12 – Location of Changes in PM_{10} Emissions – 2026 Strategy vs 2008 Base (Central Area)



10.58 A number of proposals are assessed to have no impact on this SEA objective. The following were assessed to have an impact (positive and negative)

- Large scale targeted improvements to the strategic public transport and road infrastructure which strengthens connectivity and supports regeneration and growth. Encourages the use of cars, therefore possible negative impact on air quality; schemes will reduce congestion, however if, overall volumes of traffic increase, this may balance out any benefits from more efficient vehicle operating speeds (*Uncertain Impact*);
- High quality surface access to Bournemouth Airport, provide reliable access to the sub-regions ports, rail schemes to increase capacity of passenger and freight services, supporting role of tourism in the sub-region. Long term positive benefits for air quality will be improved (*Widespread Net Positive Impact*);
- Establishment and review of freight map: Positive – efficient freight movement will assist with improving air quality (*Widespread Net Positive Impact*);
- Freight Quality Partnership and freight measures: Positive – efficient freight movement and the promotion of low carbon transport will assist with improving air quality (*Widespread Net Positive Impact*);
- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively): Encourages the use of cars, therefore possibly negative impact on air quality, however schemes will reduce congestion; however if overall volumes of traffic increase this may balance out any benefits from more efficient vehicle operating speeds (*Widespread Net Negative Impact*);
- Strategic Park and Ride: Urban areas will be improved due to less traffic congestion (*Local net positive impact*);
- Rail Based Park and Ride: Urban areas will be improved due to less traffic congestion. Rural areas may benefit (*Local net positive impact*); and
- Strategic cycle network: Will improve air quality long term (*Regional Net Positive Impact*).

10.59 Overall the strategy has a **slight beneficial** effect on air quality in AQMAs.

Improve Health through Physical Activity

Physical Fitness

10.60 The Government has a general desire to improve the health and fitness of the nation and, in particular, it has set targets for the reduction of coronary heart disease and strokes. In connection with this, the recommended minimum level of physical activity is for 30 minutes or more, for most days of the week.

10.61 In the appraisal, the contribution that schemes make to physical fitness is measured by the extent to which the number of pedestrians or cyclists, who are active for more than 30 minutes, is increased. A further indication of improvements in physical activity is the level of mode change from private car to public transport, where the stop/station access and egress constitutes an increase in activity and hence would be beneficial to physical fitness.

10.62 In the assessment of measures within a strategic study such as SEDMMTS, it is not possible to quantify the number of pedestrians or cyclists and the length of their activity. However, it is reasonable to assert that the strategy would enhance the level of physical fitness because it includes the specific policy of providing additional facilities to enhance pedestrian and cycling activity. Furthermore, the overall strategy makes a significant change in the level of mode split with major increases in the proportion of travellers using public transport.

10.63 Hence, the overall effects of the strategy in terms of physical fitness would be **moderate beneficial**.

Severance

10.64 The introduction of new transport infrastructure has the potential to create increased severance by the introduction of new or additional barriers to movement. The classic situation is the construction of a new road which breaks an existing travel movement (whether by walking, cycling, public transport or car) and hence creates a potential hindrance to travel. The design of the scheme can, and should, of course, include measures which mitigate against the potential severance, through the inclusion of footbridges, underpasses and other facilities designed to accommodate existing movement patterns as far as possible.

10.65 However, it is likely that there will be some increases in severance with major transport schemes. In view of the nature of the strategic study, it is not appropriate to include the detailed design of schemes, and hence identify the measures designed to mitigate against potential severance. However, it is possible to highlight potential sources of increased severance for individual schemes:

- measures such as Smarter Choices which reduce overall traffic levels across the highway network will therefore reduce severance by making it easier for pedestrians, cyclists, etc to move around the network; and
- elements of the Bus Showcase Corridors which produce improvements to the cross facilities for pedestrians will tend to reduction the feeling of severance.

10.66 As noted above, it is difficult to assess the net impact on severance without the detailed design of the major schemes. The 2026 Strategy has only limited measures which would potentially create physical severance, e.g. A31 widening, and the design of such schemes will include reasonable features to counter any potential increases in severance. Taking into account the positive effects of Smarter Choices and public transport improvements, it is estimated that the net impact would be **slight beneficial**.

Reduce the Risk of Death or Injury

10.67 The SEDMMTS strategy would result in a significant improvement in road safety through reductions in the level of road traffic, particularly within urban areas. The overall impact of the strategy on casualties is shown in Table 10.14. The derivation of the statistics on accident levels follows standard DfT guidance and is based on the change in the volume of vehicle-kms on different types of road as a result of the strategy. In this approach, new roads, designed to modern standards, would tend to have a lower accident level compared with existing roads.

Table 10.14 – Impact of SEDMMTS Strategy on Casualties

Scenario	Annual Weekday Casualties				
	Fatal	Serious	Slight	Total	Total Saving Compared with Do Minimum
2008	8	112	647	767	
2026 Do Minimum	9	115	673	797	
2026 Strategy	7	98	618	723	74
Full Strategy	6	93	596	695	102

10.68 Overall, the SEDMMTS 2026 strategy would result in around 70 weekday casualties being avoided each year, including 14 serious injuries and 2 fatalities. These figures rise with the Full Strategy, with a total of 102 accidents, including 3 fewer fatalities, 22 fewer serious accidents and 77 fewer slight accidents.

10.69 The Joint Local Transport Plan for the South East Dorset area focuses on reductions in the number of the most serious road casualties with targets for cutting the number of people killed and seriously injured (KSI). The SEDMMTS strategy delivers a 10% reduction in KSI casualties in 2026. With the new road links, the strategy tends to transfer traffic from local roads to strategic roads, resulting in greater reductions in casualties on local roads.

10.70 Overall, the impact of the strategy on accidents is assessed as **large beneficial.**

Reduce vulnerability to terrorism

10.71 Although it is one of the standard criteria used by Government to assess the impact of measures, the impact of the transport strategies on influencing the vulnerability to terrorism is limited. There are parallels with the earlier assessment of the resilience of the transport network, with its ability to withstand shocks from terrorist incidents being one of the criteria. However, the development of the strategy does not consciously consider the impact on terrorism and hence the effect is considered to be **neutral**.

Reduce crime (impact on crime and fear of crime)

10.72 The public transport elements of the strategy include measures to increase the personal security of travellers as an integral part of the recommendations, especially in the operation of public transport through improved facilities at bus stops and better real-time passenger information. Hence, the overall impact on security is assessed as **slight beneficial**.

Equality of Opportunity

10.73 When considering the impact of the strategies on the equality of opportunity, attention was directed at social inclusion (accessibility, availability, affordability and acceptability), at the network level. Further details about the way in which specific individual schemes impact on this element are provided in Appendix F.

Social Inclusion (accessibility, availability, affordability and acceptability)

10.74 The appraisal of the strategy against the Government's accessibility objective includes the following sub-objectives:

- increase option values – i.e. provide a greater choice of the means of travel;
- reduce severance;
- improve access to the transport system; and
- facilitate easier local, national and international travel.

Option Values

10.75 The principle underlying option values can be explained using the example of the proposed rapid transit system. Even if a particular individual living along the route of the rapid transit does not intend to use the service with any regularity, he/she may still value having the option to use the service if and when they choose. For example, a car-owner may value the ability to use the service when, for whatever reason, they cannot drive or the car is unavailable. A non-car-owning resident who generally does not travel far may value the knowledge that, should they need to

reach the city centre, the facilities exist for them to do so, at acceptable cost and with a reasonable level of convenience.

10.76 The SEDMMTS Full Strategy includes a number of major public transport enhancements, which would provide additional options to residents of the South East Dorset area:

- the rapid transit network, covering the Bournemouth and Poole urban areas, and extending out to Christchurch;
- cross-Bournemouth rail services, giving a good level of service for journeys across the conurbation.
- new park and ride sites at New Road, Riverside Avenue, Mannings Heath, Bournemouth and Creekmoor.

10.77 Table 10.15 demonstrates the increases in public transport and park and ride capacity provided by the strategy, compared with the Do Minimum situation. There is a doubling in the capacity of bus/rapid transit (measured by the number of seat-kms), largely due to the new rapid transit network. In 2026, with the Full Strategy, around 70,000 South East Dorset residents (18% of the total) would be within 250 metres of stations on the rapid transit network. In addition, the new park and ride sites and extensions to existing sites provide a fivefold increase in capacity compared with the existing park and ride network.

Table 10.15 – Public Transport Capacity

Mode	% Change in Capacity
Rail (increase in seat-km)	25%
Bus and rapid transit (increase in seat-km)	22%
Park and ride (parking spaces)	400%

10.78 Overall, it is considered that the SEDMMTS strategy will have a **large beneficial** impact on option values.

Access to Transport

10.79 The national sub-objective “Access to Transport” focuses on access to the public transport system for those with no car available.

10.80 The SEDMMTS strategies provide a substantial improvement in public transport provision throughout the study area, particularly in urban areas. This will significantly increase the opportunity for people to access the public transport network, and will provide the means for a much wider range of journeys to be made conveniently by public transport. Compared with the 2026 Strategy, the additional measures contained in the Full Strategy, especially such elements as the DARTS rapid transit system and the additions to the highway network produce a significant increase in the accessibility.

10.81 The improvements to the public transport system would have a particular impact on local travel within the South East Dorset area, but through the Bus Showcase Corridors and other improvements, would also improve public transport connections to mainline rail stations such as (Bournemouth, Poole and Christchurch), which facilitates inter-regional travel.

10.82 Table 10.16 shows the change in population within an hour of the key destinations by public transport as a result of the SEDMMTS strategies, compared with the Do Minimum.

Table 10.16 – Change in Population within an Hour by Public Transport

Destination	Additional Population within an hour	
	2026 Strategy	Full Strategy
Bournemouth centre	35,000	57,000
Poole centre	46,000	69,000
Christchurch centre	27,000	62,000
Bournemouth Airport	33,000	42,000

10.83 Overall, the strategy is judged to have a **moderate beneficial** impact on access to public transport.

Easier Local and National Travel

10.84 The improved opportunities for travel by public transport as a result of the SEDMMTS strategy are discussed in the previous section.

10.85 The local road schemes included in the strategies produce a significant improvement in accessibility by car. In the 2026 Strategy, the Parley Lane/Christchurch Road (B3073) improvements and widening near the airport and the Blackwater Junction improvement improve access to Bournemouth Airport; this is enhanced further with the addition of the East West Link in the Full Strategy.

10.86 Furthermore, reduced congestion on the highway network, brought about by the whole package of measures included in the SEDMMTS strategy, cuts journey times and improves journey time reliability, making travel easier at the local, national, and international levels.

10.87 Changes in the population within half an hour of the key destinations by car in the morning peak period in 2026 are shown in Table 10.17.

Table 10.17 – Change in Population within 30 Minutes by Car

Destination	Additional Population within 30 mins	
	2026 Strategy	Full Strategy
Bournemouth centre	65,000	97,000
Poole centre	56,000	79,000
Christchurch centre	47,000	75,000
Bournemouth Airport	62,000	122,000

10.88 The results show that the SEDMMTS strategy makes travel by road in the South East Dorset area considerably easier. This is due not only to the highway infrastructure improvements, but also, to a large extent, to the other elements of the strategy, such as public transport improvements and the expansion of Smarter Choices which encourage changes in mode split and hence ease congestion on the highway network.

10.89 With the 2026 Strategy in place, a large part of the study area is within half an hour of Bournemouth and Poole town centres, by car. This amounts to a considerable improvement in accessibility compared with the Do Minimum, with an additional 65,000 people living within 30 minutes drive of Bournemouth town centre and 56,000 living within 30 minutes of Poole town centre. The additional measures included in the Full Strategy, particularly the East West link,

further increase the accessibility by car, especially for the Airport with the improved connections to the west.

10.90 Overall, the strategy is assessed as having a **large beneficial** impact on ease of local and national travel.

Quality of Life and Promote Healthy Natural Environment

10.91 This section appraises the 2026 SEDMMTS strategy against the DfT's Quality of Life and Promote Healthy Natural Environment sub-objectives for transport, dealing with impacts on both the built and natural environment and on people. A Strategic Environmental Assessment and Habitats Regulation Assessment have been carried out for the Bournemouth, Poole and Dorset LTP3, which includes the Full Strategy. Table 10.18 shows how the SEA objectives cross reference with the environmental sub-objectives in the Strategic Appraisal.

Table 10.18 – Cross Referencing of Environmental Sub-Objectives against the SEA Objectives

Environmental Sub-Objective	SEA Objective
Biodiversity.	• 1. To ensure no harm to biodiversity at designated sites and European protected species. • 2. Enhance general biodiversity and species across Dorset.
Traffic Related Noise.	• 6. Ensure that transport developments/schemes do not have a disproportionate effect on local residents.
Historic Environment.	• 19. To protect, enhance and manage the rich diversity of the historic environment (including architectural and archaeological heritage).
Landscape Character and Open Space.	• 20. To protect, enhance and manage the character and appearance of the landscape including townscape, maintaining and strengthening local distinctiveness and sense of place.
Land Resources and Geodiversity.	• 8. Promote the conservation and wise use of land to reduce soil contamination and safeguard soil quality and quantity.
Flood Risk.	• 10. Reduce vulnerability to flooding.
Urban environment.	• 20. To protect, enhance and manage the character and appearance of the landscape including townscape, maintaining and strengthening local distinctiveness and sense of place.

Biodiversity

10.92 The examination of the transport strategy's impact on the biodiversity and earth heritage areas in the study area covers a wide range of designations, including:

- Special Areas of Conservation (SAC);
- Special Protection Areas (SPA);
- Ramsar sites;
- Sites of Special Scientific Interest (SSSI);

- National Nature Reserves;
- Local Nature Reserves;
- Ancient Woodland (distinguishing between replanted and semi-natural);
- coastal sand dunes; and
- important bird areas.

10.93 There are two SEA Objectives in relation to biodiversity (SEA Objectives 1 and 2):

- Ensure no harm to biodiversity at designated sites and European protected sites; and
- Enhance general biodiversity and species across Dorset.

10.94 A number of proposals are assessed to have no impact on these objectives in the SEA. The following were assessed to have an impact on these objectives:

- Large scale targeted improvements to the strategic public transport and road infrastructure which strengthens connectivity and supports regeneration and growth:
  - Possible disturbance of designated sites (*Widespread net negative impact*);
  - Possible impacts on local biodiversity (*Regional net negative impact*).
- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively)):
  - Possible disturbance of designated sites (*widespread negative impact*);
  - Possible impacts of local biodiversity (*regional net negative impact*);
- New roads will only be constructed where it can be demonstrated that there is a strategic need that meets corporate priorities and will be subject, where necessary to further Appropriate Assessment to consider potential impacts on SAC and SPA. Design and construction shall take into account impacts on the environment and provision for alternative modes to the car: Positive to Natura 2000 sites (*widespread positive impact*);
- Strategic Park and Ride:
  - Various Park and Ride proposals are located within/adjacent to SPAs and SACs (*Regional net negative impact*);
  - The loss of open space could impact on local biodiversity (*Local net negative impact*);
- Rail Based Park and Ride:
  - Various Park and Ride proposals are located within/adjacent to SPAs and SACs (*Regional net negative impact*).
  - The loss of open space could impact on local biodiversity (*Local net negative impact*);

10.95 The Bournemouth, Poole & Dorset LTP 2011-2026 Habitats Regulations Assessment Report (April 2011) covers sites of European Community importance (SACs and SPA) and also Ramsar sites.[41] It states that "*no strategies or proposals are considered likely to have significant impacts on a Natura 2000 site. Whilst many of the strategies and associated projects have the potential to impact Natura 2000 sites, the significance of the impact in question is largely determined by the specific details (location, timing, type of work, etc)".* The majority of impacts to Natura 2000 sites arising from the implementation of the strategy can likely be avoided or mitigated for at the project

[41] Ramsar sites are not legislated under European legislation, however national planning policy (PPS9) recommends that they should be afforded the same level of consideration as SACs and SPAs.

level through input into design, sensitive placement, and timing of construction, and implementation of appropriate mitigation at the project level or more detailed tiers of planning.

10.96 Following a Stage 1 Screening as part of the HRA, further work was undertaken to determine air quality impacts on the Natura 2000 sites. The screening concluded that there would either be no significant effects, or that the flexibility exists at the plan level to avoid or mitigate impacts through sensible design and implementation.

10.97 Overall, the strategy could have a **moderate adverse** impact on biodiversity for the 2026 Strategy (major adverse for the Full Strategy) and the detailed design and alignment of schemes will need to take specific impacts into account.

Noise

10.98 Transport is a key source of noise 'annoyance' – the feeling of displeasure evoked by noise. However, it should be recognised that, in many situations, significant changes in traffic flows are required to bring about perceptible changes in noise levels. For freely flowing traffic, a difference of about 3dB(A) is required before there is a perceptible change in the noise level. As a guide, a 25% increase or 20% decrease in traffic flow, if speed and other factors (such as the composition of traffic in terms of vehicle types) remain unaltered, only results in a 1dB(A) change in noise level.

10.99 In the appraisal process, it is the location of the noise changes, and hence the number of people affected, which is most important. The impact of noise changes on the population 'annoyed' by noise is given in Table 10.19. This has been calculated using DfT guidance, based on locations where changes in noise of at least 3dB(A) occur. Hence, with the 2026 strategy, in 45% of the model's 187 zones, there is a reduction in the population annoyed by noise, while in 44 there is no change, and in 11 there is an increase in the population annoyed. Overall, taking into account the population in the vicinity of each link of the highway network, there is a net reduction of around 17,000 in the number of people annoyed by noise as a result of the 2026 strategy.

10.100 With the Full Strategy, due to the creation of further new transport links (new roads and public transport Rapid Transit operations) there are some areas which experience an increase in noise levels with the strategy; these highlight the need for potential mitigation measures to be included in the design of such schemes in order to counter the potential noise increases. On the other hand, the new infrastructure provides relief to other areas which currently experience noise issues, resulting in a net overall improvement.

Table 10.19 – Change in Population Annoyed by Noise (based on changes > 3dB(A))

Changes in Population Annoyed Compared with Do Minimum	2026 Strategy	Full Strategy
Net change in number of people annoyed by noise	-17,000	-23,000
Proportion of zones experiencing increase in population annoyed	11	15
Proportion of zones experiencing no change in population annoyed	44	39
Proportion of zones experiencing decrease in population annoyed	45	46

10.101 Overall, there is a small reduction in the number of people across the South East Dorset area who are annoyed by noise, and the strategy therefore has a **slight beneficial** effect on noise.

Historic Environment

10.102 The man-made environment comprises buildings of architectural or historic significance, areas such as parks and other designated landscapes or public spaces, historic landscapes and architectural complexes and sites (e.g. Scheduled Ancient Monuments, places with historical associations such as battlefields, preserved evidence of human effects on the landscape, etc).

10.103 SEA Objective 19 considers the need to protect, enhance and manage the rich diversity of the historic environment (including architectural and archaeological heritage), raising the following questions:

- Does the option ensure protection and enhancement of the historic environment (including architectural and archaeological heritage)?
- Will the option protect and enhance sites, features and areas of historical, archaeological and cultural value in both urban and rural areas?

10.104 A number of proposals are assessed to have no impact on this SEA objective. The following were assessed to have an impact:

- Large scale targetted improvements to the strategic public transport and road infrastructure which strengthens connectivity and supports regeneration and growth: any new highway infrastructure may impact on the historic environments. However, junction improvements may have a positive impact on the historic environment and landscape, including townscape (*Uncertain Impact*).
- High quality surface access to Bournemouth Airport, provide reliable access to the sub-regions ports, rail schemes to increase capacity of passenger and freight services, supporting role of tourism in the sub-region: Possibly short/long term negative impact on historic environment (*Regional Net Negative Impact*);
- Freight Quality Partnership and freight measures: Efficient freight movement should be beneficial to the historic environment (*Regional Net Positive Impact*);
- Establishment and review of freight map: Positive – Efficient freight movement should be beneficial to the historic environment (*Regional Net Positive Impact*);
- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively)): any new highway infrastructure may impact on the historic environments, however, junction improvements may have a positive impact on the historic environment and landscape, including townscape – potentially may divert traffic from sensitive areas and reduce 'rat running' (*Uncertain Impact*).
- Strategic Park and Ride: Reducing transport congestion in the urban areas will benefit the historic environment (*Local net positive impact*).
- Rail based Park and Ride: Reducing transport congestion in the urban areas will benefit the historic environment (*Local net positive impact*).

10.105 Across much of the study area, the general effect of reduced traffic levels brought about by a combination of 'Smarter Choices', public transport enhancements and demand management will have positive impact on heritage features.

10.106 Overall, the strategy could have a **slight adverse** impact on heritage for the 2026 Strategy (**moderate adverse** for the Full Strategy) and the detailed design and alignment of schemes will need to take specific potential impacts into account.

Landscape Character and Open Space

10.107 The assessment of the impact of the SEDMMTS strategy on the landscape considers both the physical and cultural aspects of the land itself and the way in which these characteristics are perceived. As a consequence, the appraisal is qualitative. Assessment is based on the SEA Report for the LTP3 (December 2010). SEA Objective 20 is to protect, enhance and manage the character and appearance of the landscape including townscape, maintaining and strengthening local distinctiveness and sense of place:

- Large scale targeted improvements to the strategic public transport and road infrastructure which strengthens connectivity and supports regeneration and growth: any new highway infrastructure may impact on the historic environments. However, junction improvements may have a positive impact on the historic environment and landscape, including townscape (*Uncertain Impact*).
- High quality surface access to Bournemouth Airport, provide reliable access to the sub-regions ports, rail schemes to increase capacity of passenger and freight services, supporting role of tourism in the sub-region: Possibly short/long term negative impact on townscape and landscape (*Regional Net Negative Impact*);
- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively)): any new highway infrastructure may impact on the historic environments. However, junction improvements may have a positive impact on the historic environment and landscape, including townscape – potentially may divert traffic from sensitive areas / rat running (*Uncertain Impact*).
- Freight Quality Partnership and freight measures: Efficient freight movement should be beneficial to the historic environment (*Regional Net Positive Impact*);
- Establishment and review of freight map: Positive – Efficient freight movement should be beneficial to the historic environment (*Regional Net Positive Impact*);
- Strategic Park and Ride: Reducing transport congestion in the urban areas will benefit the townscape (*Local Net Positive Impact*); and
- Park and Ride journeys by Rail: Reducing transport congestion in the urban areas will benefit the townscape (*Local Net Positive Impact*).

10.108 Given that some of the components of the strategy have a direct and significant impact on the landscape, the conclusion of the appraisal would be that the 2026 strategy has a **moderate adverse** effect (**major adverse** for the Full Strategy), although the precise alignment of individual schemes can be designed to reduce the impact on landscape and thus the overall effect.

Land Resources

10.109 SEA Objective 8 is to promote the conservation and wise use of land to reduce soil contamination and safeguard soil quality and quantity. A number of proposals are assessed to have no impact on this SEA objective. The following were assessed to have an impact:

- Large scale targetted improvements to the strategic public transport and road infrastructure which strengthens connectivity and supports regeneration and growth. Possible development on greenfield land, possible disturbance of contaminated land (*Local Net Negative Impact*);
- High quality surface access to Bournemouth Airport, provide reliable access to the sub-regions ports, rail schemes to increase capacity of passenger and freight services, supporting role of tourism in the sub-region. Possible development on greenfield land, possible disturbance of contaminated land (*Uncertain Impact*);

- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively)). Possible development on greenfield land, possible disturbance of contaminated land *(Regional Net Negative Impact*);
- Strategic Park and Ride: Development on Greenfield may occur (*Local Net Negative Impact*); and
- Park and Ride journeys by Rail: Development on greenfield may occur (*Local Net Negative Impact*).

10.110 Given that some of the components of the strategy have a direct impact on land resources, the conclusion of the appraisal would be that the 2026 strategy has a **Moderate adverse** effect (or a **major adverse** effect for the Full Strategy).

Water Environment

10.111 The assessment of the strategy's impact on the water environment is based on the Environment Agency's definition as 'the fresh, marine, surface and underground water in England and Wales'.

10.112 SEA Objective 9 considers the need to prevent pollution to the water environment and protect resources – will the option prevent pollution to water courses? SEA Objective 10 is to reduce vulnerability to flooding, presenting the following questions:

- Will the option assist with preventing flooding?
- Will the option reduce the amount of roads at risk from flooding?

10.113 The principal impacts of measures on the water environment in the vicinity of the schemes are summarised below:

- Large scale targeted improvements to the strategic public transport and road infrastructure which strengthens connectivity and supports regeneration and growth:
  - Possible water pollution during the construction phase (*Local Net Negative Impact*);
  - Flood risk prevention not included, A31 at risk of flooding (*Local Net Negative Impact*);
- High quality surface access to Bournemouth Airport, provide reliable access to the sub-regions ports, rail schemes to increase capacity of passenger and freight services, supporting role of tourism in the sub-region: Long term positive benefits (*Widespread Net Positive Impact*);
- Freight Quality Partnership and freight measures: Positive sustainable movement addressed (*Local Net Positive Impact*);
- Establishment and review of freight map: Should be linked to areas at risk of flooding (*Uncertain Impact*);
- Strategic transport infrastructure (A31 dualling, A31 Ringwood, PBRI, Bournemouth Airport access, North-South road link, East-West road link, A338 widening, BSCs, DARTS (assessed collectively)):
  - Possible water pollution during the construction phase (*Local Net Negative Impact*);
  - Flood risk prevention not included, A31 at risk of flooding (*Local Net Negative Impact*);
- Strategic Park and Ride: Riverside floodplain (*Local Net Negative Impact*); and
- Rail based Park and Ride: Riverside floodplain (*Local Net Negative Impact*);

10.114 Overall, the 2026 Strategy could have **slight adverse** impact on the water environment (**moderate adverse** impact on the Full Strategy) and the detailed design and alignment of

schemes will need to take specific impacts into account, in particular flooding and water pollution during the construction phase.

Urban environment (Townscape)

10.115 Townscape is defined as the physical and social characteristics of the built and unbuilt urban environment and the way in which they are perceived. The majority of the schemes included in the strategy are located outside the urban areas, although there are some sections which lie relatively close to urban areas. The appraisal of the townscape features is essentially qualitative.

10.116 The townscape assessment is included in the previous section on Landscape Character and Open Space, in relation to SEA Objectives 20 "*to protect, enhance and manage the character and appearance of the landscape including townscape, maintaining and strengthening local distinctiveness and sense of place*".

10.117 Overall, the strategy could have a **slight adverse** impact on townscape and the detailed design and alignment of schemes will need to take specific potential impacts into account.

Experience of Travel

Journey Ambience

10.118 Journey Ambience is a function of the quality of facilities provided for travellers, the level of information that is disseminated to them, the cleanliness of services, the views from vehicles, and the level of overall traveller stress which includes such factors as the safety of travel. The level of journey ambience can be directly affected (positively or negatively) by travellers themselves, and by the network providers and operators.

10.119 The SEDMMTS strategy may be deemed to enhance journey ambience in a number of ways although it is not possible to estimate the number of travellers that would be affected, nor to gauge the magnitude of the effect. The aspects of the strategy which would enhance journey ambience include the improvements to reliability and hence the reduction in stress as a result of the decreased congestion on the highway network. The increase in the level of information to travellers would also improve ambience; this information would be provided on the motorway network through the greater use of Variable Message Signs and on the public transport network, for example with the increased availability of real-time information for bus passengers as part of the Bus Showcase corridors.

10.120 The improved public transport vehicles included in the short-term enhancements to the local rail network and in the introduction of new buses as part of the Bus Showcase corridors will have a positive affect on the journey ambience. In the longer term, with the Full Strategy, the inauguration of rapid transit services across the study area, operated by modern vehicles, will have a significant effect on journey ambience.

10.121 Hence, the overall effects of the strategy in terms of journey ambience would be **moderate beneficial.**

Transport Interchange

10.122 The strategy contains a number of measures designed to improve the ease and quality of interchange between transport modes across the study area. Some of the specific measures include:

- the expansion of interchange facilities at locations such as Bournemouth Interchange (bus and rail), in central Bournemouth (bus) and Bournemouth Airport (bus and Park and Ride);
- better integration of rail stations with improved signing as part of station travel plans and increased parking facilities at some rail station;

- improved passenger waiting facilities at stops including real-time passenger information, within the Bus Showcase corridor measures;
- increased frequency on local rail services to provide 'turn up and go' style of operation for passengers on the local rail network;
- in the longer term with the Full Strategy, creation of a rapid transit services on corridors extending across the conurbation with common sections within Bournemouth city centre to facilitate interchange between lines;
- in the longer term with the Full Strategy, creation of new park and ride sites to enhance integration between private car and public transport; and

10.123 The overall impact of the package of measures would be a significant enhancement in the level of integration between modes and within public transport sub-modes.

10.124 Thus the transport strategy may be considered to be **large beneficial** in terms of the provision of physical interchange measures.

Land Use Policy

10.125 The development of the SEDMMTS transport strategy has been closely linked with the parallel development, by the local authorities (BoP, BBC and DCC) of the spatial strategy for the South East Dorset area. The level of growth to 2026 in population and employment outlined in Chapter 3, dictated that the transport strategy needed to closely reflect the location of the new developments in developing the measures in the strategy.

10.126 The transport strategy took direct account of the needs of specific developments within the spatial strategy. In addition, there were significant developments within the existing urban areas across the study area, together with specific growth at Bournemouth Airport. The transport measures in the SEDMMTS strategy were designed specifically to cater for the spatial developments and the timing of the implementation programme for the transport measures was tailored to the anticipated spatial development programme, although many of the housing growth is spread across a number of small sites rather than major new developments. As an example, the public transport network was designed to serve a number of the new employment development sites, including Ferndown. Other improvements to the highway network were also designed to cater for the additional demands caused by the developments, for example the widening of the B3073 adjacent to Bournemouth Airport.

10.127 Hence, the SEDMMTS strategy shows **moderate beneficial** impacts in terms of the integration with land use developments.

Other Government Policies

10.128 The sub-objective seeks to identify how the strategy affects other relevant government policies across the range of government departments.

10.129 In July 2002, the Government and the Local Government Association agreed upon a set of seven shared priorities, which were:

- raising standards across schools;
- promoting healthier communities and narrowing health inequalities;
- creating safer and stronger communities;
- transforming the local environment;
- improving the quality of life of older people and children, young people and families at risk;

- meeting local transport needs more effectively; and
- promoting the economic vitality of localities.

10.130 A number of these wider priorities are directly relevant to the contents and objectives of the transport strategy. In this context, the Department for Transport's 'Shared Priority Delivery Plan' contains the following four key outcomes:

- tackling congestion;
- delivery accessibility;
- safer roads; and
- better air quality.

10.131 Further DfT policy objectives include these specific outcomes, supplemented by further related items:

- improving the quality of life; and
- reducing social exclusion.

10.132 The other elements of the strategy appraisal highlight how the combined elements of the transport strategy contribute to satisfying the outcomes.

10.133 Other government departments have related policy objectives which are relevant to the aims and contents of the transport strategy, including:

- Department for Health:
  - improve access to health facilities;
  - encouraging walking and cycling;
- Department for Education and Skills:
  - increasing opportunities for access to education;
- Department for the Environment, Food and Rural Affairs:
  - a better quality of life, the strategy for sustainable development.

10.134 The contents of the transport strategy and the appraisal, described elsewhere in this report, make a significant contribution to the achievement of these policies. Hence, the SEDMMTS strategy shows a **strong beneficial** impact in terms of integration with other Government policies.

Summary

10.135 The preceding sections have examined the impacts of the SEDMMTS strategy under the DfT goals. The Strategic Appraisal outlined in the previous sections are summarised in Table 10.20 to Table 10.29.

Table 10.20 – Cost and Likely Value for Money

	Full Strategy	2026 Strategy
Capital cost (excluding HA and Purbeck Contributions Scheme funding sources)	£637m	£270m
Revenue cost (per annum)	Smarter choices = £1.425m per annum Public transport = £5.33m	Smarter choices = £1.425m per annum Public transport = £125k per annum

	Full Strategy	2026 Strategy
Funding source(s)	Various sources (e.g. LSTF bid, major scheme funding, LTP, developer funding).	Various sources (e.g. LSTF bid, major scheme funding, LTP, developer funding).
Income generated (per annum)	£0-5m	£0-5m
Overall cost risk (1 = high risk, 5 = low risk)	2 – Medium-High	3 - Medium
Affordability (1 = not affordable, 5 = affordable)	1. Not Affordable	5. Affordable
Likely Value for Money (BCR)	Very High >4	Very High >4

Table 10.21 – Deliverability

	Full Strategy	2026 Strategy
Implementation timetable from inception to delivery	10+ years	10+ years
Public acceptability (1 = low, 5 = high)	4 – Medium-High	2 – Low-Medium
Practical feasibility (1 = low, 5 = high)	5 – High	3 - Medium

Table 10.22 – Performance against DfT Goals

	Full Strategy	2026 Strategy
Support economic competitiveness and growth	Major Beneficial	Major Beneficial
Tackle climate change	Slight Beneficial	Slight Beneficial
Better safety, security and health	Moderate Beneficial	Moderate Beneficial
Promote equality of opportunity	Moderate Beneficial	Moderate Beneficial
Improve quality of life and natural environment	Major Adverse	Moderate Adverse
Affordability	1. Not Affordable	7. Affordable
Implementability	3. Moderately Implementable	7. Implementable
Scale of Impact (1 = small impact, 5 = significant impact)	**5**	**4**

Table 10.23 – Strategic/Network Fit

	Full Strategy	2026 Strategy
Objectives your proposal will achieve	Strategic Transport	Strategic Transport
Is the option innovative and/or encourage better use?	Innovative	Innovative
Scale of impact (1 = low, 5 = high)	4 – Medium-High	4 – Medium-High

Table 10.24 – Quality of Evidence and Key Uncertainties/Risks

	Full Strategy	2026 Strategy
What is the quality of the supporting evidence? (1 = low, 5 = high)	Medium-High	Medium-High
Degree of consensus over outcomes? (1= little, 5 = majority) - *evidence rather than support*	4	5 - Majority
Key Uncertainties/risks (external factors)	Timing of some proposals is flexible and some schemes can be phased (particularly those in the strategy to 2026). Parley Lane-Christchurch Road (in 2026 Strategy) is a precursor to the East-West road link. DARTS proposal would need to be delivered in its entirety. Timing would be driven by funding availability, feasibility, and interfaces with the heavy rail services.	A31 widening at Ringwood depends on level of support from the Highways Agency and available funding. The extent of the need to divert utilities for the BSCs is currently unknown (with associated cost implications). Further improvements are needed to the rail line between Worgret junction and Swanage.
Flexibility (1 = static, 5 = dynamic)	3 - Moderate	3 - Moderate

Table 10.25 – Support Economic Competitiveness / Growth – RAG Assessment

	Full Strategy	2026 Strategy
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Major Beneficial
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	Major Beneficial
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Moderate Beneficial
Delivery of housing (facilitate or prevent new housing)	Major Beneficial	Major Beneficial
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Major Beneficial	Moderate Beneficial

Table 10.26 – Reduce Transport's Emissions of Carbon Dioxide – RAG Assessment

	Full Strategy	2026 Strategy
Reduce Carbon Emissions (carbon intensity, volume of travel)	Slight Beneficial	Slight Beneficial

Table 10.27 – Better Safety, Security and Health – RAG Assessment

	Full Strategy	2026 Strategy
Air Quality	Slight Beneficial	Slight Beneficial
Improve health through physical activity	Moderate Beneficial	Moderate Beneficial
Reduce the risk of death or injury	Major Beneficial	Major Beneficial
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance)	N/A	N/A

	Full Strategy	2026 Strategy
Reduce crime (impact on crime and fear of crime)	Slight Beneficial	Slight Beneficial

Table 10.28 – Greater Equality of Opportunity – RAG Assessment

	Full Strategy	2026 Strategy
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Moderate Beneficial
Accessibility (in terms of bus journey times/areas served)	Major Beneficial	Major Beneficial
Social and distributional impacts (on low income and vulnerable groups)	Major Beneficial	Major Beneficial
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Moderate Beneficial
Sub-regional imbalance (impact on weak regions)	N/A	N/A
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Moderate Beneficial

Table 10.29 – Improve Quality of Life and Promote Healthy Natural Environment – RAG Assessment

	Full Strategy	2026 Strategy
Traffic Related Noise	Neutral	Slight Beneficial
Biodiversity	Major Adverse	Moderate Adverse
Geodiversity	Major Adverse	Moderate Adverse
Historic Environment	Moderate Adverse	Slight Adverse
Landscape Character and Open Space	Major Adverse	Moderate Adverse
Land Resources	Major Adverse	Moderate Adverse
Flood Risk	Moderate Adverse	Slight Adverse
Experience of travel	Major Beneficial	Moderate Beneficial
Urban environment	Slight Adverse	Slight Adverse

11. Funding and Next Steps

Introduction

11.1 As set out in Chapter 1, the purpose of the SEDMMTS is to guide transport investment decisions in the South East Dorset sub-region to 2026, in line with Government policy. The SEDMMTS will inform the implementation plan for the Dorset LTP3, which includes the transport strategy for the South East Dorset area. The end product for the Strategy Development phase of the SEDMMTS is a programme of transport investment priorities for the following time periods:

- Short term 2011-2014;
- Medium term 2014-2020;
- Long term 2020-2026; and
- 2026 and beyond (to 2041).

11.2 The objectives of the SEDMMTS focus on the contents of a sustainable transport system. Affordability and 'Implementability' (being capable of being implemented) have been defined as two broader objectives for the contents of the transport strategy. The affordability objective will take into account the situation at the time of strategy development as far as the funding arrangements are concerned, considering the funding of individual items or the strategy as a whole.

11.3 Since the Strategy Development process began, there have been a number of significant changes in relation to local Government finances. In May 2010 a new Government was elected, whose stated priority is to cut the £156 billion public sector finance deficit inherited from the previous Government. Some areas of spending are protected – transport is not. On the 10th June 2010 the Government published details of the £1.166bn Local Government contribution to the £6.2bn cross Government savings in 2010/11 - £309m was cut from the DfT budget.

11.4 Key changes to local Government finances since the new Government was elected include:

- In-year cuts (2010/11) to capital grants – e.g. integrated transport block cut by 25% in South East Dorset;
- The Comprehensive Spending Review (CSR) announcement in October included a 15% reduction to the DfT's budget in real terms, compared to the aggregate reduction across all Government spending announced in the CSR of 19%[42];
- In-year cuts to revenue based grants and some grants were cancelled altogether. The total number of DfT grants reduced from 26 to 4 to simplify the funding system;
- A commitment to abolish regional bodies (Government Offices and Regional Development Agencies), and ended funding for the Regional Leaders' Boards (which replaced the Regional Assemblies under the previous Government)[43]; and
- Significant changes to the major schemes process.

11.5 This section reviews the potential sources of funding for transport schemes in the context of the SEDMMTS. The transport strategy comprises a series of individual elements, with different characteristics in terms of the balance between ownership of the assets, construction or capital cost, operating cost, level of revenue and variety of benefits. At the same time, these characteristics lend themselves to different possible sources of funding.

[42] 20th October 2010 Spending Review Statement
[43] Regional Government Statement – 22nd July 2010 http://www.communities.gov.uk/statements/corporate/regionalgovernment

Funding Sources Overview

11.6 Local authority spending can be split into two categories:

- Revenue spending (R) - the cost of running services such as staff, heating, lighting, and cleaning, as well as products and services provided – for example concessionary fares; and
- Capital spending (C) - acquiring, constructing or improving assets such as roads, bus lanes, buildings and vehicles.

11.7 Under standard accounting practice, revenue resources may be spent on capital and revenue expenditure. Capital resources can normally be only applied to meet capital expenditure. In exceptional cases revenue expenditure may be funded from borrowed money or capital receipts by a council applying to the Secretary of State for a 'Capitalisation Direction'.

11.8 Existing funding sources for transport include:

- Integrated Transport Block (C);
- Major Schemes (bid-based) (C);
- Developer contributions (S106, SEDTCS, Purbeck Interim Contributions scheme) (R) & (C);
- Prudential borrowing, use of reserves and council tax (R) & (C);
- Local Government Finance Settlement (Formula Grant) (R); and
- Other non-transport grants which are non-ringfenced could be spent on transport (subject to council priorities) (C).

11.9 New sources announced and/or introduced since June 2010 include:

- Local Sustainable Transport Fund (bid-based) (R) & (C);
- Regional Growth Fund (bid-based) (R) & (C); and
- New Homes Bonus (R) & (C).

11.10 Councils can supplement funding from Central Government with various local revenue raising mechanisms, for example:

- User charging – road user charging, tolls, workplace parking levies, parking charges; and
- Contributions from businesses (new powers to be introduced to allow Tax Incremental Financing).

Main Mechanisms for Capital Investment

11.11 Five main mechanisms of funding transport schemes can be identified:

- Integrated Transport Block;
- Local Sustainable Transport Fund (which also has a revenue element);
- Major Schemes (bid-based);
- Developer contributions (SEDTCS, S106, etc); and
- Programme spending by national government agencies or bodies such as Network Rail and the Highways Agency.

11.12 The Government has also introduced the bid-based Regional Growth Fund bids can involve transport related bids; however no transport related bids are being progressed by the councils.

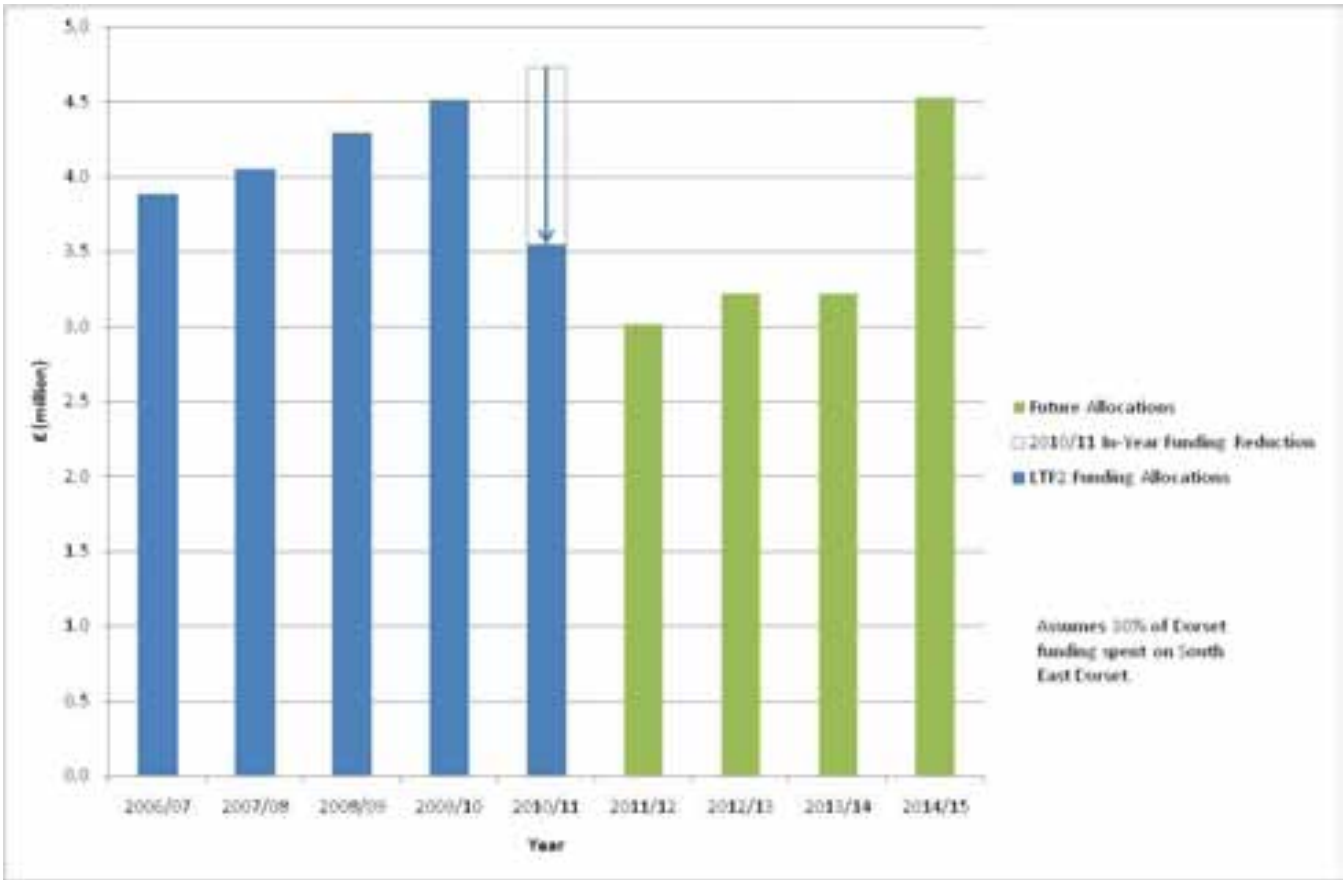
Integrated Transport Block

11.13 The process for agreeing LTPs is the main route for delivering local transport capital investment as well as driving much current expenditure. The LTP3 comprises a strategy to 2026 and a series of three year implementation plans.

11.14 Local authorities are given final Integrated Transport Block allocations for two years (e.g. 2011/12 and 2012/13), and indicative allocations for the following two years (2013/14 and 2014/15).

11.15 The Integrated Transport Block allocation for Bournemouth, Poole and all of Dorset is £4.6 million in 2011/12. Assuming Dorset spends 30% of its funding in South East Dorset (as per during LTP2), this amounts to a total of £3.02 million for South East Dorset in 2011/12. Figure 11.1 shows past and future funding allocations, including the 2010/11 in-year cut to funding.

Figure 11.1 – Past and Future Funding Allocations



Local Sustainable Transport Fund

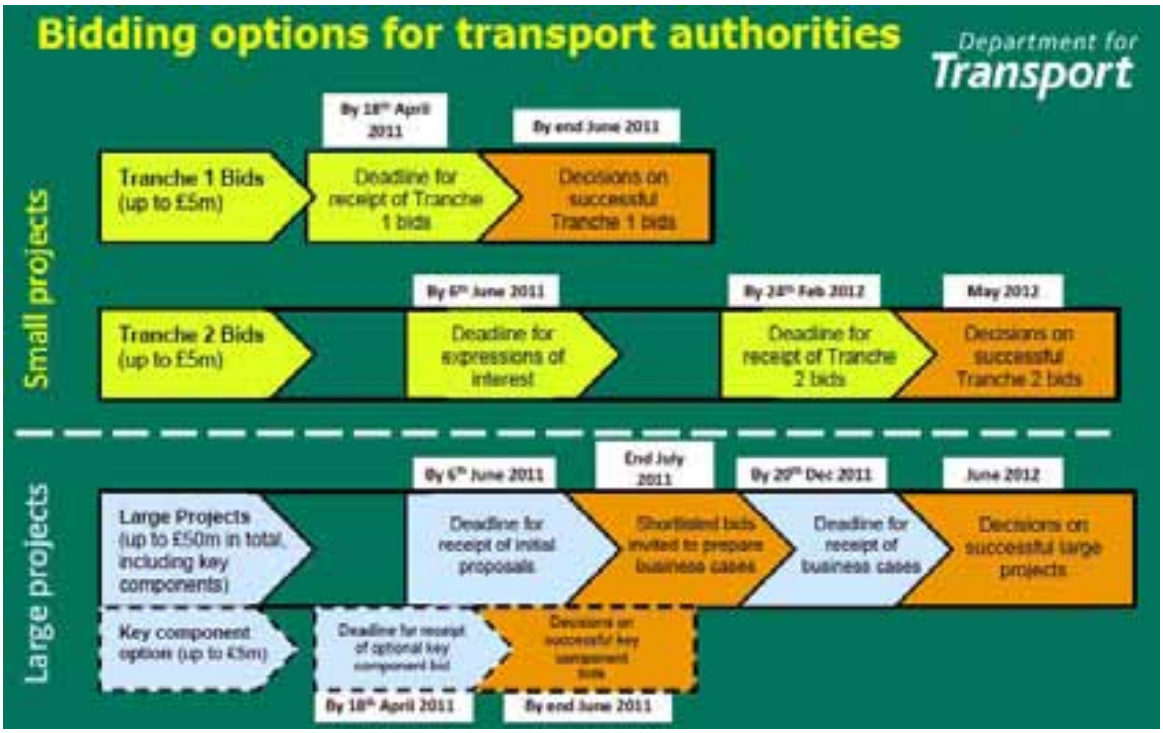
11.16 The Local Sustainable Transport Fund (LSTF) will support packages of transport interventions that support economic growth and reduce carbon emissions in their communities as well as delivering cleaner environments and improved air quality, enhanced safety and reduced congestion. It will be a bid-based system. It was announced in the CSR that the LSTF would be worth £560 million (nominal, £526 million in real terms) in total over the CSR period, split £350 million capital and £210 million revenue. LSTF aims to maximise the toolkit of options available to local authorities. Bidding options are shown in Figure 11.2.

11.17 The guidance states that local circumstances and the needs of local communities should drive the solutions that come forward to the Fund. Packages could include the following types of measures:

- Encouraging mode shift: better travel information, smart and integrated ticketing or personalised travel planning, improving public transport and cycling and walking initiatives;
- Managing demands on the network: including the provision of park and ride facilities, car clubs and car sharing schemes and the development of freight consolidation centres;
- Better traffic management: incorporating more efficient signal times, junction improvements designating red routes, 20 mph zones, cycle lanes or quality bus corridors, pedestrian zones, and better management of street works and incidents Improving access and mobility;
- Improving access and mobility: (through work based and school travel plans, replacing short car journeys, cycling and walking, improvements in street design or the provision of facilities, community transport, demand responsive.

11.18 The fund is not designed to support major infrastructure or service enhancements in relation to inter-urban journeys.

Figure 11.2 – LSTF Bidding Options for Transport Authorities



11.19 Bournemouth, Poole and Dorset will be submitting a joint LSTF bid – 'A35 Corridor, linking Poole-Bournemouth-Christchurch, with a possible 'key component option' bid for the Joint Traffic Control Centre. DfT have indicated it would be appropriate for the authorities to be involved in small joint bids, as well as the large A35 corridor joint bid, and their own individual bids. The A35 Corridor bid will be a Joint 'Large Project' bid with key component element (see Figure 11.2).

11.20 Based on findings of the Transport Study and initial review of the LSTF guidance the potential components of the A35 Corridor bid, subject to further development, comprise:

- A35 Bus Showcase Corridor infrastructure measures, including:
  - improved junction control with bus priority at signals linked to RTI;
  - bus lanes;
  - parking rationalisation/ right turn bans to improvement flow on main corridor and parking enforcement.

- Bus Operation:
  - Improve and rationalise the bus services by formalising corridor service levels in a QBC;
  - Smartcard ticketing – build on/ incorporate current ITSO bid;
  - Branding of services/ bus stops/new buses.
- PTP, WTP and STP - in tandem with infrastructure improvements, targeting households, major employers and education establishments within 500m either side of A35 corridor;
- Other elements could include :
  - Passenger Information (e.g. bus and rail, road network incidents) in public locations such as shopping centres, hospitals and offices;
  - Walking and cycling measures along and across the A35 corridor, including feeder routes linking to schools and other major attractions, and public realm improvements;
  - Cycle Training/Bike It initiatives;
  - Car clubs – identify opportunities in conjunction with travel plan measures; and
  - Installation and promotion of electric charging points.

Major Schemes

11.21 In June 2010 the DfT announced the suspension of the major scheme funding process. Following the CSR announcement in October 2010, the DfT provided guidance to local authorities about the prioritisation and progress of major schemes which had been submitted for Programme Entry in the Spending Review period prior to June 2010[44]. The RFA process which previously prioritised major schemes by region has also been abolished.

11.22 Guidance regarding new major schemes (and unsubmitted major schemes, previously in the RFA) is awaited from the DfT, the following is known at this stage:

- at present the DfT cannot accept any new schemes for Programme Entry;
- there will be a new major schemes funding framework from 2014/15, which will be in line with the move to greater localism;
- in the meantime, given the uncertainty of longer term funding, any further development costs incurred are entirely at the scheme promoter's risk; and
- it is likely that the local contribution will need to be higher than under the previous (2007) guidance (previously 10%).

11.23 Based on the available information it is assumed that the earliest that major scheme funding would be available is from 2015/16 onwards. The LTP 'major scheme' funding will continue to be additional to the mainstream LTP funding and is designed for schemes with an estimated cost greater than £5 million. The Implementation Plan and funding profile assumes that the councils are successful in securing the major scheme funding.

Section 106 Developer Contributions

11.24 Section 106 agreements are a way of delivering or addressing matters that are necessary to make a development acceptable in planning terms. They are increasingly used to support the provision of services and infrastructure, such as highways, recreational facilities, education, health and affordable housing.

[44] Investment in Local Major Transport Schemes (October 2010)
http://www.dft.gov.uk/pgr/regional/ltp/major/transportschemes/pdf/transportschemes.pdf

11.25 Planning obligations are a legally binding commitment made under Section 106 of the Town and Country Planning Act 1990 in conjunction with the granting of planning permission. They require developers to secure provision of, or improvement to, existing transport infrastructure to meet the needs of new development and/or bus routes to serve the development to ensure that it is accessible

11.26 They should not be used solely to resolve existing deficiencies in infrastructure provision; or to secure contributions to the achievement of wider planning objectives that are not necessary to allow consent to be given for a particular development. Areas where obligations are most viable may not be where the transport investment is most needed.

South East Dorset Transport Contributions Scheme

11.27 The South East Dorset Transport Contributions Scheme (SEDTCS)[45] has been approved by the five local planning authorities: Bournemouth, Poole, Christchurch, East Dorset and Dorset[46] between April and November 2009. The Contributions Scheme guidance will apply to the whole area defined in LTP2 as South East Dorset, with the exception of the part in the administrative area of Purbeck District Council where interim guidance has been operational since January 2007[47] and is reviewed annually.

11.28 The SEDTCS provides guidance on the financial contributions that will be sought from developers towards implementing the transport strategies set out in policy documents of South East Dorset. These contributions will be used towards alleviating the additional pressures of new development on the South East Dorset transport network. It covers the period until 31st March 2027, and will remain in place until such time as a replacement scheme is adopted. For East Dorset, the scheme will operate from 1st January 2010 for 18 years, or until such time a replacement scheme is adopted. The scheme differs from the Community Infrastructure Levy (CIL) but is consistent with recent legislation.

11.29 The SEDTCS is based on a standard tariff related to the additional transport movement caused by development. The tariff for 2009/10 is £713.20 per additional vehicle trip. All charges are calculated using the relevant trip rates from TRICS, the national database for development trip rates, and will include an allowance for public transport and cycling trips. For example, eight daily additional trips are forecast for a 4+ bed dwelling, costing the developer £5,706 for that dwelling (£713.20 x 8 trips). For appropriate land uses, including retail, a reduced trip rate will be applied to exclude pass-by trips.

11.30 Contributions provided as part of development proposals will be used to mitigate the cumulative impact of all new development, by the provision of a package of sustainable transport initiatives which benefit the SE Dorset area. In all cases, some measures may be implemented within a different local authority from that in which the development is located, or across local authority boundaries.

11.31 Expenditure of contributions will comply with the current LTP, and will be decided by the South East Dorset Transport Contributions Executive (TCE). The TCE comprises one voting Member from each of the constituent authorities, plus scrutineers and advisors, who may vote on non-financial matters only. The use of monies will be programmed according to priorities set out in the LTP and LDFs / or in agreement with the relevant Local Planning Authority (LPA).

11.32 It should be noted that promoters of large developments (or where a site has unusual constraints) are encouraged to make pre-application approaches to the relevant council to clarify if there are

[45] South East Dorset Transport Contributions Scheme Supplementary Planning Guidance (November 2009).

[46] Note DCC is the is the authority for applications in relation to: Mining, quarrying and the working of minerals and associated facilities; waste disposal or the treating, storing, processing or disposing of refuse or waste materials; and developments by the County Council (for example roads, schools, etc). Other types of planning application are made to the relevant district council.

[47] Purbeck Transportation Strategy Developer Contributions Guidance: - January 2007 Dorset County Council

any additional S106, S278 or S38 requirements on top of the tariffs, or whether a s106 agreement would be more appropriate given the nature of the proposal.

11.33 The benefits of the scheme are that it allows development to occur along with mitigation infrastructure, particularly in the case of small infill developments. The risks are that it requires the local authorities to work together, and it receives significant objections/challenges from small/medium developers.

11.34 It is understood that for the next few years that any contributions will be spent on repaying the RIF loan for the Twin Sails Bridge, which totals £9.96 million. It is understood that repayments commence in 2013/14. The scheme has also helped to secure match funding from Sustrans for a cycle scheme in Bournemouth.

Purbeck Interim Contributions Scheme

11.35 The Purbeck scheme operates in a similar way to the SEDTCS, although it should be noted there are differences. Following approval by DCC and Purbeck District Council, the scheme commenced on the 1st January 2007 and will remain in place until a Planning Obligation supplementary planning document is adopted by Purbeck District Council. The scheme originally included a residential extension charge element which was removed by Purbeck District Council in June 2009. The tariff for 2009/10 is £993 per additional trip per day (two-way) for residential development. For non-residential development the tariff is £662 per additional trip per day (two-way).

Local Authority 'Prudential' Borrowing

11.36 Some Councils use Prudential Borrowing to invest in self-finance schemes, for example refurbishing a car park, with the funds borrowed being repaid through parking charges revenue.

11.37 The Prudential Capital Finance system was introduced in 2004 and it allows local authorities to self-finance borrowing for capital expenditure without Government consent, providing their plans are affordable, prudent and in line with the Chartered Institute of Public Finance and Accountancy Prudential Code. Local authority borrowing contributes to the total level of public sector debt which is monitored against the Government's Sustainable Investment Rule (SIR).

The Private Finance Initiative

11.38 The Private Finance Initiative (PFI) is a form of public-private partnership (PPP) by which local authorities can fund new or improved capital assets (mostly, but not always, buildings). Unlike traditional procurement, the public sector does not buy the assets, but rather pays for their use together with associated services (for example, security, cleaning, etc). Capital investment in the asset is made by the private sector, which recovers its costs over the length of the contract - often 25 years or more – this could be in the form of tolls on new highway links. The PFI approach allows investment to be brought forward by using private capital, through a committed stream of 'revenue' payments by local (and central) government.

11.39 In 2010 the DfT re-assessed local transport PFI schemes in development or procurement, and decided to not approve the 3rd round of street lighting PFI schemes. Due to the reduced Government support for PDFI, it has not been considered as a core source of funding.

Additional Potential Revenue Raising Mechanisms

Tolls and Road User Charging

11.40 The Transport Act 2000 allows local and municipal authorities to charge road users on a limited scale. In addition, a local traffic authority can impose a levy or licence charge on road users, or for keeping vehicles on roads. This funding method involves charging road users for the use of road space. This may be through passing a 'cordon' (as currently in operation in London), or based on congestion levels in operation when using the road.

11.41 One of the key political issues associated with a local charging scheme is that the transport improvements may need to be in place in advance of the charging regime. However, it is difficult for a local authority to develop and procure transport projects in advance of the introduction of a charging scheme, when the funding for those projects is dependent on the successful implementation of the charging scheme.

11.42 Tolls and road user charging have not been included as future funding sources, since there is no strong local support for implementation (see Chapter 7), which would be a primary requirement for taking them forwards.

Workplace Parking Charges

11.43 The Transport Act 2000 also made provision for local authorities to implement workplace parking levies. The availability of convenient, free or relatively cheap parking provided by employers encourages car use, particularly for commuting, even when alternative modes are available. By imposing a charge on the level of parking attached to a development, the objective is to influence the level of car use by employees at the site. As with road user charging, the revenues received from workplace charges must be used to improve transport in the charged area.

11.44 WPL has not been included as future funding sources, since there is no strong local support for its implementation (see Chapter 7).

Tax Incremental Financing

11.45 Tax Incremental Financing (TIF) is a finance method which is designed to use future increases in taxes to finance current improvements (which theoretically will create the conditions for those future increases). When a transport project is carried out, there is often an increase in the land value as it becomes more attractive for development and investment.

11.46 The Local Growth White Paper[48] states that the coalition Government will introduce new borrowing powers to enable authorities to carry out TIF (which is commonly used already in the US). TIF will enable them to borrow against future additional uplift within their business rates base. Councils can use that borrowing to fund key infrastructure and other capital projects, which will further support locally driven economic development and growth. They will need to manage the costs and risk of this borrowing alongside wider borrowing under the prudential code. However, a key risk with TIF is that borrowing against projected revenues may be overly optimistic and may lead to financial problems if growth does not match projections.

Business Improvement Districts (BIDs)

11.47 BIDs are a partnership between a local authority and the local business community to develop and take forward projects and services that benefit the trading environment and the public realm. They are designed to support the long-term sustainability of town and city centres. The BID is funded by non-domestic rate payers through a supplement to the rates bill.

Summary

11.48 There are clearly several significant developments that will shape the way transport schemes are funded in the future. However, it is likely that the bulk of investment will continue to be funded in a similar way as is done today, with some modifications. The following sections consider funding of the following types of scheme:

- Highway;
- Intelligent Transport Systems;

[48] Local growth: realising every place's potential (October 2010) http://www.bis.gov.uk/assets/biscore/regional/docs/l/cm7961-local-growth-white-paper.pdf

- Heavy rail;
- Light rail;
- Bus; and
- Smarter choices.

Funding Road and Road Traffic Schemes

Major Schemes

11.49 Most road schemes proposed by the study for the local strategic road network will need to be included within the major schemes process as they cost over £5 million. Based on the available information it is assumed that the earliest that major scheme funding would be available is from 2015/16 onwards, which is reflected in the Implementation Programme. The following highway schemes are expected to form part of major scheme bids, supported by a local contribution from the SEDTCS:

- Poole Bridge Regeneration Initiative (PBRI) system of roads and gyratories linking to the Twin Sails Bridge;
- North-south road link – Canford Bottom to Magna Road;
- East-west road link – Chapel Gate to Magna Road;
- Blackwater junction improvement;
- Parley Lane improvements – Blackwater to Chapel Gate; and
- A338 3 lane widening – Blackwater to Cooper Dean.

South East Dorset Transport Contributions Scheme

11.50 Income from the SEDTCS will be used to pay towards the local contributions of future major schemes and pay towards scheme development costs.

Integrated Transport Block

11.51 Improvements to key junctions can be funded from the Integrated Transport Block if under £5 million.

Highways Agency Programme Investment

11.52 The Highways Agency (HA) has a substantial annual budget for highway maintenance and renewal, although this has reduced as part of the CSR. Few new roads are planned, although the programme includes road widening and junction capacity improvements. The biggest Highways Agency road projects fall into one of the following categories:

- Targeted Programme of Improvements – major road projects costing more than £5 million;
- Country-Wide Projects – national initiatives being carried out by the Agency;
- Design, Build, Finance & Operate (DBFO) – a PFI for parts of the motorway and trunk road network. The Highways Agency pay DBFO companies an amount, which is based on the number and type of vehicles using the road, with adjustments made for lane closure and safety performance; and
- Route Management Strategies (RMS) – a strategic approach to the maintenance, operation and improvement of the network, involving regional stakeholders and the public in the decision-making process (e.g. the A31 RMS).

11.53 Three highways schemes are located on the trunk road network:

- Canford Bottom hamburger (decision awaited);
- A31 westbound widening at Ringwood;
- A31 dual carriageway and grade separated junctions – Ameysford to Merley.

11.54 The schemes at Ringwood and Ameysford to Merley cost over £5 million.

11.55 The Secretary of State's announcement of 26th October on major transport projects and the DfT's supporting document entitled 'Investment in Highways Transport Schemes' affects the delivery of Highways Agency major schemes.

Developer Contributions

11.56 There are many examples of developer contributions being used to fund access roads to developments. However these investments are almost always relatively small-scale and directed at providing access to the particular development in question. Recently the trend has been to look for schemes integrated with public transport improvements.

11.57 The SEDTCS could be used to wholly or partially fund new road proposals in South East Dorset.

Funding of Intelligent Transport Systems

Local Sustainable Transport Fund

11.58 The three councils are planning to submit an LSTF bid, which will include a new Joint Traffic Control Centre for all three authorities.

Integrated Transport Block

11.59 Upgrades to traffic signals and the UTC system are required which are anticipated to be funded from the Integrated Transport Block. An upgrade to the UTC system is a precursor to the BSC to improve the operation of signals along the corridor in general and enable bus priority at traffic signals.

European Funding

11.60 EU research funding is also possible for innovative schemes, for example, the VIVALDI Programme.

Funding Heavy Rail Schemes

Rail Refranchising

11.61 The proposed increase in rail frequency would be delivered as part of the next rail refranchising – the new franchise will start in 2017.

Purbeck Interim Contributions Scheme

11.62 The Purbeck scheme is covered separately as it is still operational (since 2007) and all of its income will be spent on Dorset's ~£3m contribution towards the signalling which will allow regular rail services between Swanage and the main line rail network at Wareham; this will be undertaken by Network Rail as part of the Poole to Wool area resignalling (scheduled for completion in 2013).

Integrated Transport Block

11.63 LTP funding can be used for Park and Rail schemes, which are effectively expansions to the existing car parks at Holton Heath, Hinton Admiral and Wareham stations.

Local Authority Borrowing

11.64 Prudential borrowing by local authorities can be used to fund heavy rail schemes – the Mayor of London has done this to pay for the extension of the East London Line. Any borrowing will, of course, have to be underpinned by future revenue stream.

Funding Light Rail Schemes (e.g. DARTS)

Major Scheme Funding

11.65 DARTS is expected to form part of a longer-term major scheme.

South East Dorset Transport Contributions Scheme

11.66 Income from the SEDTCS will be used to pay towards the local contributions of future major schemes and pay towards scheme development costs.

Local Authority Borrowing

11.67 In line with heavy rail schemes outlined above, prudential borrowing can be used by local authorities to fund light rail schemes, e.g. the extensions of the Docklands Light Railways.

Funding Bus Schemes

Quality Bus Partnerships

11.68 The main mechanism for implementing bus service enhancements has been the Quality Bus Partnership (QBP) (or similar approaches such as the Bus Showcase) where investment by the local authority in infrastructure is combined with investment by a bus operator in vehicles or other enhancements (e.g. frequency enhancements or new routes).

Local Sustainable Transport Fund

11.69 The joint LSTF bid is expected to include the A35 BSC.

Major Scheme

11.70 The following bus schemes are expected to form part of future major scheme bids:

- A35 BSC (depending on the outcome of the joint LSTF bid);
- North Bournemouth BSC;
- Longer term BSC – e.g. Wallisdown, North-South link to Poole, Castle Lane; and
- Park and Ride at Mannings Heath, Creekmoor and New Road.

South East Dorset Transport Contributions Scheme

11.71 Income from the SEDTCS will be used to pay towards the local contributions of future major schemes and pay towards scheme development costs.

Section 106 Developer Contributions

11.72 The Riverside Avenue Park and Ride site will be funded by developer contributions with a section 106 agreement already in place. Section 106 agreements will be used where more appropriate than the SEDTCS (e.g. particularly large developments).

EU Funding

11.73 EU funding is available for the implementation of new technology in public transport, in particular the use of environmentally-friendly fuels and new vehicle technology. However, these are usually only for 'demonstration' pilot projects, rather than regular, 'mainstream' funding.

Funding of Smarter Choices

Local Sustainable Transport Fund

11.74 The joint A35 LSTF bid will include a package of smarter choices, walking and cycling measures along the A35.

Integrated Transport Block

11.75 The main source of funds for enhancements to the cycling and pedestrian environment is the Integrated Transport Block. The Integrated Transport Block is for capital measures only, but could be used to fund capital improvements that would support WTP (e.g. cycle routes serving major employers).

Developer Contributions

11.76 Other potential sources of funding include urban regeneration programmes, contributions from developers, and as part of transport improvement packages. The needs of pedestrians would need to be taken into account as part of the developer's design process prior to submission of planning application process.

Businesses (e.g. WTP)

11.77 The cost of developing travel plans can be shared with other organisations and businesses. Local bus companies may be willing to provide support and incentives in the form of discounted travel.

11.78 Employers are also able to pay their employees up to 20p per mile tax free for using their own cycles on business travel, and employees are able to claim tax relief on 12p per business mile if their employer pays less than 12p.

Programme and Funding of the SEDMMTS Strategy

11.79 In this section, we bring together the cost estimates for the individual elements of the strategy outlined with the preceding sections of the report and present an indicative profile of implementation and expenditure over the period to 2026. Longer term proposals are included beyond 2026 reflecting the lower availability of funding in the short term. The timing of schemes takes into account a number of factors including the time and resources necessary to develop, design and implement the scheme; the likely duration of the planning and approval process, including statutory consultation procedures and the funding process that would need to be followed.

Implementation Plan

11.80 Schemes were initially allocation to time period based on:

- ease of implementation;
- making better use of existing infrastructure in short/medium term;
- whether remedies required now or in future;
- whether linked with specific future planning developments;

- time needed for more detailed design, further assessment, preparation of bids for major scheme funding, etc; and
- likely availability of funding.

11.81 The timing of schemes was then refined to reflect the likelihood of funding in the short to medium term, with some schemes moving back.

Short term 2011-2014

11.82 As a result of the relative scarcity of funding in the immediate short term, initial efforts would concentrate on low cost/ high return schemes in the first three years, which are identified in more detail in the LTP3 Implementation Plan. Resources for the development of medium term measures would also be required in this period:

- Smarter choices including personalised travel plans, expanded travel plans, passenger information, car clubs, and car sharing;
- Low cost improvements to public transport (especially within Bus Showcase Corridors) and community services;
- ITS improvements – extend UTC/ Joint Traffic Control Centre/ VMS;
- Junction improvements;
- Cycling & walking schemes;
- Highways improvement – Canford Bottom [awaiting decision];
- Freight Quality Partnership;
- Development/implementation of Travel smartcard (Oyster card) type scheme; and
- Development/progress of major scheme bids.

Medium term 2014-2020

11.83 Assuming transport funding returns to pre-recession levels, the medium term would see the implementation of a number of strategic improvements to public transport and highway networks as below. The development of longer term schemes would also be required in this period:

- Formation of an Integrated Transport Authority;
- Phase 1 Bus Showcase Corridors – N Bournemouth & A35 Christchurch to Poole
- Express bus services to outlying areas;
- Parley Lane improvements – Blackwater to Chapel Gate;
- Airport Hub/Interchange;
- Poole Regeneration gyratories/ links;
- A31 westbound widening at Ringwood;
- Improvement of key junctions, e.g. Bear Cross, Ensbury Park, Queen Anne Drive, Shah of Persia, Bakers Arms;
- Swanage Rail – running through services to Wareham;
- Increased rail frequency – Brockenhurst to Wareham;
- Cycling and Walking – completion of strategic network;
- Build on smarter choices success of early years;

- Development of future Major Scheme bids; and
- Park and Rail – Wareham/ Hinton Admiral/ Holton Heath.

Long term 2020-2026

11.84 To meet the projected growth in traffic as a result of population growth and increased economic activity, over the longer term significant additional infrastructure will be required:

- A31 Trunk Road dualling – Ameysford to Merley;
- Phase 2 Bus Showcase Corridors –Wallisdown, North South link to Poole, Castle Lane;
- Town centre parking charges/ reduction in long stay capacity in tandem with Park and Ride increase; and
- Development of DART (Rapid Transit) system – operation of train/ tram vehicles across the conurbation, utilising the existing heavy rail network with on street running section connecting to Bournemouth centre.

2026 and beyond

11.85 Due to costs and deliverability issues the following schemes are recommended for post 2026 delivery:

- Park and ride sites – Mannings Heath/ Northbourne/ Riverside/Creekmoor;
- North South road link (single c/way) - Canford Bottom to Magna Road;
- East West road link - Chapel Gate to Magna Road;
- A338 3 lane widening – Blackwater to Cooper Dean; and
- DARTS implementation.

11.86 Figure 11.5 presents an indicative timetable for the implementation of schemes through to 2026.

Strategy Costs

11.87 Figure 11.3 shows the cost profile for the components of the SEDMMTS strategy, totalling £738 million (including the three HA schemes). In the short term (to 2014/15), this represents an annual average cost of £7.5 million to the local authorities, compared with the Integrated Transport Block allocation over the same period of around £3.5 million per year[49].

11.88 As it currently stands there are some significant variations between peaks and troughs in the profile and further work will be required to adjust the profile to smooth out the annual expenditure.

11.89 Highways Agency costs comprise:

- Merley to Ameysford widening (75% of cost – remainder Local Authority funded);
- Canford Bottom (full cost);
- Ringwood Widening (full cost);

11.90 Local Authority costs consist of:

- Merley to Ameysford widening (25% of scheme cost);
- Swanage Rail Reconnection (to be funded by the Purbeck Interim Contributions scheme);

[49] Assuming that DCC continues to spend 30% of its Integrated Transport Block allocation on South East Dorset.

- Remainder of the transport strategy.

11.91 Figure 11.4 shows the revenue commitment per year, which includes ongoing operating costs and the revenue costs for smarter choices.

Figure 11.3 – SEDMMTS Cost Profile

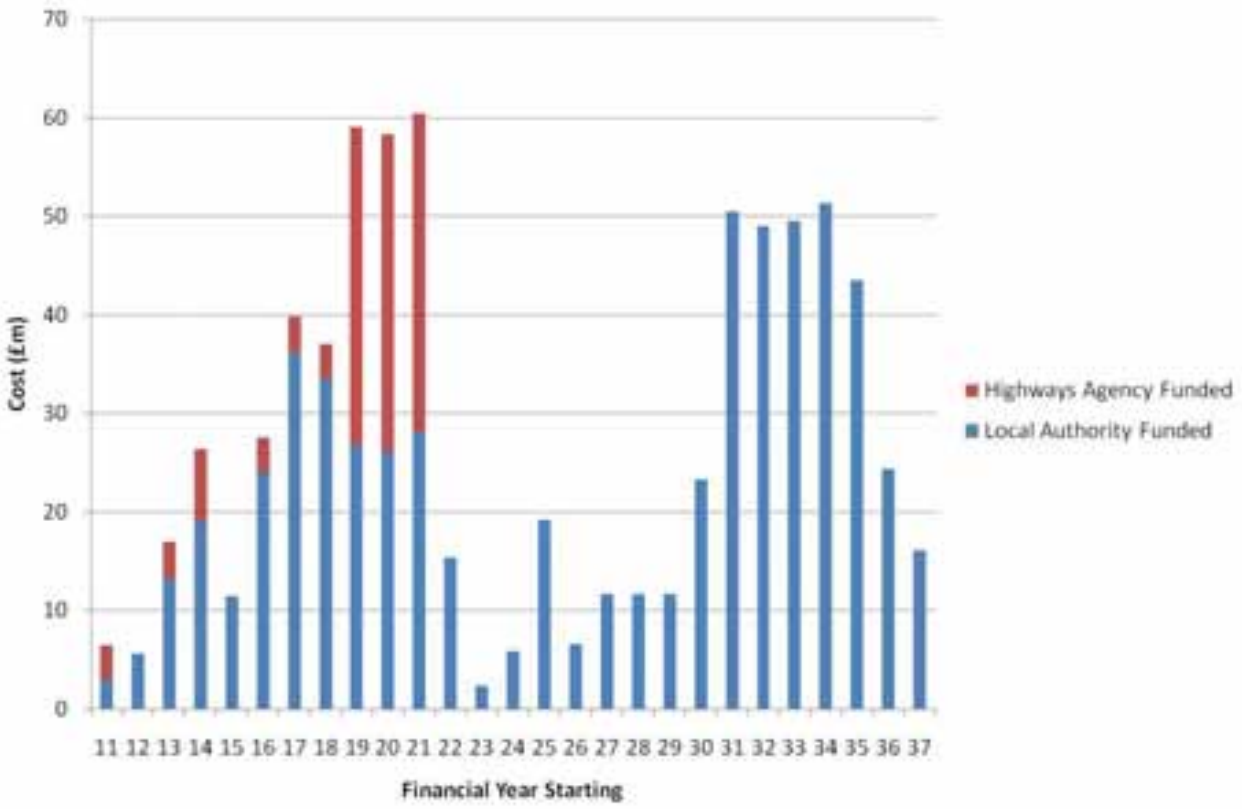
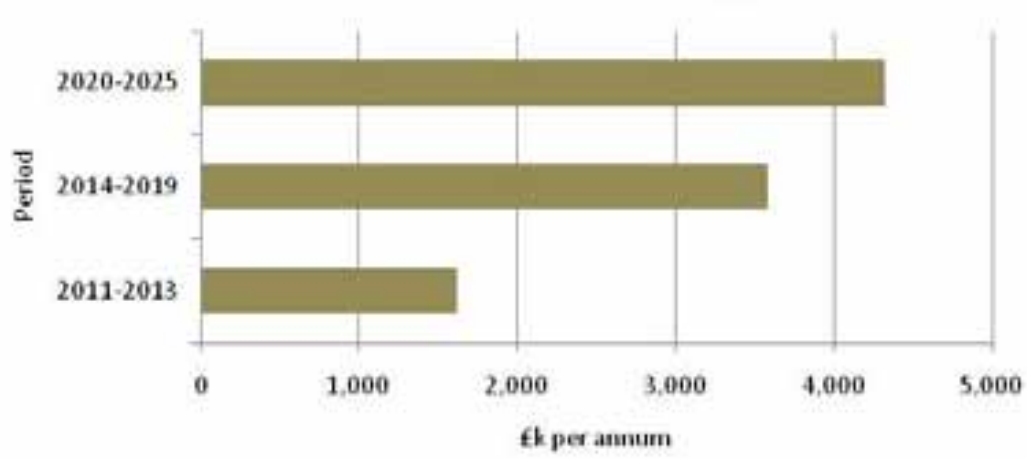


Figure 11.4 – Indicative Revenue Commitment per Annum



What Happens Next

11.92 The recommendations from the study outlined in this report will be presented to the partner group comprising officers from the following organisations:

- Department for Transport (DfT)/Government Office for the South West (GOSW);
- South West Regional Development Agency (SWRDA);

- South West Councils (SWC);
- Highways Agency (HA);
- Bournemouth Borough Council (BBC);
- Dorset County Council (DCC); and
- Borough of Poole (BoP).

11.93 Having reviewed the outcomes from the study, the officers will develop recommendations on which schemes and measures should be taken forward by their organisations, identifying a potential timetable for implementation.

11.94 The Secretary of State for Transport and elected members of the local authorities will then consider which schemes and measures should be taken forward. Once decisions have been made, further work will be undertaken on the schemes and measures to enable them to be entered into the appropriate programmes of the Department for Transport, the Highways Agency and the local authorities. The schemes and measures will then be subject to the normal statutory planning processes.

11.95 The study has been progressed in an open and consultative manner and the possible options have been discussed publicly. Many of the proposals are at a very early stage in the planning process and, if the recommendations are accepted, considerable further work will be required to prepare and consult on detailed designs for the schemes, including specific route alignments.

Figure 11.5 – SEDMMTS Implementation Programme

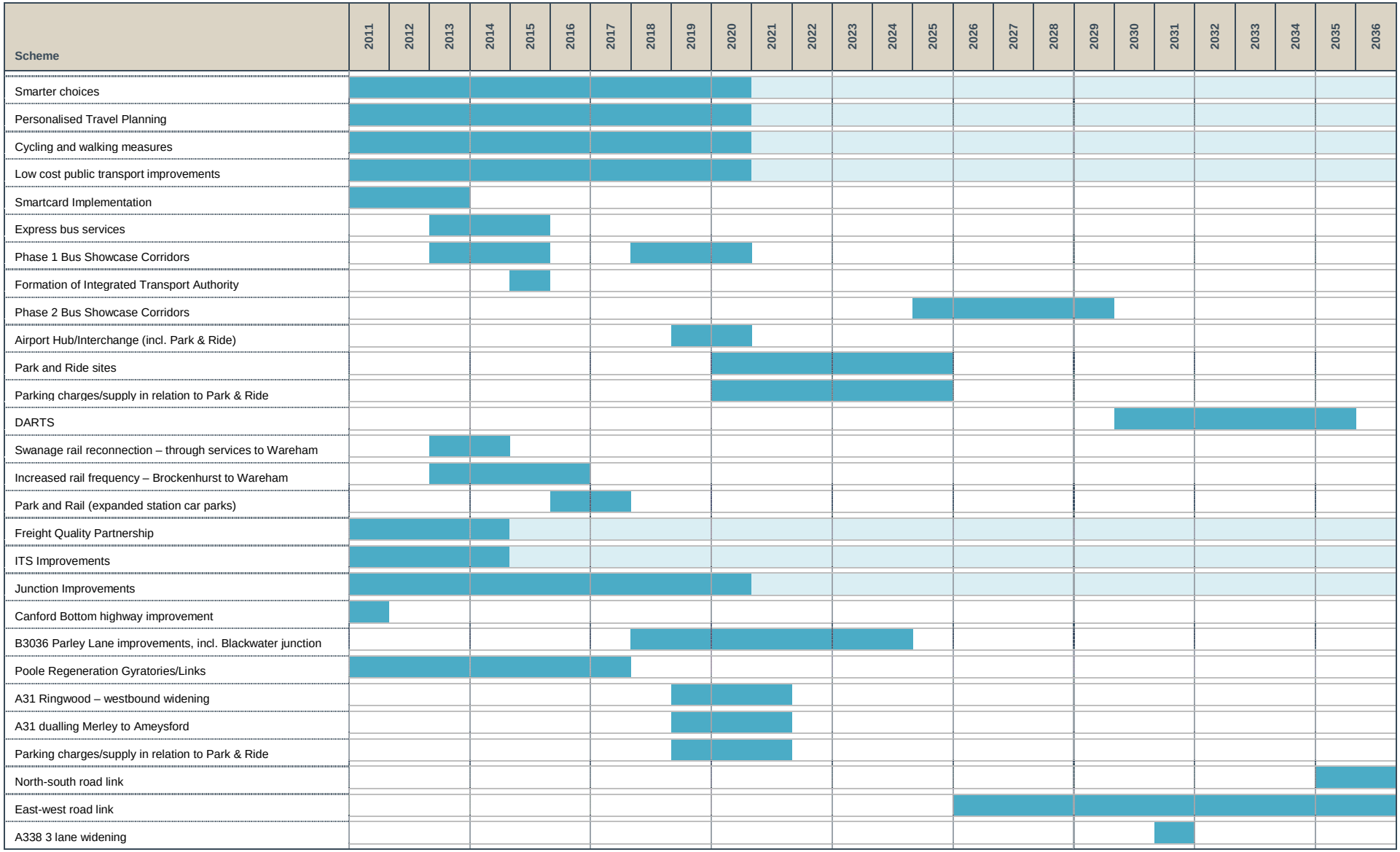
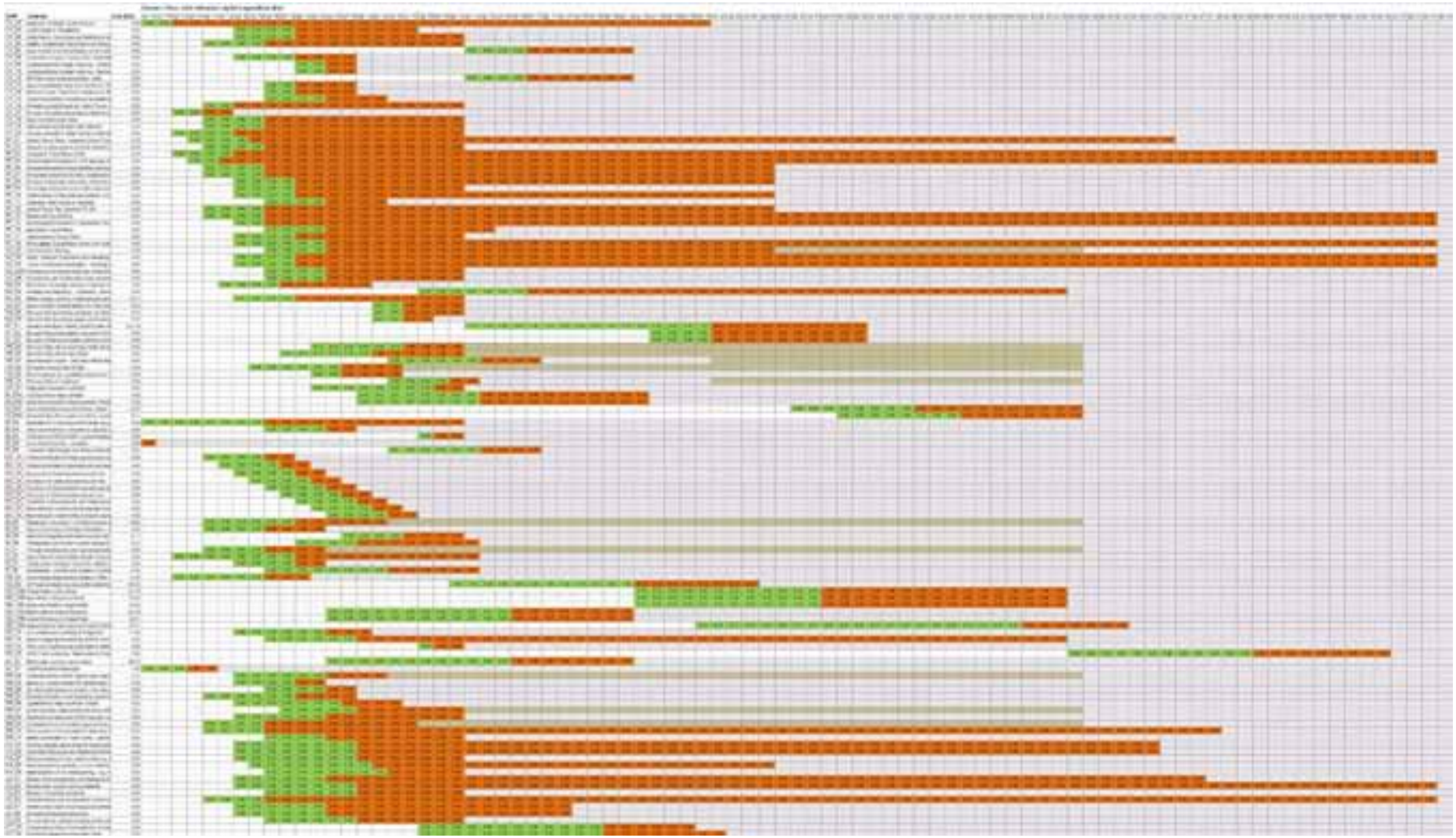


Figure 11.6 – SEDMMTS Implementation Programme to 2026 (Larger Version in Appendix G)



South East Dorset Multi-Modal Transport Study

Final Report – Appendices

April 2012

Notice

Document History

JOB NUMBER: 5062559			DOCUMENT REF: 5062559 SEDMMTS Final Report - Appendices for v1.21.docx			
1	Final Version	Various	TP	RT	PR	April 2012
Revision	Purpose Description	Originated	Checked	Reviewed	Authorised	Date

Plan Design Enable

Contents

Appendices

Page

Appendix A – Glossary of Terms

Table A.1 – Glossary of Terms

Abbreviation	Description
ANPR	Automatic Number Plate Recognition
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
ATC	Automatic Traffic Count
BBC	Bournemouth Borough Council
BCR	Benefit Cost Ratio
BID	Business Improvement District
BKR	The HA Benefit Cost Ratio
BoP	Borough of Poole
bph	buses per hour
BSC	Bus Showcase Corridor
CCTV	Closed Circuit Television
CO2	Carbon Dioxide
COBA	Cost Benefit Analysis
CRP	Community Rail Partnership
DARTS	Dorset Area Rapid Transit System
DaSTS	Delivering a Sustainable Transport System
DCC	Dorset County Council
DfES	Department for Education and Skills
DfT	Department for Transport
DM	Do Minimum
EDDC	East Dorset District Council
FQP	Freight Quality Partnership
FTE	Full Time Equivalent
GOSW	Government Office for the South West
HA	Highways Agency
HBEB	Home Based Employer's Business
HBO	Home Based Other
HBW	Home Based Work
HGV	Heavy Goods Vehicle
HOV	High Occupancy Vehicle

Abbreviation	Description
JtW	Journey to Work
KSI	Killed and Seriously Injured
LA21	Local Agenda 21
LATS	London Area Travel Survey
LEA	Local Education Authority
LGV	Light Goods Vehicle
LLSOA	Lower Level Super Output Area
LPA	Local Planning Authority
LTDS	London Travel Demand Survey
LTP	Local Transport Plan
LTP3	Third Local Transport Plan (2011-2026)
LU	Land Use
MAA	Multi-Area Agreement
MCC	Manual Classified Count
MSBC	Major Scheme Business Case
NATA	New Approach To Appraisal
NHBEB	Non-Home Based Employer's Business
NHBO	Non-Home Based Other
NOx	Nitrogen Oxides
NPV	Net Present Value
NRTS	National Rail Travel Survey
NTEM	National Trip End Model
OD	Origin Destination
P&I	Problems and Issues
P&R	Park and Ride
P/A	Production/Attraction
PCT	Primary Care Trust
PCU	Passenger Car Unit
PFI	Public Finance Initiative
PM10	Particulate Matter
PMG	Project Management Group
PNR	Private Non-Residential (Parking)
PT	Public Transport

Abbreviation	Description
PTP	Personalised Travel Planning
PVB	Present Value of Benefits
PVC	Present Value of Costs
QBC	Quality Bus Contract
QBP	Quality Bus Partnership
RFA	Regional Funding Allocation
RPA	Regional Planning Assessment
RSI	Roadside Interview
RSG	Revenue Support Grant
RSS	Regional Spatial Strategy
RTI	Real Time Information
RUS	Route Utilisation Strategy
SAG	Strategy Advisory Group
SCE	Supported Capital Expenditure
SED	South East Dorset
SEDDM	South East Dorset Demand Model
SEDMMTS	South East Dorset Multi-Modal Transport Study
SMOTS	Sustainable Modes of Travel Strategy
SoS	Secretary of State
SSSI	Site of Special Scientific Interest
STDT	Sustainable Travel Demonstration Town
STHC	School Travel Health Check
STP	School Travel Plan
STS	Sustainable Travel Sutton
SWC	South West Councils
SWRDA	South West Regional Development Agency
TEE	Transport Economic Efficiency
TIF	Tax Incremental Financing
tph	trains per hour
TEE	Transport Economic Efficiency
TTSI	Travel to School Initiative
TUBA	Transport User Benefits Appraisal
V/C	Volume/Capacity

Abbreviation	Description
VMS	Variable Message Sign
WRG	Wider Reference Group
WTP	Workplace Travel Plan

Appendix B – Long List of Schemes

Table B.1 – Long List Measures – Cycling, Walking and Smarter Choices

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implemen table	
1	Area-wide	Cycling Network Micro-Corridors – particularly strong potential for Bournemouth built up area	-	✓	✓	-	✓	x	✓	✓
2	Area-wide	Identify strategic cycle network and highlight gaps	-	✓	✓	✓	✓	x	✓	✓
2A		Healthy Sustainable Travel Network linking the main commuting destinations within Poole, Bournemouth, Christchurch, Wimborne, Bournemouth Airport and Ferndown (part of the Green Infrastructure Strategy). Improve permeability of highways, parks and green spaces to cycling.								
2B		Improve links from the strategic cycle routes to recreational routes (part of the Green Infrastructure Strategy), including links to green spaces and corridors (part of the Green Infrastructure Strategy).								
3	Area-wide	Cycle links in rural areas connecting towns/villages	-	✓	✓	✓	✓	x	✓	✓
4	Area-wide	Prime Cycle Ne–work - with priority at signals	-	✓	✓	✓	✓	x	✓	✓
5	Christchurch / Bournemouth	Cycle/ pedestrian bridge/ walkway, Tuckton Bridge	-	✓	✓	-	✓	x	✓	✓
6	Christchurch / Bournemouth	Pigshoot Bridge, Throop	-	✓	✓	-	✓	x	✓	✓
7	Dorset	Cycle route from Holton Heath to Poole with bridge over Lytchett Bay	-	✓	✓	-	x	xx	✓	✓
8	Christchurch / Bournemouth	Off road cycle route along Stour valley	-	✓	✓	-	-	x	✓	✓
9	Bournemouth/ Poole	Park and cycle - Sea front, Westbourne, Poole	-	✓	✓	-	✓	x	✓	✓
10	Area-wide	Cycle hire scheme	-	✓	✓	✓	✓	x	✓	✓
11	Area-wide	Cycle routes to rail stations	-	✓	✓	✓	✓	x	✓	✓
12	Area-wide	Improved area cycle maps	-	✓	✓	✓	✓	✓	✓	✓
12A	Area-wide	Provide information about taking bikes on trains								
13	Area-wide	School Travel Plans	-	✓	✓	-	✓	x	✓	✓
13A	Area-wide	Influencing parental choice of school (i.e. to encourage parents to choose schools nearer to where they live) – pre-choice marketing.								
14	Area-wide	Workplace Travel Plans (WTP)	-	✓	✓	-	-	x	✓	✓
14A	Area-wide	Monitoring/checking/enforcement of WTP secured through the planning process								
14B	Area-wide	Promote providing teleconferencing facilities								
14C	Area-wide	Encouraging employers to allow their employees to work from home all or part of the time (teleworking)								
14D	Area-wide	Promote providing videoconferencing facilities								

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implemen table	
14E	Area-wide	Encourage employers to pay for public transport passes for their employees.								
14F	Area-wide	Introduce travel plan networks, where several employers in the same area come together (e.g. Sutton examples).								
15	Christchurch	Airport Travel Plan	-	✓	✓	-	-	x	✓	✓
16	Area-wide	Residential Travel Plans	-	✓	✓	-	-	x	✓	✓
16A	Area-wide	Monitoring/checking/enforcement of Residential Travel Plans secured through the planning process								
17	Area-wide	Personalised Travel Plans	-	✓	✓	-	-	x	✓	✓
18	Area-wide	Car Clubs/Car Sharing	-	✓	-	✓	-	x	✓	✓
19	Area-wide	Railway Station Travel Plans								
20	Area-wide	Public Transport Information and Marketing								
21	Area-wide	Travel Awareness Campaigns - including promoting the health benefits of walking and cycling.								
22	Area-wide	Promote the use of alternative fuel vehicles including use of alternative fuel vehicles at the councils.								
23	Area-wide	Visitor/Leisure Travel Plans								
24	Area-wide	Hotel bookings – include PT passes/information for visitors, as an incentive to travel to the area by sustainable modes								
25	Area-wide	Language schools – provide students with bus passes to speed up boarding times.								
26	Poole	Improve pedestrian links around the Port of Poole.								
27	Poole	Cycle links to Upton Country Park, Holes Bay and Creekmoor.								

Table B.2 – Long List Measures – Public Transport

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implement able	
1	Dorset	Reconnect Swanage railway to mainline with potential for Park & Ride	✓✓	✓	✓	✓	✓	✓	✓	✓
2	Area-wide	Increase rail frequency – Wareham – Hinton Admiral (4tph)	✓✓	✓	✓	✓	✓	-	x	✓
3	Hampshire	Brockenhurst to Ringwood rail connection	✓	✓	-	✓	x	x	x	x
4	Bournemouth / Christchurch	Rail/transit – Bournemouth Airport to Christchurch (along old railway line alignment)	✓✓	✓	-	✓	x	xx	xx	x
5	Bournemouth	Re-open Boscombe station (as part of DARTS – see scheme 12)	✓	-	-	✓	-	x	x	✓
6	Bournemouth	Re-open Westbourne station (old Bournemouth West station) (as part of DARTS – see scheme 12)	✓	-	-	✓	-	xx	xx	✓

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implement able	
7	Christchurch	Park and–Rail - behind Sainsbury's on A35. Rail Station, adjacent to Christchurch urban extension	✓	✓	✓	✓	-	x	-	✓
7A	Christchurch	Improve Hinton Admiral Station (instead of new Park and Rail at Christchurch)								
8	Bournemouth	Rail station at Meyrick Park – to serve Bournemouth town centre	✓	-	-	✓	-	x	x	x
9	Area-wide	Better access, parking, walking/cycling link at all stations	✓	✓	✓	-	✓	✓	✓	✓
10	Dorset	Park and Rail at existing rail station at Holton Heath	✓	✓	✓	-	-	x	✓	✓
11	Dorset	Park and Rail at existing station at Wareham with reconnected Swanage Line	✓	✓	✓	-	-	x	✓	✓
12	Area wide	Dorset Area Rapid Transit (DARTS) New Milton to Wareham - Running tram-trains on heavy rail network across conurbation, plus on street links to Bournemouth Town Centre	✓✓	✓✓	✓	✓	✓	x	x	✓
13	Area wide	Light rail - Ringwood - West Moors - Ferndown - Wimborne, etc	✓	✓	✓	✓	x	xx	xx	x
14	Poole/Christchurch	Transit - Merley to Poole, Bournemouth Airport and Town Centre (detailed in A31 Poole Corridor Study)	✓	✓	✓	✓	x	x	x	x
15	Bournemouth	Airport to Bournemouth Light Rapid Transit (LRT)	✓✓	✓	✓	✓	x	xx	xx	x
16	Bournemouth / Poole	Guided bus along Bourne Valley	✓	✓	-	✓	x	x	xx	x
17	Hampshire	Ringwood Park and Ride site – previous informal use of long stay car park by employees of large Bournemouth bank served by shuttle bus	✓	✓	-	-	-	✓	✓	✓
18	Bournemouth / Poole	Bear Cross/Bearwood – Park and Ride	✓	✓	-	-	x	✓	✓	✓
19	Bournemouth / Poole	Park and Ride sites at Mannings Heath/Turbary Park linked to both Poole & B'mouth	✓	✓	-	-	-	✓	✓	✓
20	Bournemouth / Poole	Park and Ride sites at New Road and Canford Magna	✓	✓	-	-	-	✓	✓	✓
21	Bournemouth / Christchurch	Bournemouth Ai–port - Park and Ride to Bournemouth and for airport access. Use of airport car parks for out of season P+R over flow – see scheme 40. Possibly PT only link through Malmesbury Estate	✓	✓	-	-	-	✓	✓	✓
22	Bournemouth	Riverside Park & Ride	✓	✓	-	-	-	✓	✓	✓
23	Bournemouth / Poole / Christchurch	Prime Transport Corridors aka Bus Showcase Corridors/ ITS corridors (RFA)	✓	✓	✓	✓	-	✓	✓	✓
23A	Bournemouth / Poole / Christchurch	High Occupancy Vehicle (HOV) lanes as part of Bus Showcase Corridors								
24	Bournemouth / Poole / Christchurch	Extended Prime Transport Corridors (to cover all PT corridors, e.g. A31) Feeder services	✓	✓	✓	✓	-	x	✓	✓
25	East Dorset	Express services to urban centres	✓	-	-	✓	-	✓	✓	✓
26	Area wide	Improved bus links to Ferndown Industrial estate from across the conurbation	✓	-	-	✓	-	✓	✓	✓

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implement able	
26A	Area wide	Improved bus links to industrial estates								
27	East Dorset	Express services – Wimborne Flyer - improved services between Wimborne and Bournemouth	✓	-	-	✓	-	✓	✓	✓
28	Area wide	Similar to express – core corridors and feeder services to hubs and P&R sites	✓	-	-	✓	-	✓	✓	✓
29	Bournemouth / Christchurch	Third lane on B3073/A338 – PT and HOV linked to scheme 40	✓	✓	✓	-	x	x	-	✓
30	East Dorset	Bus Only Link to airport through Heatherlands estate. Bus service loop from airport around Ferndown, W. Parley and Heatherlands down to airport and separate express service to Bournemouth town centre from airport	✓	✓	-	✓	-	✓	-	✓
31	Poole	Canford Bottom bus/cycle only link	✓	-	-	-	-	x	x	x
32	Bournemouth	Improve bus services on north-south routes	✓	-	-	✓	-	✓	✓	✓
33	Christchurch	Extend bus routes beyond Sainsbury's to Highcliffe and Eastern Christchurch	-	-	-	✓	-	✓	✓	✓
34	Area-wide	Extend inter-urban bus routes into South Hampshire	✓	-	-	✓	-	x	✓	✓
35	Poole	Civic Centre bus link	✓	-	✓	-	-	✓	✓✓	✓
36	Bournemouth	Direct non-stop service between Bournemouth centre & Bournemouth Hospital	-	-	-	✓	-	x	✓	✓
37	Area-wide	Increased bus services to beaches in Summer/at weekends	✓	✓	-	✓	-	x	✓	✓
38	East Dorset	Demand Responsive service in Wimborne, etc	-	-	-	✓	✓	x	✓	✓
39	Area-wide	Community transport. NHS Bournemouth & Poole funding community transport manager to develop conurbation wide scheme	-	-	-	✓	✓	✓	✓	✓
40	Bournemouth / Christchurch	Transport interchange/ hub at Bournemouth Airport. Better linkages to other centres, orbital route – Parley Cross to Cooper Dean with HOV and bus priority lane, Hurn Roundabout improvement, Parley Cross improvement, Chapel Gate roundabout improvement	✓	-	✓	✓	-	x	✓	✓
41	Christchurch	Interchange – too many buses in Christchurch – rationalise buses in High St/Bridge St	✓	✓	✓	-	-	✓	x	✓
42	Bournemouth	New bus station – old bus station site opposite Wetherspoons	✓	-	-	-	-	x	✓	x
43	Area-wide	Passenger information – different options already available (Traveline, text messaging, mobile phone technology)	✓	✓	-	-	-	✓	✓	✓
44	Area-wide	Improve accuracy of at stop information - include all routes & cancelled buses	✓	-	-	-	-	✓	✓	✓
45	Area-wide	Widespread use of use of public transport display screens in shopping centres, major offices, etc	✓	✓	-	-	-	✓	✓	✓
46	Area-wide	Through ticketing between operators	✓	-	-	-	-	x	✓	✓
47	Area-wide	Use of stored value tickets (Oyster type) to improve journey – imes - multi-operator and/or multi-modal	✓	✓	-	-	-	x	✓	✓

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implement able	
47A	Area-wide	Smartcards – number and location of points for passengers to load money onto their cards (e.g. not just the bus stations). Also initially providing the smartcards for free.								
48	Area-wide	Introduce cheap ticket for children to encourage bus use	-	-	✓	✓	-	x	✓	✓
49	Poole	Sandbanks Ferry - better co-ordination of bus services	-	-	-	-	-	✓	✓	✓
50	Area-wide	Coastal shipping - results of pre-feasibility study of Jurassic Coast service	✓	✓	-	✓	-	x	-	x
51	Area-wide	Swanage-Bournemouth – Boscombe – boat PT service Poole – Swanage high frequency water taxis Poole – Bournemouth high frequency water taxis Christchurch - extend existing services for local trips with longer operating period and improved frequency	✓	✓	-	✓	-	x	-	✓
52	Area-wide	Cheap public transport tickets for visitors of selected tourist attractions								
53	Area-wide	Provide bus services for people who start work early (supported services)								
54	Area-wide	Integrated Transport Authority								
55	Area-wide	Provide taxi tokens rather than free bus passes.								
56	Area-wide	Park & Stride/walk sites								
57	Area-wide	Improved integration between bus and rail – information at rail stations, signage at the station, bus/rail timings.								
58	Area-wide	Enforcement of bus lanes/HOV lanes and illegal parking.								
59	Area-wide	Secure parking for cyclists/powered two wheelers at Park and Ride sites.								
60	Area-wide	Shuttle buses to tourist locations from rail stations.								

Table B.3 – Long List Measures – Highways

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implement able	
1	Poole	A31 dual carriageway and grade separated junctions – Ameysford to Merley	✓✓	XX	X	-	XX	X	✓	✓
2	Poole	A31 to Poole Link Road (Options a, b, c, d, e, f, g)	✓✓	XX	X	-	XX	XX	-	✓
3	Hants	A31 westbound widening at Ringwood	✓✓	X	X	-	XX	X	✓	✓
4	Christchurch	Christchurch Bypass/Relief Road (Options a, b, –, d) - with possible connections across A338 to airport links	✓✓	XX	X	-	XX	XX	✓	X
5	Area-wide	Improve regional connectivity to/from north-west of area (Bristol/M5, Wales, Midlands, etc)	✓✓	X	X	-	X	X	-	✓
5A	Area-wide	Work with neighbouring authorities to determine north-south route (i.e. towards M4/M5).								
6	Bournemouth	Castle Lane Relief Road	✓✓	XX	X	-	XX	XX	✓	✓
7	Bournemouth	Wallisdown/ Branksome Relief Road	✓✓	XX	X	-	XX	XX	-	X
8	Bournemouth	Kinson Relief Road	✓✓	XX	X	-	XX	X	✓	✓
9	Christchurch / Bournemouth	A338 Link Road to airport (part of airport access). A338 widening from Ashley Heath junction with A31 to Cooper Dean and operation of A338 through to County Gates	✓✓	XX	X	-	XX	XX	✓	✓
10	Dorset	Sandford and Holton Heath Bypass	✓✓	XX	X	-	XX	XX	✓	X
11	East Dorset	West Moors Bypass	✓	X	X	-	X	X	-	X
12	East Dorset	3 Legged Cross Link Road	✓	X	X	-	X	X	-	X
13	East Dorset	A350 – Sturminster Marshall bypass. Traffic management through villages	✓	X	X	-	X	X	✓	X
14	Bournemouth / Poole	Key junctions – Cemetery Jnct, Wallisdown Crossroads, Bear Cross, Mountbatten Arms, Iford, Castle Lane East/West	✓✓	X	-	-	X	X	✓	✓
15	Poole	Various schemes for Pottery Junction, Ashley Road, Bournemouth Road/St Osmunds Road	✓	X	-	-	X	X	✓	✓
16	East Dorset	Wimborne Town Centre improvements	✓	-	-	-	-	✓	✓	✓
17	East Dorset	Ferndown Town Centre – possible banned turns	✓	-	-	-	-	✓	✓	✓
18	East Dorset	Parley Cross (airport access), Parley Cross southern bypass	✓✓	XX	X	-	XX	X	✓	✓
19	Bournemouth	Station roundabout – at grade with new pedestrian facilities	✓	-	X	✓	X	X	✓	✓
20	Bournemouth	Ensbury Park gyratory - Boundary Rd/Wallisdown Road, Improve access to Columbia Road/Redhill Drive	✓	-	-	-	X	✓	✓	✓
21	East Dorset	Longham Bridge and double mini roundabouts	✓	-	-	-	X	X	✓	✓
22	Christchurch	Highway link A338 to airport	✓✓	XX	X	-	XX	XX	✓	✓
23	Bournemouth	A338 Cambridge Road	✓	X	-	-	X	X	✓	✓
24	Bournemouth	A338 S' Paul's grade separation / trumpet jct	✓	X	-	-	X	X	✓	✓
25	Bournemouth	A338 widening to 3 lanes between S' Paul's roundabout and Richmond Hill	✓✓	XX	X	-	XX	XX	✓	X
26	Bournemouth	Reduce speed limits on A338	-	-	✓✓	-	✓	✓	X	✓
27	Bournemouth	Bournemouth Town Centre Vision - Network alterations	✓	-	-	-	-	X	✓	✓

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implement able	
28	Bournemouth	Holdenhurst Rd/Richmond Park Rd junction	✓	-	-	-	-	x	✓	✓
29	Area-wide	Corridor/road hierarchy review – too many competing uses of streets	✓	-	-	-	-	✓	-	✓
30	Christchurch	Christchurch Town Centre Strategy – measures to tackle A35 congestion e.g. close High St to through traffic, traffic management east of Iford	✓✓	-	-	-	✓	✓	-	✓
31	Christchurch	Stony Lane roundabout / Fountains Roundabout	✓	-	-	-	-	x	✓	✓
32	Bournemouth	Outputs from ITS/UTC study	✓	-	-	-	-	x	✓	✓
33	Poole	Combined traffic control centre for DCC/PBC/BBC	✓	-	-	-	-	x	-	✓
34	Bournemouth	Christchurch to Ringwood Road corridor – traffic calming	-	-	✓	-	✓	x	✓	✓
35	Bournemouth	Parking – Bournemouth Town Centre study	-	-	-	-	-	x	✓	✓
36	Bournemouth	Multi-storey car parks to replace surface car parks – Town Centre Vision	-	-	-	-	-	x	✓	✓
37	Area-wide	Reduce parking on main radial routes e.g. A35	✓	-	-	-	-	x	x	✓
38	Poole, Bournemouth, Christchurch	Reduced parking capacity in town centres along with Park and Ride schemes	-	✓	-	x	-	x	x	✓
39	Christchurch	Rationalisation of on-street parking – e.g. Waterloo Bridge, Town Bridge - removal of parking bays	✓	-	-	-	-	x	x	✓
40	Area-wide	Dorset Parking strategy/signing	-	✓	-	-	-	x	✓	✓
41	Area-wide	Increased driver information signs across conurbation(congestion, incidents, parking availability) – include provision of information on delays on HA network	✓	✓	-	✓	✓	x	✓	✓
42	Area-wide	Extended use of HOV and bus priority lanes	✓	✓	-	-	✓	x	✓	✓
43	Area-wide	Introduction of traffic calming, home zones, etc	-	-	✓	-	✓	x	✓	✓
44	Area-wide	Issues on routes outside SE Dorset study area conurbation have impact on routes inside SE Dorset	✓	-	-	-	-	x	✓	✓
45	Area-wide	Potential for lane narrowing, hard shoulder running and 50 mile/hr limits on strategic roads	✓	-	✓	-	-	x	✓	✓
46	Area-wide	20 mile/hr limits on residential roads	-	-	✓	-	-	✓	✓	✓
47	Area-wide	Reduced speed limit of 20 mile/hr across conurbation	x	-	✓	-	-	x	x	x
48	Area-wide	Ramp metering on strategic roads	✓	-	-	-	-	x	✓	✓
49	Area-wide	Better coordination of road works (permits)								
50	Area-wide	Allow powered two wheelers to use bus lanes								
51	Area-wide	Provide web-based traffic information about traffic delays on strategic routes (similar to Highways Agency website).								

Table B.4 – Long List Measures – Demand Management

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implementable	
1	Area-wide	Congestion charging – area-wide, city centre cordon, other cordons	✓✓	✓✓	✓	x	✓	-	xx	✓
2	Area-wide	Parking charges set at levels to target specific users, e.g. commuters/long stay	✓	✓	-	-	-	-	x	✓
3	Area-wide	Parking charges in association with P&R sites	✓	✓	-	-	-	x	x	✓
4	Area-wide	Workplace parking levies/charges	✓	✓	✓	x	✓	-	xx	✓
5	New roads	Toll roads on new roads								
6	Area-wide	Allow car park day tickets to be used at several car parks (e.g. for tourists visiting several locations)								
7	Area-wide	More Controlled Parking Zones (Residents Parking)								

Table B.5 – Long List Measures – Freight

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implementable	
1	Area-wide	Deliveries – timing – Dorset FQP	x	-	-	-	-	✓	-	✓
2	Area-wide	Consolidation transhipment centre	✓	✓	✓	-	✓	x	✓	✓
3	East Dorset	Linkages between freight routes and PT corridors – Ferndown	✓	✓	-	-	-	x	✓	✓
4	Poole	Freight to rail on Hamworthy branch	✓	✓	✓	-	✓	x	-	✓
5	Area-wide	Lorry routes – new facilities and publicity (freight map)	✓	-	-	-	✓	x	-	✓
6	Poole	Lorry bans/access restrictions B3068 Blandford Road through Hamworthy and Upton from Poole Bridge to A35 Upton bypass – restriction of HGVs and general traffic growth as a result of the Poole regeneration area development and port access	x	✓	✓	-	✓	x	✓	✓

Table B.6 – Long List Measures – Land Use and Urban Design

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implementable	
1	Area-wide	Density of developments (non-transport intervention)	✓	✓	-	-	-	x	x	✓
2	Area-wide	Development location and accessibility (non-transport intervention)	✓	✓	-	✓	-	x	x	✓
3	Area-wide	Issue of gravel extraction (non-transport intervention)	-	-	-	-	x	x	x	x

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implemen table	
4	Area-wide	Include urban realm, townscape and streetscape in townscape design (non-transport intervention)	-	-	✓	-	✓	x	✓	✓
5	Area-wide	Increased pedestrianised areas	-	-	✓	-	✓	x	✓	✓
6	Area-wide	Revision of parking standards	-	-	-	-	-	✓	✓	✓
7	Area-wide	Impact of commuting from developments in Winchester/Southampton, etc	✓	-	-	-	-	✓	-	✓
8	Area-wide	Promote mixed use development, to encourage people to live and work in the same place.								
9	Area-wide	Buildings to have dual purposes – e.g. school/sports centre.								
10	Area-wide	Use BREEAM assessment for an area (as opposed to a single building.								
11	Area-wide	Provide electric vehicle charging points (as part of a national scheme).								

Table B.7 – Long List Measures – Non-Transport Interventions

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implemen table	
1	Area-wide	Density of developments	✓	✓	-	-	-	x	x	✓
2	Area-wide	Development location and accessibility	✓	✓	-	✓	-	x	x	✓
3	Area-wide	Issue of gravel extraction	-	-	-	-	x	x	x	✓
4	Area-wide	Include urban realm, townscape and streetscape in townscape design	-	-	✓	-	✓	x	✓	✓
5	Area-wide	Influencing parental choice so that parents send their child to their nearest school		✓	✓		✓	x	✓	✓
6	Area-wide	Introduce staggered school start times						x	✓	✓
7	Area-wide	Increase the economic participation amongst the population (e.g. more older workers, more women in the workforce etc).	✓			✓		✓	✓	✓
8	Area-wide	Major investment in business infrastructure (e.g. more office stock to meet modern business requirements)	✓					x	✓	✓
9	Bournemouth / Poole	Introduce new workplace hubs in rural and local centres	✓	✓				x	✓	✓
9A	Area-wide	Internet cafes/hubs at post offices/village halls etc.								
9B	Area-wide	Teleworking centres – desks paid for by employers.								
9C	Area-wide	Space sharing between businesses								
9D	Area-wide	Provide Wifi at Park and Ride site waiting rooms.								
10	Area-wide	Wider uptake of flexi-time and smarter working arrangements		✓			✓	-	✓	✓

No	Location	Description	DfT Goal					Additional Objectives		Include in Strategy Options?
			Economy	Climate Change	Safety	Equality	Quality of Life	Afford-able	Implemen table	
11	Area-wide	Education and training initiatives for local labour force to contain in-commuting	✓					x	✓	✓
12	Area-wide	Incorporating additional housing development in line with regional strategies to address mismatch between population and job forecasts	✓					x	✓	✓
13	Bournemouth and Poole	Changing visitor hours at hospitals								
14	Area-wide	Broadband coverage across the whole South East Dorset area								
15	Area-wide	Mobile phone signal/coverage across the whole South East Dorset area								

Appendix C – Appraisal Summary Tables

Assessment Sheet	**Option Name/No.**	2026 Strategy

1.) Summary of option	
Description and objective	• Smarter choices including personalised travel plans, expanded travel plans, passenger information, car clubs, and car sharing; • Low cost improvements to public transport (especially within BSC) and community services; • ITS improvements – extend UTC/ Joint Traffic Control Centre/ VMS; • Junction improvements; • Cycling and Walking – completion of strategic network; • Highways improvement – Canford Bottom; • Freight Quality Partnership; • Implementation of Travel smartcard (Oyster card) type scheme; • Formation of an Integrated Transport Authority; • Phase 1 BSC – N Bournemouth & A35 Christchurch to Poole • Express bus services to outlying areas; • Parley Lane improvements – Blackwater to Chapel Gate; • Airport Hub/Interchange; • Poole Regeneration gyratories/ links; • A31 westbound widening at Ringwood; • Improvement of key junctions, e.g. Bear Cross, Ensbury Park, Queen Anne Drive, Shah of Persia, Bakers Arms; • Swanage Rail – running through services to Wareham; • Increased rail frequency – Brockenhurst to Wareham; • Park and Rail – Wareham/ Hinton Admiral/ Holton Heath; • A31 Trunk Road dualling – Ameysford to Merley; • Phase 2 BSC –Wallisdown, North South link to Poole, Castle Lane; • Town centre parking charges/ reduction in long stay capacity in tandem with Park and Ride increase.
Key DfT Goal	Reduce carbon emissions
Secondary Goal	Support economic competitiveness and growth
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	PVC of £219m (Table 10.2)
Revenue Costs (£m)? (per annum)	**0-5**	- Smarter Choices - Express bus services - anticipated to be delivered commercially as part of QBP agreements. - Swanage Rail = £1.5m per year, at 2010 prices. - Hinton Admiral (rail) = £0.23m per year. - Holton Heath (rail) = £0.23m per year. - Wareham (rail) = £0.23m per year. - Bournemouth Airport Interchange/Hub = £40k per year. - Increased rail frequency = £3.1m per year. PVC of £108m (Table 10.2)
Where is funding coming from?	Various sources (e.g. LSTF bid, major scheme funding, LTP, developer funding).	
Any income generated to local authority (£m)? (per annum)	**Yes**	0-5
i.Overall cost risk? ii.Other costs?	**3. Medium**	Many of the proposals have low-medium cost risk. High cost risk associated with: • Increased rail frequency – Brockenhurst to Wareham; • Parley Lane/Christchurch Road (B3073) improvements. • Re-opening of the Swanage rail line with potential Park & Ride (dependant on Network Rail Resignalling).

Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	2026 Strategy has been designed to be affordable. Dependent on securing funding from bids, e.g. LSTF and major schemes. It is anticipated that the 2026 Strategy is affordable over a 15 year period.
Likely value for money?	**Very High >4**	BCR of 15.0 (Table 10.2)

3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Some measures will have shorter implementation timescales.
Public acceptability	**3. Medium**	
Practical feasibility	**4. Medium-high**	
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (5)
	Goal&colour	Better safety, security and health (6)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (2)
Additional network goals:	*Goal&colour*	Affordability (7)
	Goal&colour	Implementability (7)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	The range of measures selected ensures a high impact on several of the goals (see RAG assessments).
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	The majority of measures are strategic in nature.
Is the option innovative and/or encourage better use?	**Innovative**	The BSC aim is to improve routes for buses by encouraging cars and goods vehicles onto a parallel route through general highway improvements. High intensity implementation of smarter choices.
Overall strategic fit?	**4. Medium-high**	The range of measures selected ensures a high impact on several of the goals (see RAG assessments).
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**Yes**	See Strategic Appraisal for individual schemes.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is strong consensus that good public transport schemes can encourage mode shift away from the car. Also strong consensus for the outcome of the assessment for A31 widening.
Key Uncertainties/risks (external factors)	A31 widening at Ringwood depends on level of support from the Highways Agency and available funding. The extent of the need to divert utilities for the BSCs is currently unknown (with associated cost implications). Further improvements are needed to the rail line between Worgret junction and Swanage.	
Flexibility (1 = static, 5 = dynamic)	**3**	Some elements are flexible in terms of delivery timing or phasing (e.g. BSC). Swanage will need to fit in with Network Rail plans and programmes (e.g. resignalling of the wider area). Timing of A31 widening schemes is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	The economic assessment demonstrates a very strong case for the strategy, which would perform well even with lower levels of growth. In the base year (2008) situation, the transport system is already under stress, and many of the measures included in the strategy are needed to address current as well as future problems. PVB of travel time benefits of £1200m (Table 10.2)
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	The SEDMMTS strategy provides significant improvements to reliability when compared to the Do-Minimum case and is judged to have a large beneficial impact overall.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region. The SEDMMTS strategy has the potential to encourage the development of a range of employment sites, which together will provide for about 20,000 jobs, of which 2,000 are not redistributed or displaced jobs. This is in addition to the assistance the strategy provides in enabling improved accessibility for sites earmarked for mix-used development.
Delivery of housing (facilitate or prevent new housing)	Major Beneficial	The HA have identified several trunk road locations adjacent to strategically significant urban areas where considerable capacity problems already exist and they consider these problems must be addressed to allow the employment and residential development proposals to be carried forward. One of these locations indicated is the length of A31 bordering the northern edge of Poole and Bournemouth; the A31 to Poole scoping report points to the need to dual this length of A31. The HA has also highlighted that congestion issues on A31 at Ringwood needs to be addressed before some potential developments can be progressed.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	A31 widening schemes would improve resilience by adding capacity (e.g. in the event of accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	The Full Strategy reduces CO2 emissions by 6.0% for the Full Strategy by 2026, compared with the Do-Minimum. Overall the strategy slows the increase in emissions of CO2 and hence has a slight beneficial impact on greenhouse gases. Reduction in AM Peak car mode share from 91.4% to 87.6% (compared with 2026 Do-Minimum), which is lower than the 2008 base results.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to public transport and active modes would improve air quality.
Improve health through physical activity	Moderate Beneficial	High impact as a result of walking measures and completion of the strategic cycle network, in conjunction with smarter choices.
Reduce the risk of death or injury	Major Beneficial	PVB of £87m (Table 10.2)
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.

Reduce crime (impact on crime and fear of crime).	Slight Beneficial	The public transport elements of the strategy include measures to increase the personal safety of travellers as an integral part of the recommendations, e.g. Improved facilities at bus stops and better real time passenger information.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the BSC improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of bus journey times/areas served)	Major Beneficial	New/improved bus services will improve accessibility through reducing bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	Major Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some bus services, thus reducing operating costs which may help keep down fares. This proposal should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall. A35 BSC scheme would benefit residents of Boscombe, an area with high level of deprivation.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefiting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment. Also, would serve the regeneration area in Poole.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to public transport would reduce traffic related noise.
Biodiversity	Moderate Adverse	Majority of works for BSC would be within highway boundary. Anticipated adverse impact as a result of A31 widening but no detailed assessment.
Geodiversity	Moderate Adverse	Majority of works for BSC would be within highway boundary. Anticipated adverse impact as a result of A31 widening but no detailed assessment.
Historic Environment	Slight Adverse	Majority of works for BSC would be within highway boundary. Anticipated adverse impact as a result of A31 widening but no detailed assessment.
Landscape Character and Open Space	Moderate Adverse	Majority of works for BSC would be within highway boundary. Anticipated adverse impact as a result of A31 widening but no detailed assessment.
Land Resources	Moderate Adverse	Majority of works for BSC would be within highway boundary. Anticipated adverse impact as a result of A31 widening but no detailed assessment.
Flood Risk	Slight Adverse	Majority of works for BSC would be within highway boundary. Anticipated adverse impact as a result of A31 widening but no detailed assessment.

Experience of travel	Moderate Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users. The widened road A31 is assumed to be built to a high design standard and therefore improve the driving experience.
Urban environment	Major Beneficial	BSC measures include improving consistency of street furniture and improved bus stop facilities. No direct impact of new highway links on the urban environment, although it may benefit from removing through traffic from residential streets.

Assessment Sheet	**Option Name/No.**	Full Strategy (2011 to 2026 and beyond)

1.) Summary of option		
Description and objective	**2026 Strategy plus the following**: • Park and ride sites – Mannings Heath/ Northbourne/Riverside/Creekmoor; • North South road link (single c/way) - Canford Bottom to Magna Road; • East West road link - Chapel Gate to Magna Road; • A338 3 lane widening – Blackwater to Cooper Dean; and • DARTS implementation.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Support economic competitiveness and growth	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**250-500**	PVC of £443m (Table 10.2)
Revenue Costs (£m)? (per annum)	**5-10**	It is anticipated that the bus-based Park and Ride sites and services would need some revenue support, higher initially and declining to: - Creekmoor: £10k per annum. - Mannings Heath: £45k per annum. - Riverside: £20k per annum. - Northbourne (Kinson) = £50k per annum. - Total: £125k per annum. Operating cost of DARTS = £6m per year - however, it is estimated that the operating costs would be covered by system revenue with moderate revenue surplus. PVC of £216m (Table 10.2)
Where is funding coming from?	Various sources (e.g. LSTF bid, major scheme funding, LTP, developer funding).	
Any income generated to local authority (£m)? (per annum)	**Yes**	0-5
i.Overall cost risk? ii.Other costs?	**2. Medium-high**	It is anticipated that the Park and Ride sites would need some revenue support, which would be higher initially. Adjusting town centre parking charges will reduce the cost risk.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Whilst the DARTS proposal makes use of the existing rail network (in part), there are still significant infrastructure costs that would be incurred for this scheme. The road links are assumed to be unaffordable due to the high cost and the scheme is not in the DfT's major scheme process.
Likely value for money?	**Very High >4**	BCR of 4.8 (Table 10.2)
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Long delivery timescales assumed for the new highway links, with the likely need for a public inquiry..
Public acceptability	**2. Low-medium**	Whilst there is recognition amongst the public that some highway improvements are required, there is opposition to building of new roads.

Practical feasibility	**3. Medium**	The highway link proposals would require new river crossings which would need approval from the Environment Agency. Likely to be a number of issues over tram/train interface for DARTS even though it is accepted in principle. General issue of on-street running through Bournemouth town centre.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (7)
	Goal&colour	Tackle climate change (5)
	Goal&colour	Better safety, security and health (6)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (3)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**5. Significant impact**	The range of measures selected ensures a significant impact on several of the goals (see RAG assessments).
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	The majority of measures are strategic in nature.
Is the option innovative and/or encourage better use?	**Innovative**	E.g. DARTS, which makes use of the existing rail network where possible.
Overall strategic fit?	**5. High**	The range of measures selected ensures a high impact on several of the goals (see RAG assessments).
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	Yes	See Strategic Appraisal for individual schemes.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**4**	There is strong consensus that good public transport schemes can encourage mode shift away from the car. Mixed views regarding DARTS - particular support by South East Dorset residents who would be able to access DARTS and hence benefit from its operation. There is a general consensus that appropriately located and priced Park and Ride sites can improve traffic conditions - however the multi-centred conurbation would not be easily served by Park and Ride. The highway link to the west of the Airport is one of the most favoured measures in the consultation.
Key Uncertainties/risks (external factors)	Integration of DARTS tram rail services with heavy rail services - support will be needed from Network Rail.	
Flexibility (1 = static, 5 = dynamic)	**3**	Timing of some proposals is flexible and some schemes can be phased (particularly those in the strategy to 2026). Parley Lane-Christchurch Road (in 2026 Strategy) is a precursor to the East-West road link. DARTS proposal would need to be delivered in its entirety. Timing would be driven by funding availability, feasibility, and interfaces with the heavy rail services.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	The economic assessment demonstrates a very strong case for the strategy, which would perform well even with lower levels of growth. In the base year (2008) situation, the transport system is already under stress, and many of the measures included in the strategy are needed to address current as well as future problems. PVB of travel time benefits of £1500m (Table 10.2)
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	The SEDMMTS strategy provides significant improvements to reliability when compared to the Do-Minimum case and is judged to have a large beneficial impact overall.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region. The SEDMMTS strategy has the potential to encourage the development of a range of employment sites, which together will provide for about 20,000 jobs, of which 2,000 are not redistributed or displaced jobs. This is in addition to the assistance the strategy provides in enabling improved accessibility for sites earmarked for mix-used development.
Delivery of housing (facilitate or prevent new housing)	Major Beneficial	DARTS would contribute to delivery of housing by enhancing public transport supply and capacity. East-west link will not serve new housing, but would improve access between housing and employment at the airport.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Major Beneficial	New highway links would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	The Full Strategy reduces CO2 emissions by 6.2% for the Full Strategy by 2026, compared with the Do-Minimum (0.2% greater decrease than the 2026 Strategy). Overall the strategy slows the increase in emissions of CO2 and hence has a slight beneficial impact on greenhouse gases. Reduction in AM Peak car mode share from 91.4% to 87.1% (compared with 2026 Do-Minimum), which is lower than the 2008 base results.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to public transport and active modes would improve air quality.
Improve health through physical activity	Moderate Beneficial	Same level of impact as the 2026 strategy (no additional measures for active modes).
Reduce the risk of death or injury	Major Beneficial	PVB of £91m (Table 10.2)
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	The public transport elements of the strategy include measures to increase the personal safety of travellers as an integral part of the recommendations, e.g. Improved facilities at bus stops and better real time passenger information.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the BSC improvements. DARTS serves town centres of Poole, Bournemouth and Christchurch and improves public transport links to employment and services such as healthcare. However, the highway link schemes benefit car drivers only; no benefits for those without access to a car. Does not promote social cohesion.
Accessibility (in terms of bus journey times/areas served)	Major Beneficial	New/improved bus services will improve accessibility through reducing bus journey times. DARTS would help improve rail provision for local journeys. Journey time benefits from faster journeys and increased frequency, and journey time benefits from Bournemouth town centre.
Social and distributional impacts (on low income and vulnerable groups)	Major Beneficial	DARTS proposal would benefit those on low incomes who are more likely to use public transport. However, the highway link schemes benefits car drivers; no benefits for those without access to a car.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	DARTS would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Neutral	Mode shift away from the car would help to reduce traffic related noise. Anticipate an increase in noise in some locations due to generated traffic. Neutral assessment takes account increase in some locations, and decrease in others.
Biodiversity	Major Adverse	Anticipated adverse impact as a result of highway links but no detailed assessment. North-south link option avoids Canford Heath environmental designations. Various Park and Ride proposals are located within/adjacent to SPAs and SACs. Loss of open space may impact local biodiversity.
Geodiversity	Major Adverse	Anticipated adverse impact as a result of highway links but no detailed assessment.
Historic Environment	Moderate Adverse	Anticipated adverse impact as a result of highway links but no detailed assessment.
Landscape Character and Open Space	Major Adverse	Proposed route for the highway links would impact on land resources as it crosses farm land.
Land Resources	Major Adverse	Highway link proposals may impact on flood risk since it involves several river crossings.
Flood Risk	Moderate Adverse	Highway link proposal may impact on flood risk since it involves several river crossings. Park and Ride sites would include use of SUDS (Sustainable Urban Drainage Systems) and not worsen flood risk.
Experience of travel	Major Beneficial	High quality DARTS tram-trains would improve the experience of travel. Higher standard road would improve the experience of travel.
Urban environment	No Impact	No impact on the urban environment.

Appendix D – Maps and Diagrams

Introduction

Modelling Maps and Diagrams

Baseline data

Figure D.1 – Zoning System within External Area

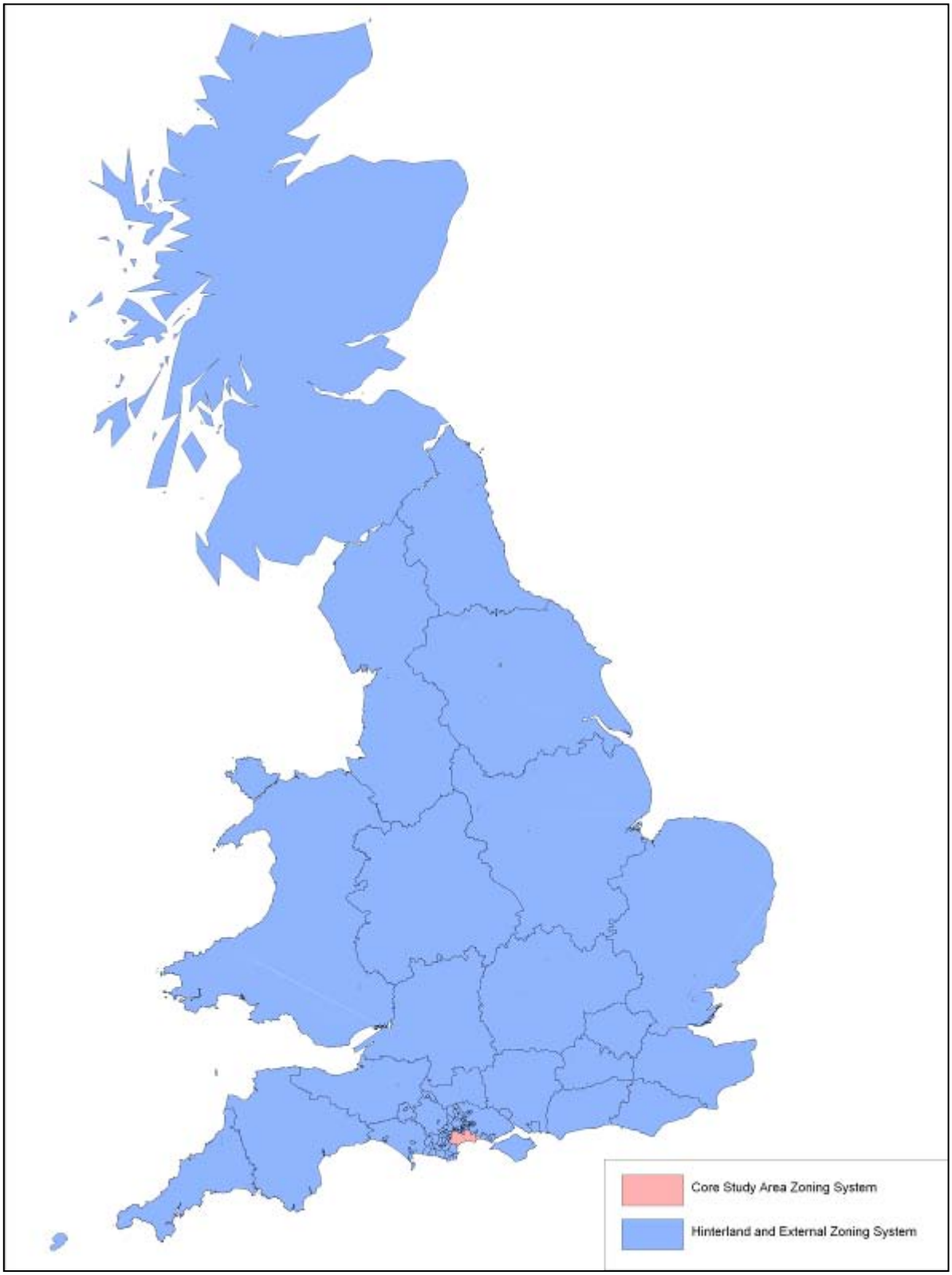


Figure D.2 – Zone System in Hinterland Area

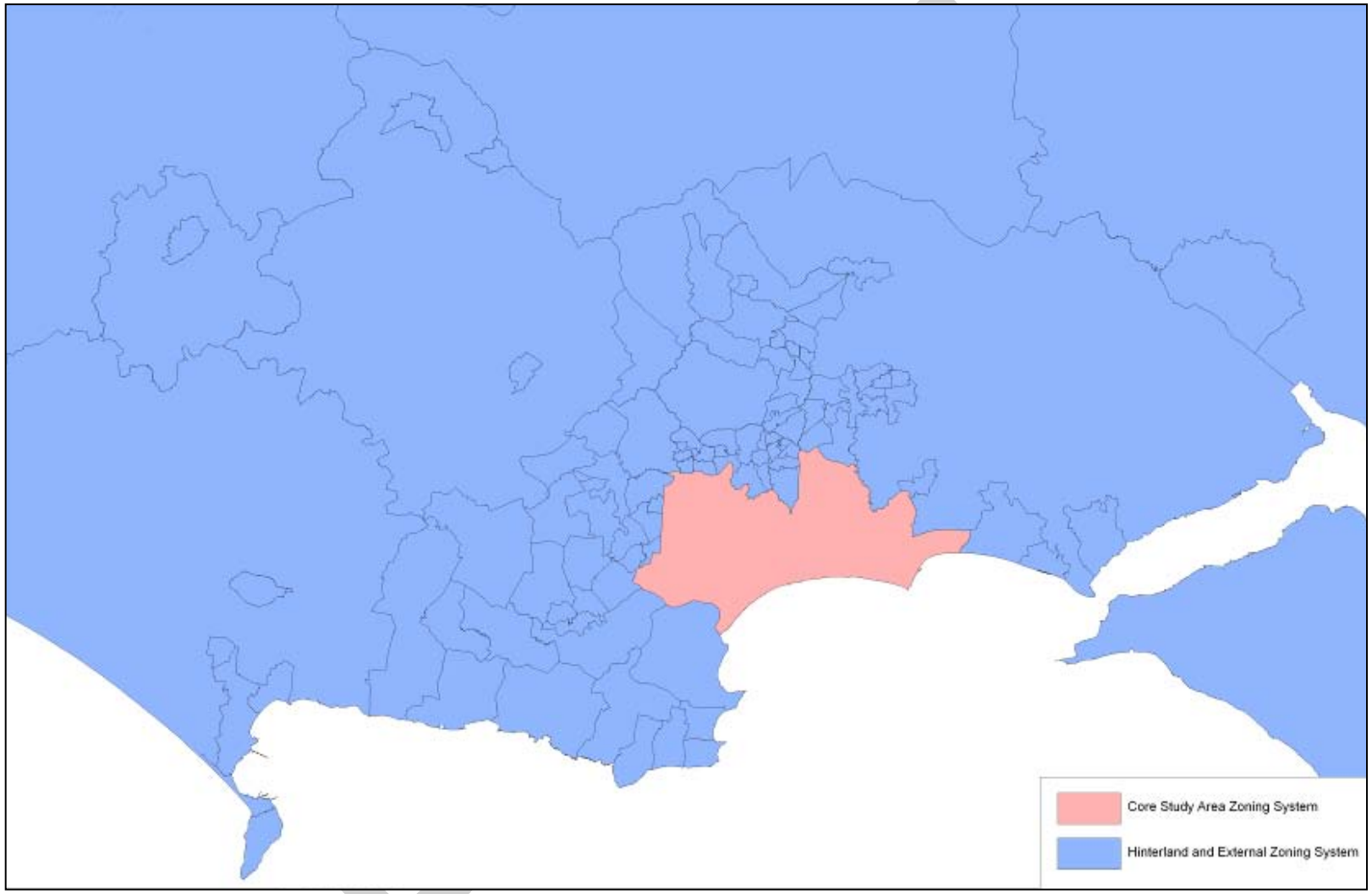


Figure D.3 – Study Zone System

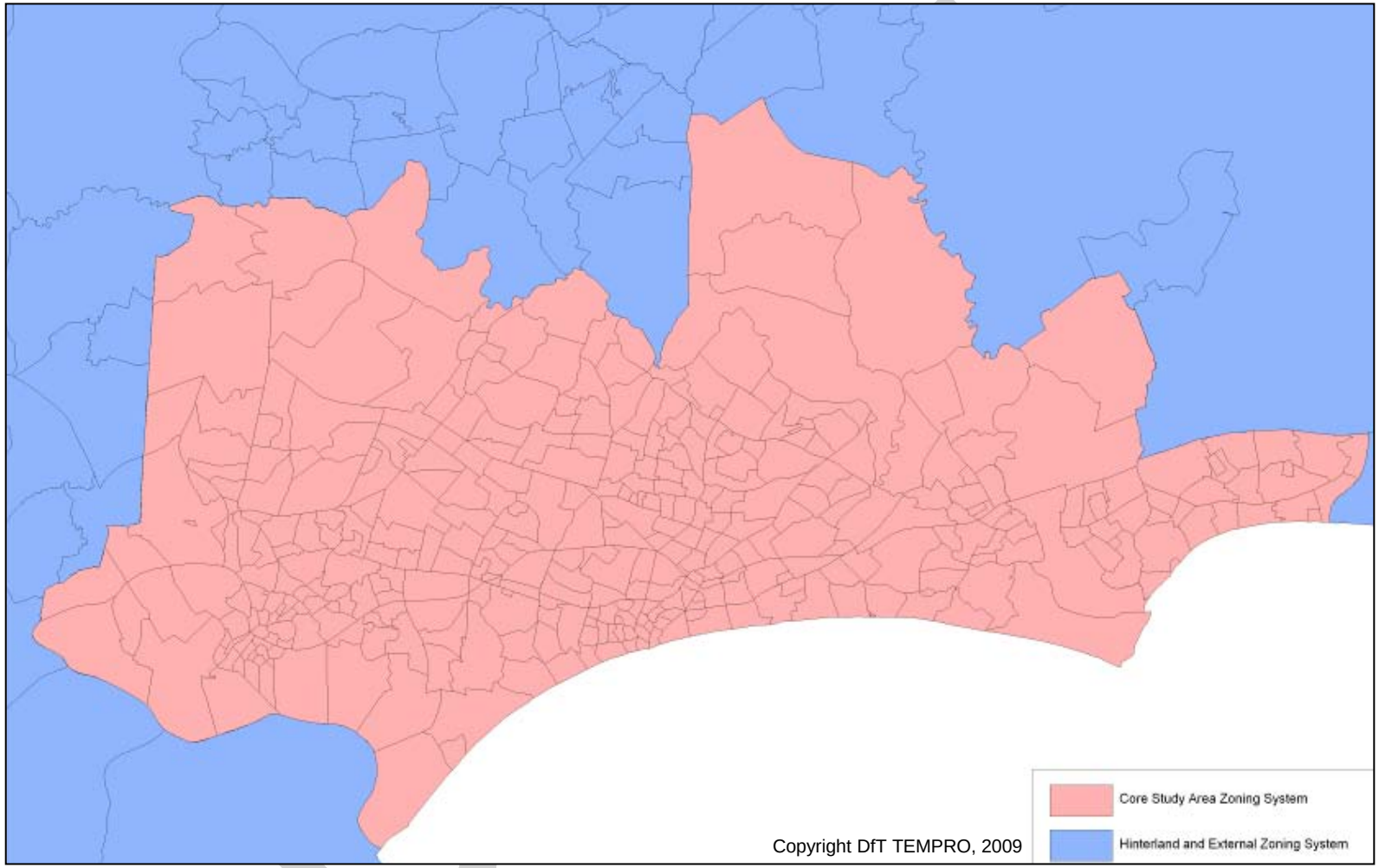


Figure D.4 – SEDMMTS Simulation Network

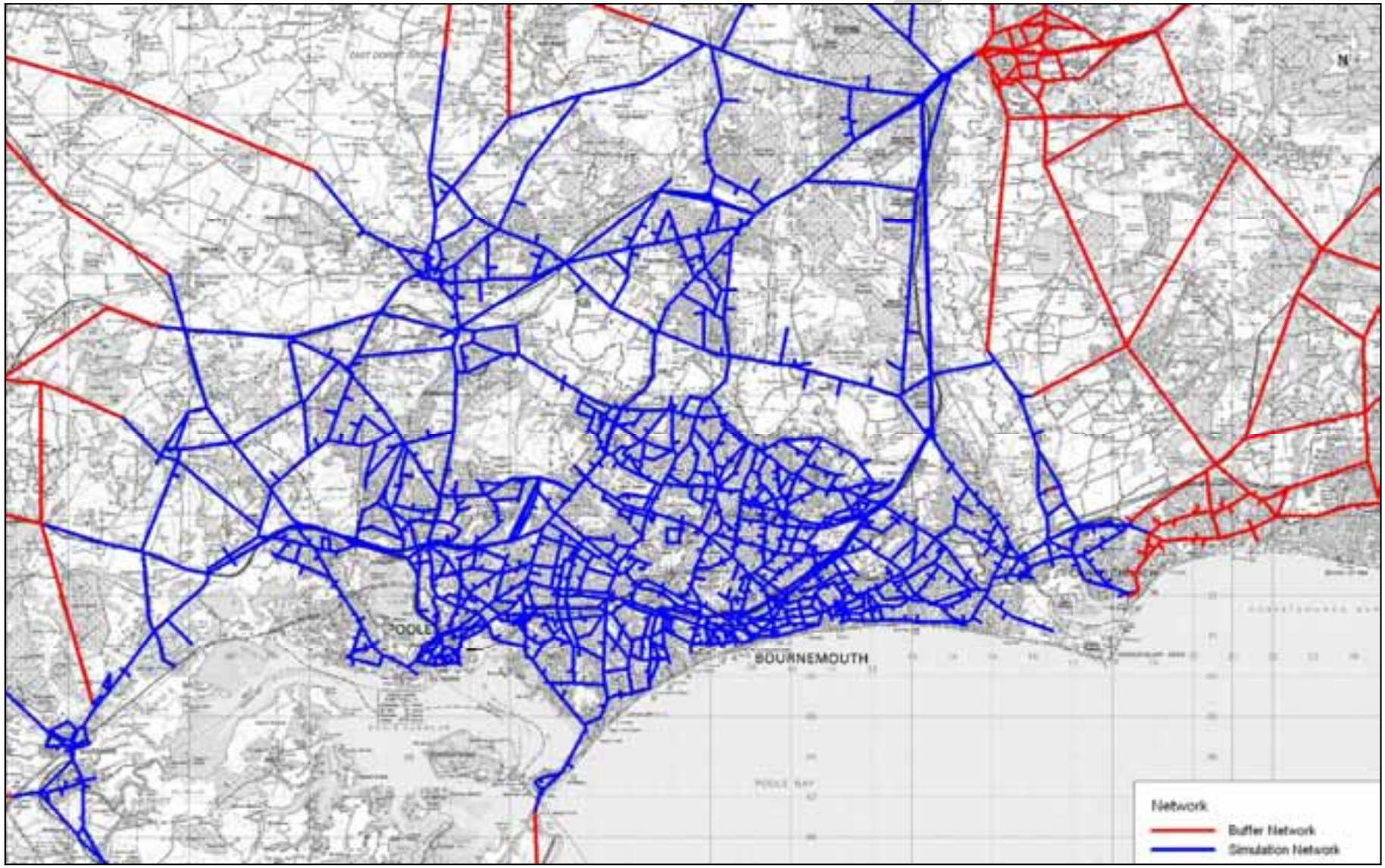


Figure D.5 – Buffer Network

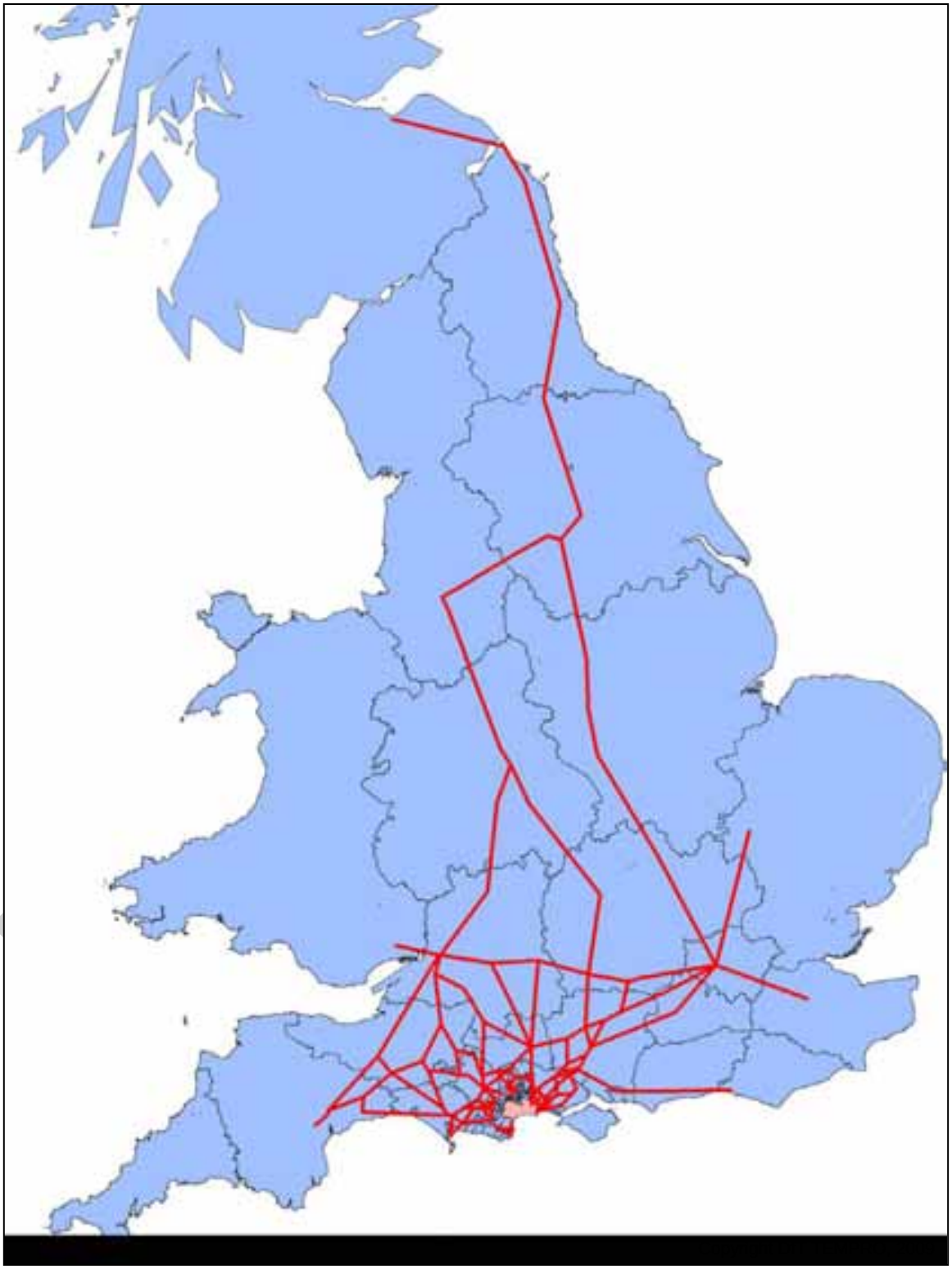


Figure D.6 – Journey Time Routes

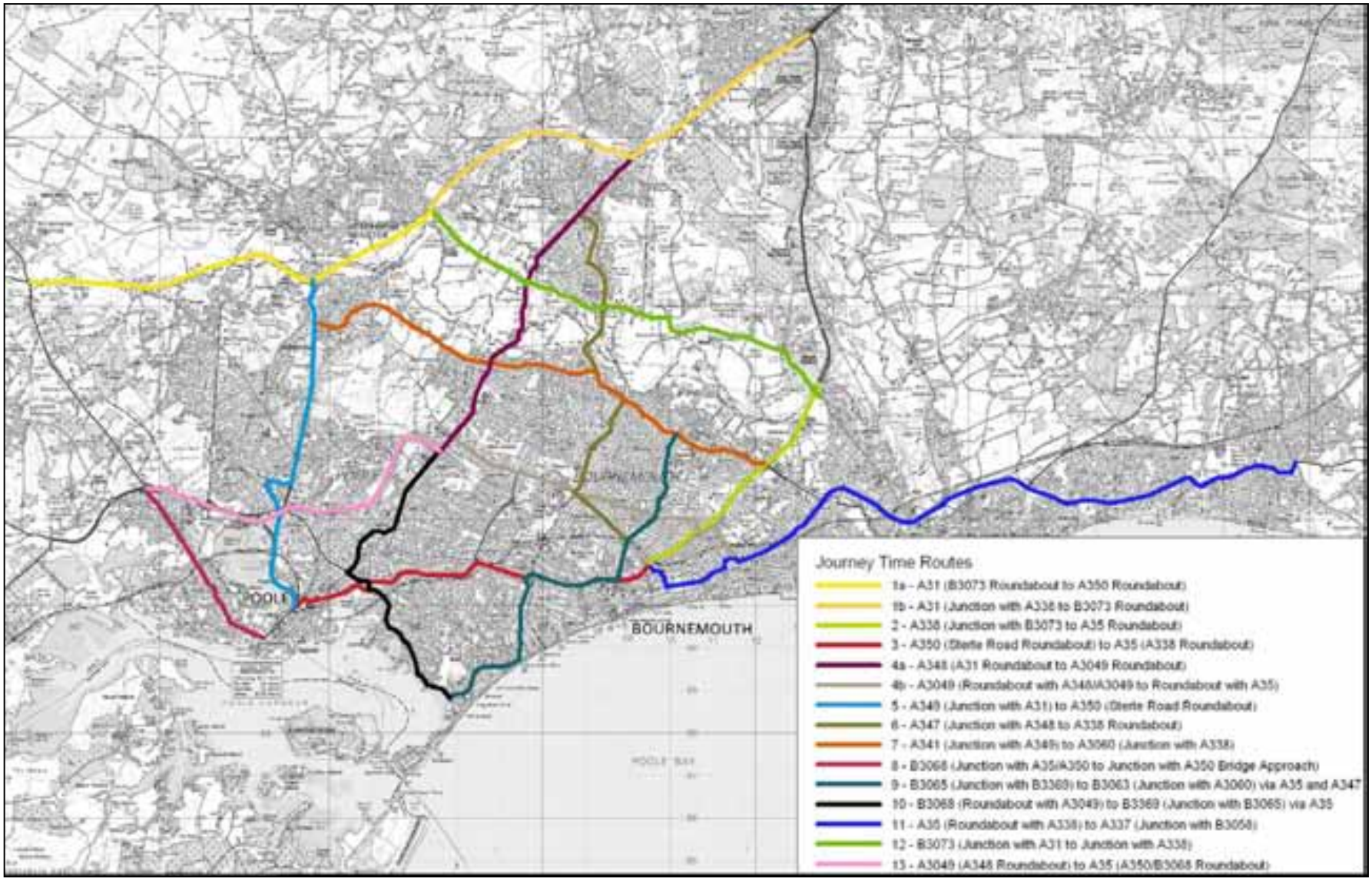


Figure D.7 – Bus Network in PT Model

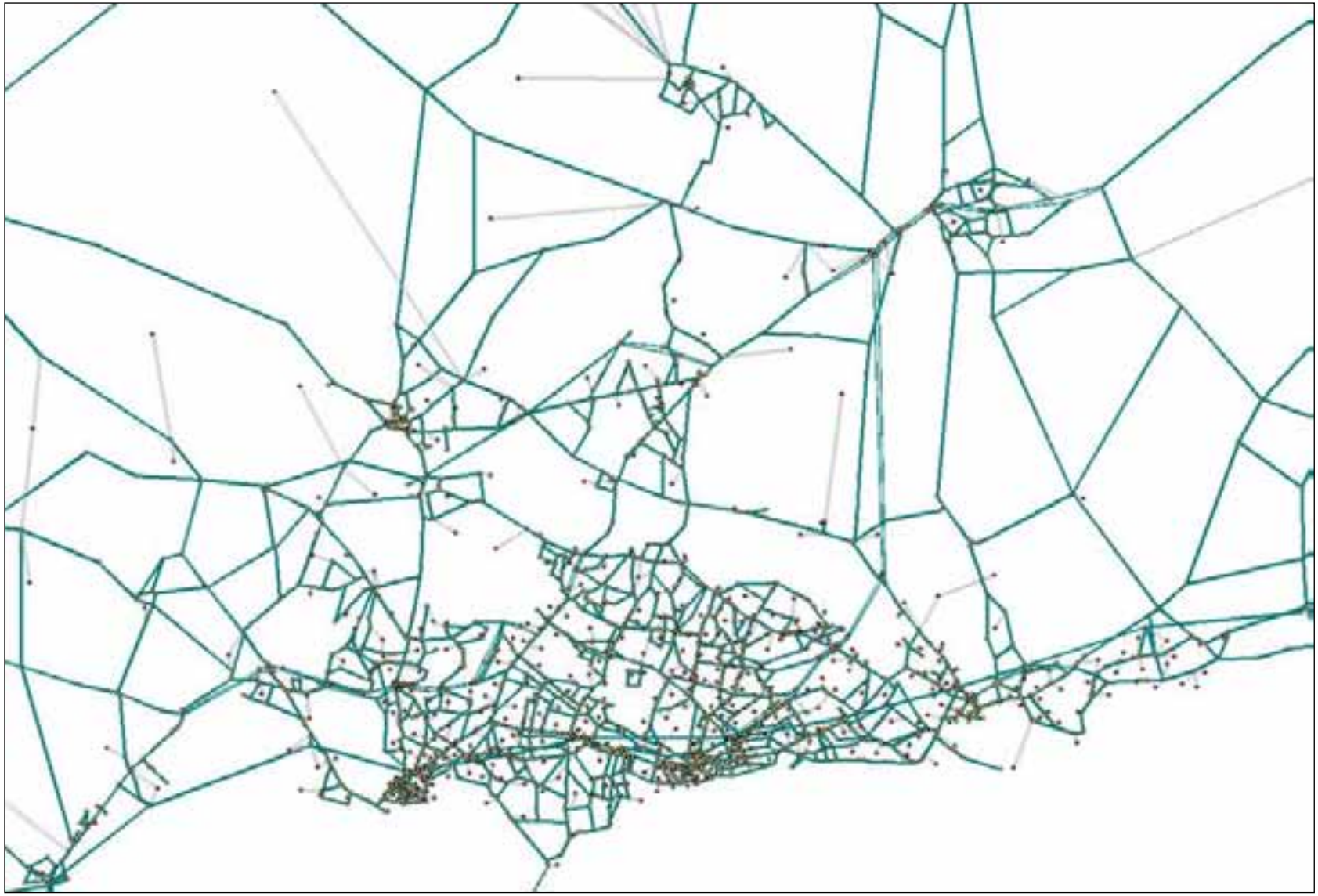


Figure D.8 – Rail Network in PT Model

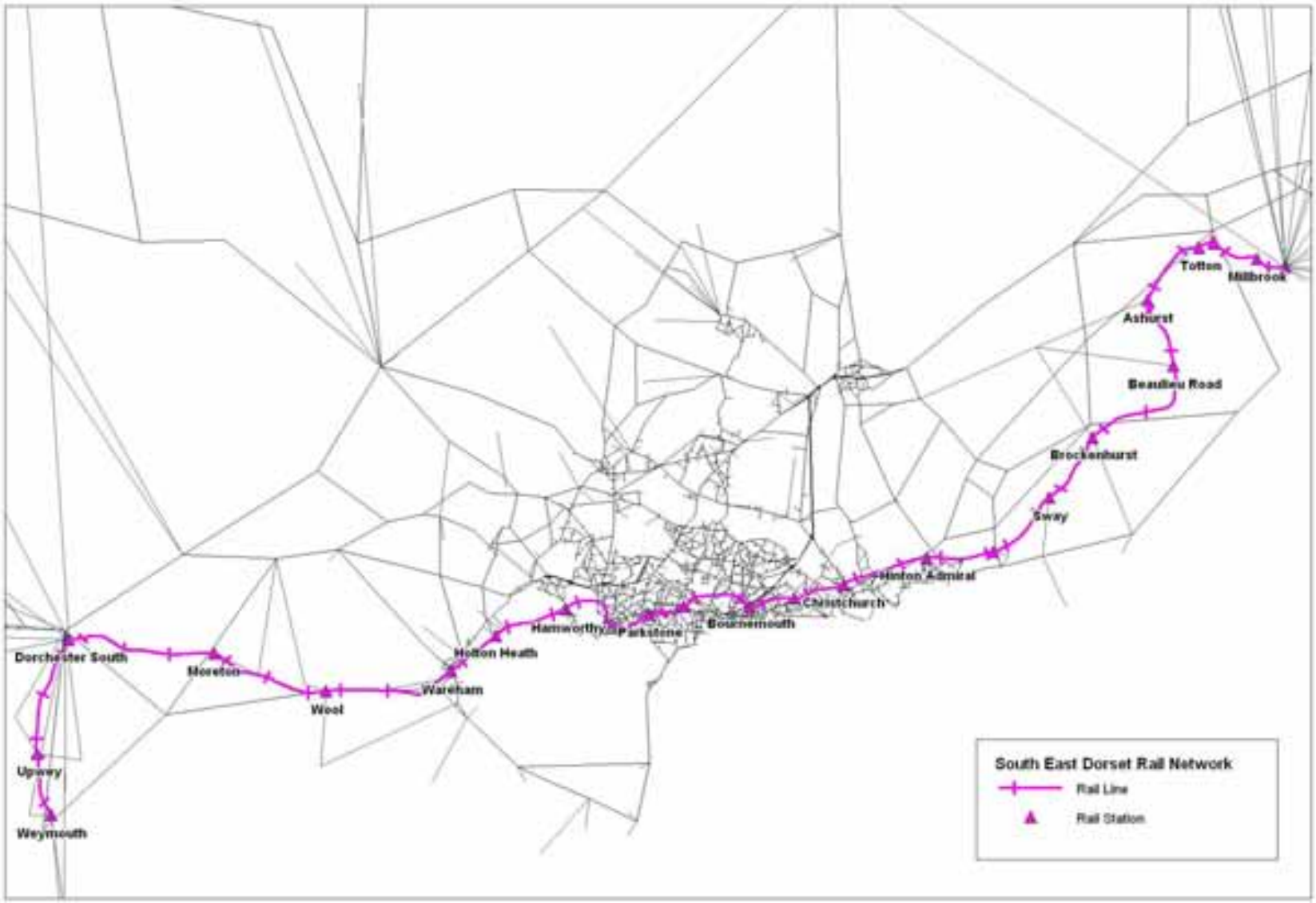


Figure D.9 – Changes in AM Peak Link Flow

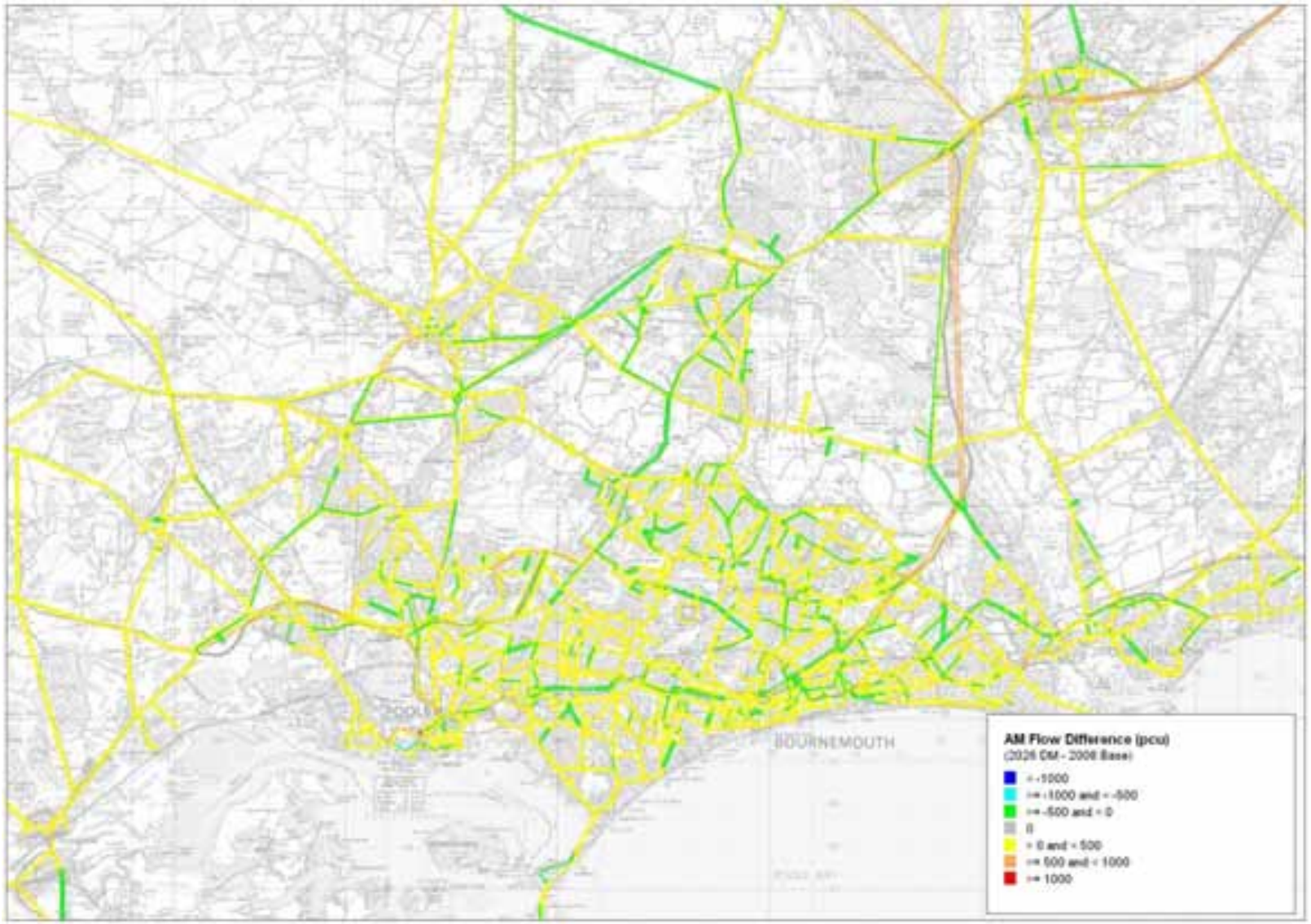


Figure D.10 – Changes in Inter Peak Link Flow

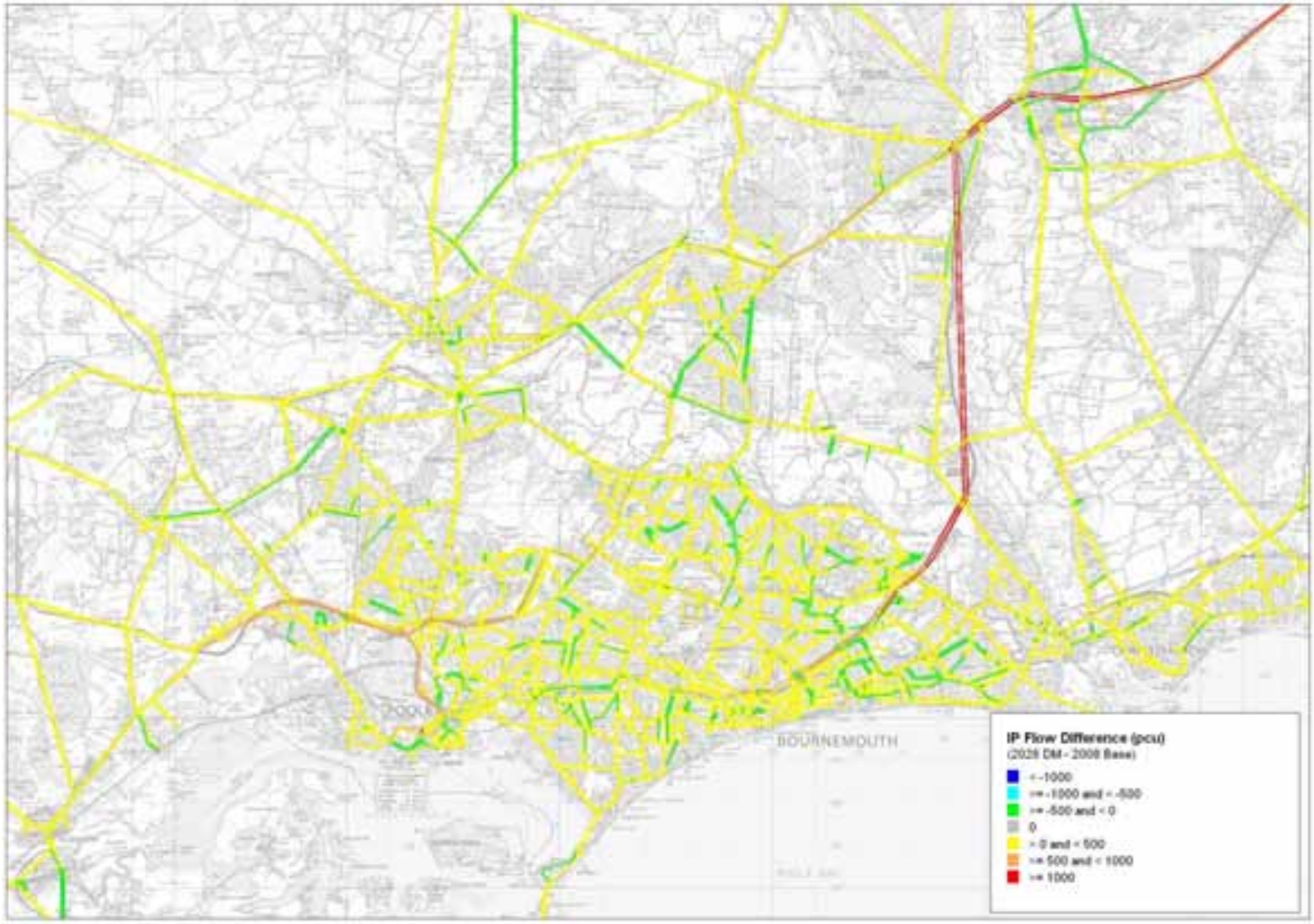


Figure D.11 – Changes in PM Peak Link Flow

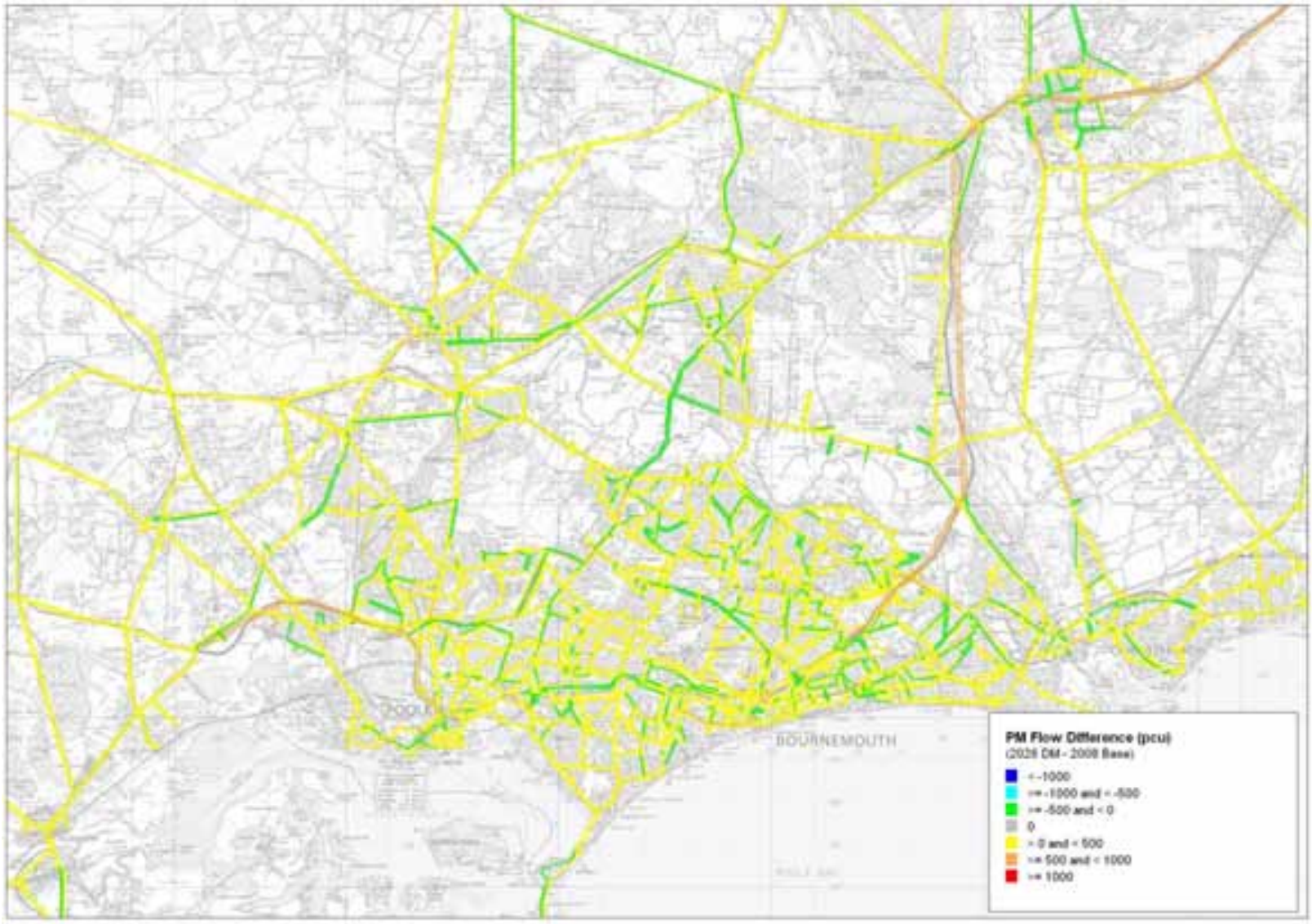


Figure D.12 – Average Driving Speed to Poole Town Centre

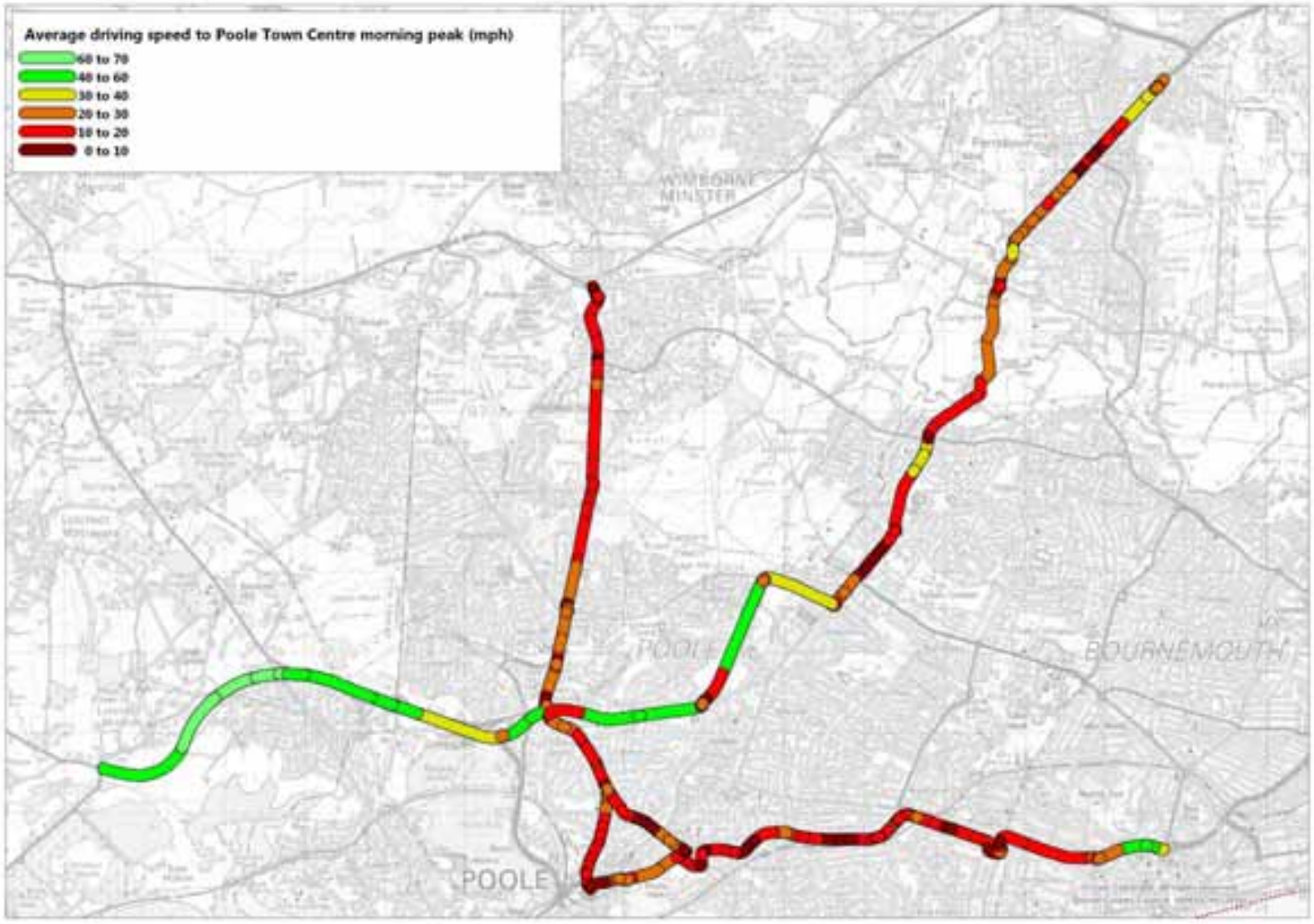


Figure D.13 – Average Driving Speed to Bournemouth Town Centre

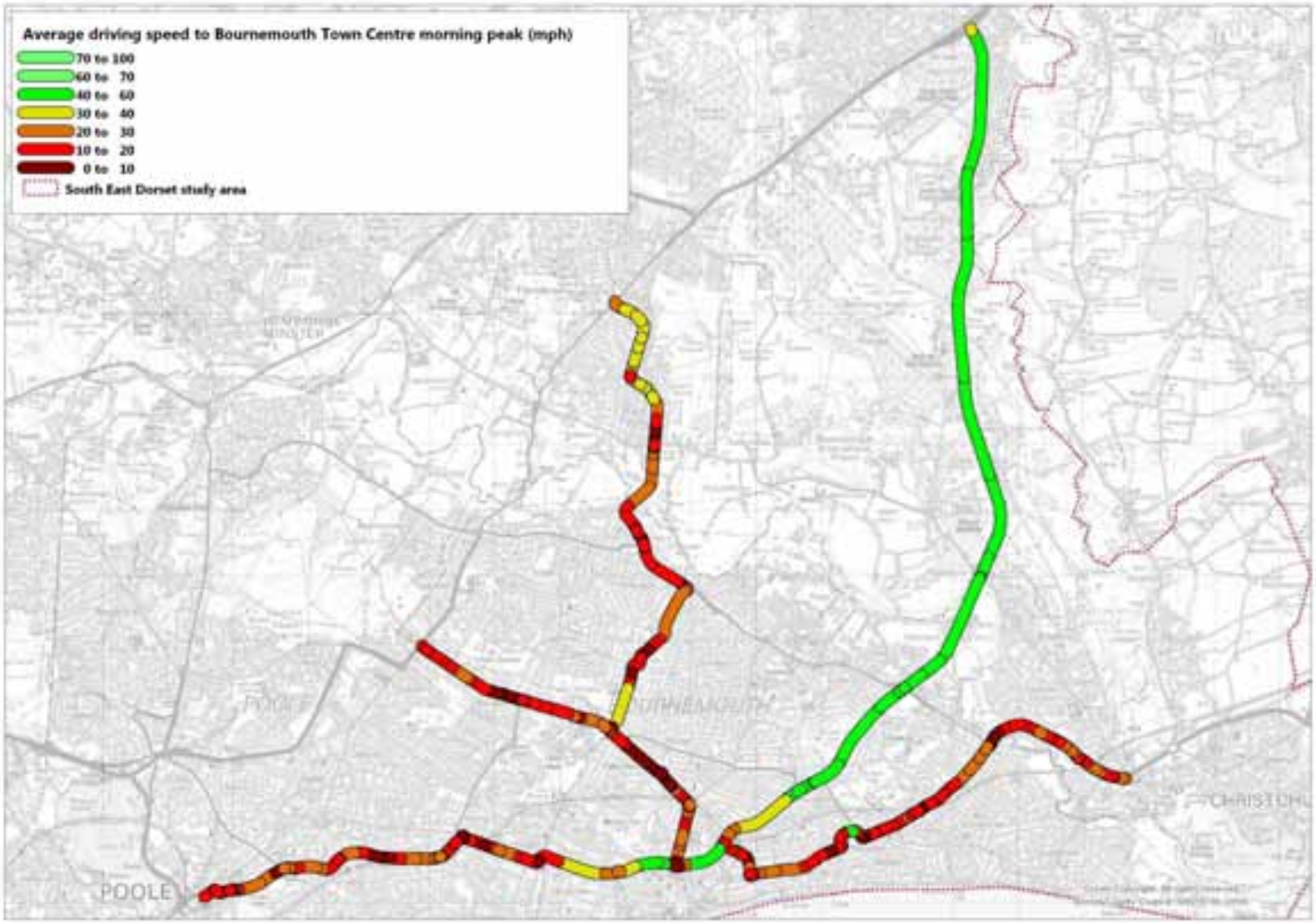


Figure D.14 – Morning Peak Drive Time to Christchurch Town Centre

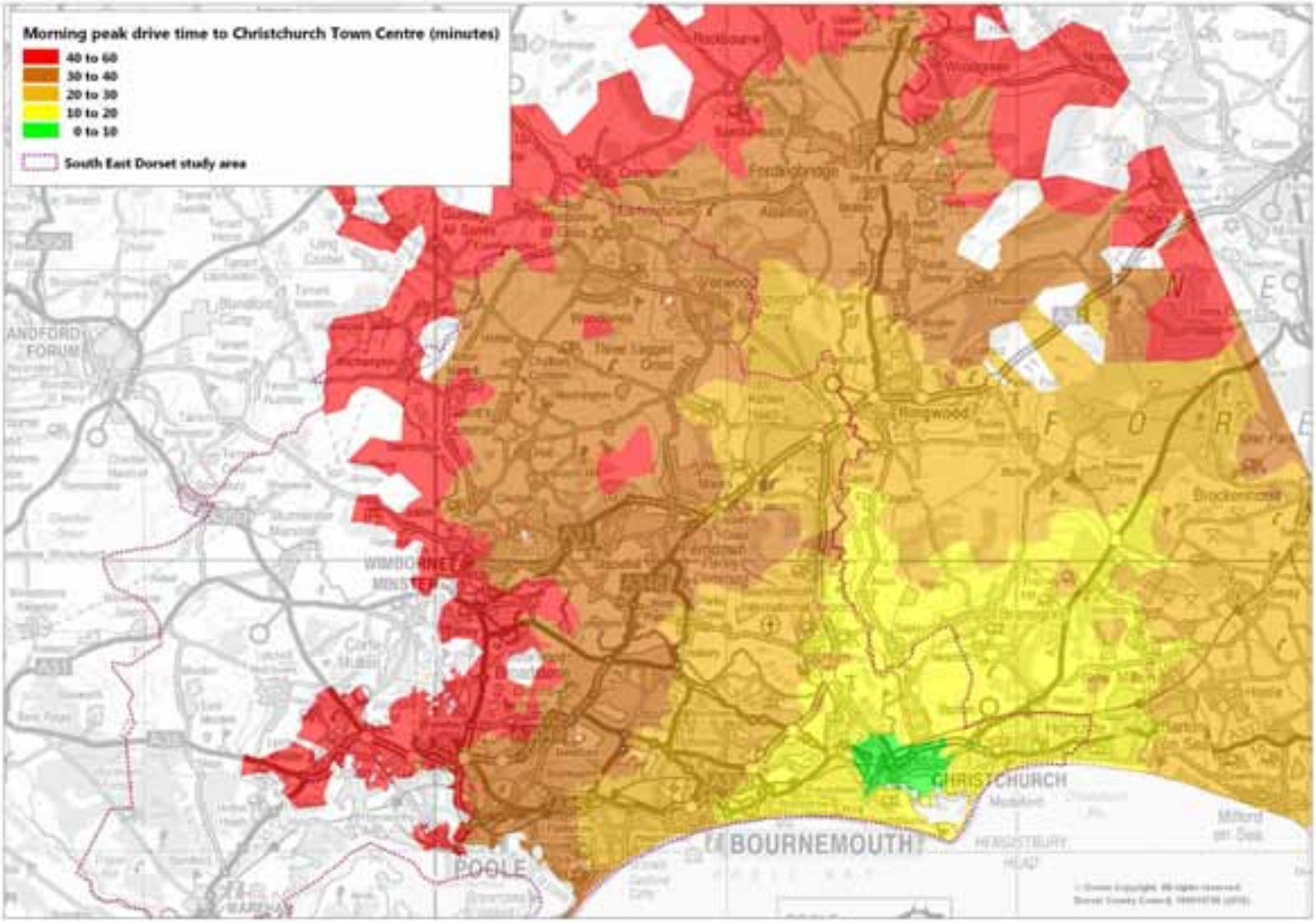


Figure D.15 – Morning Peak Drive Time to Wimborne Town Centre

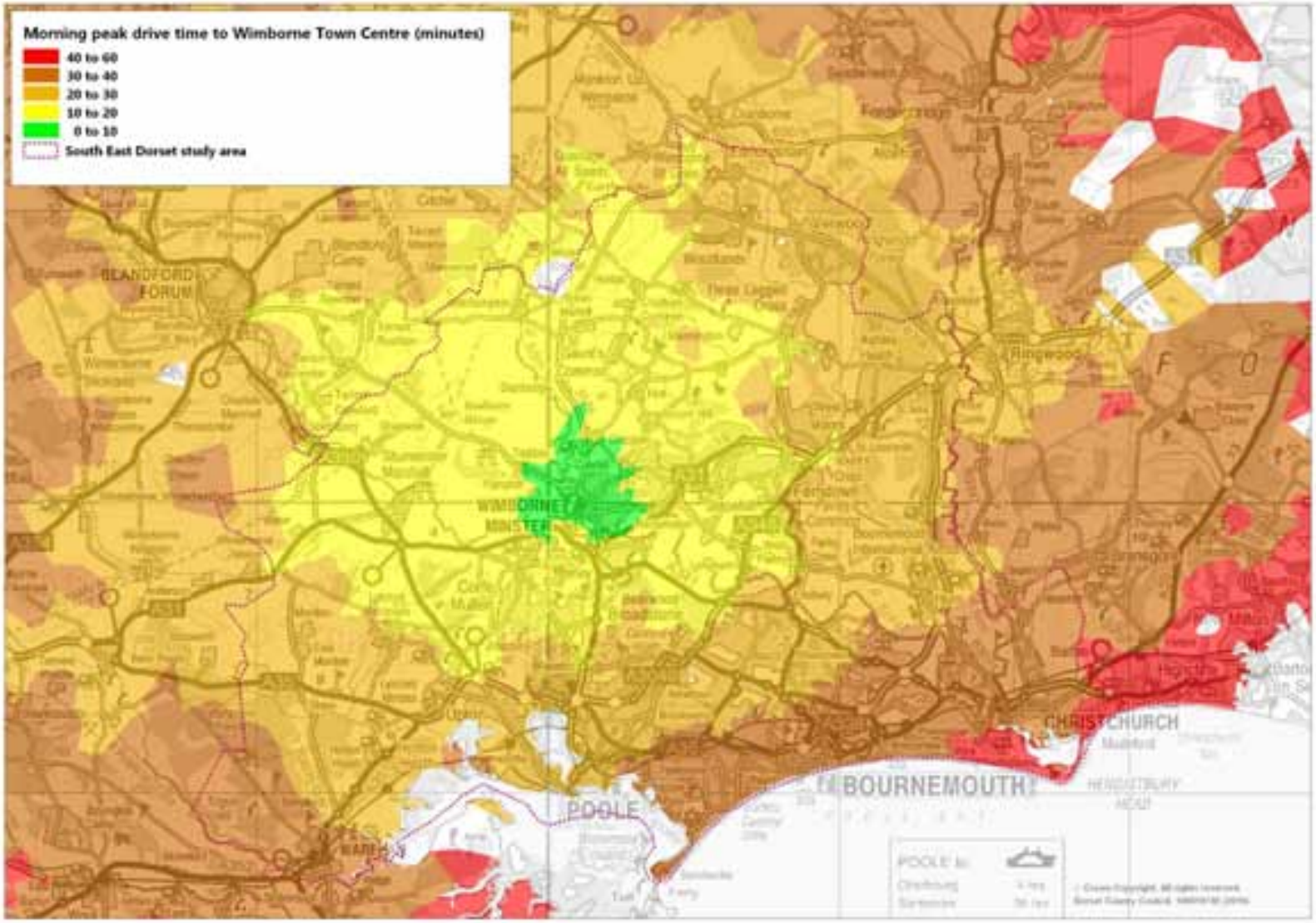


Figure D.16 – Morning Peak Drive Time to Poole Town Centre

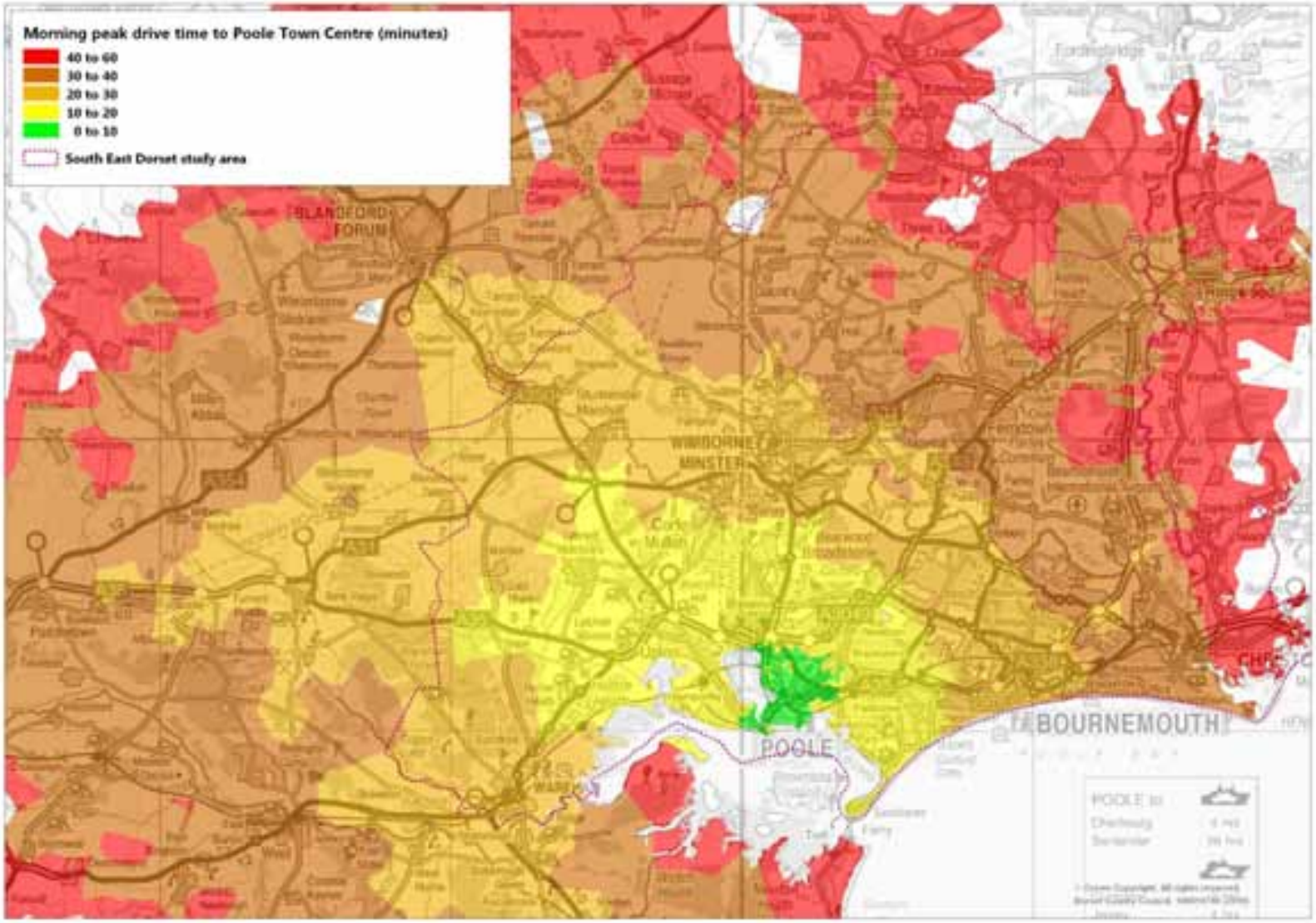


Figure D.17 – Morning Peak Drive Time to Bournemouth Town Centre

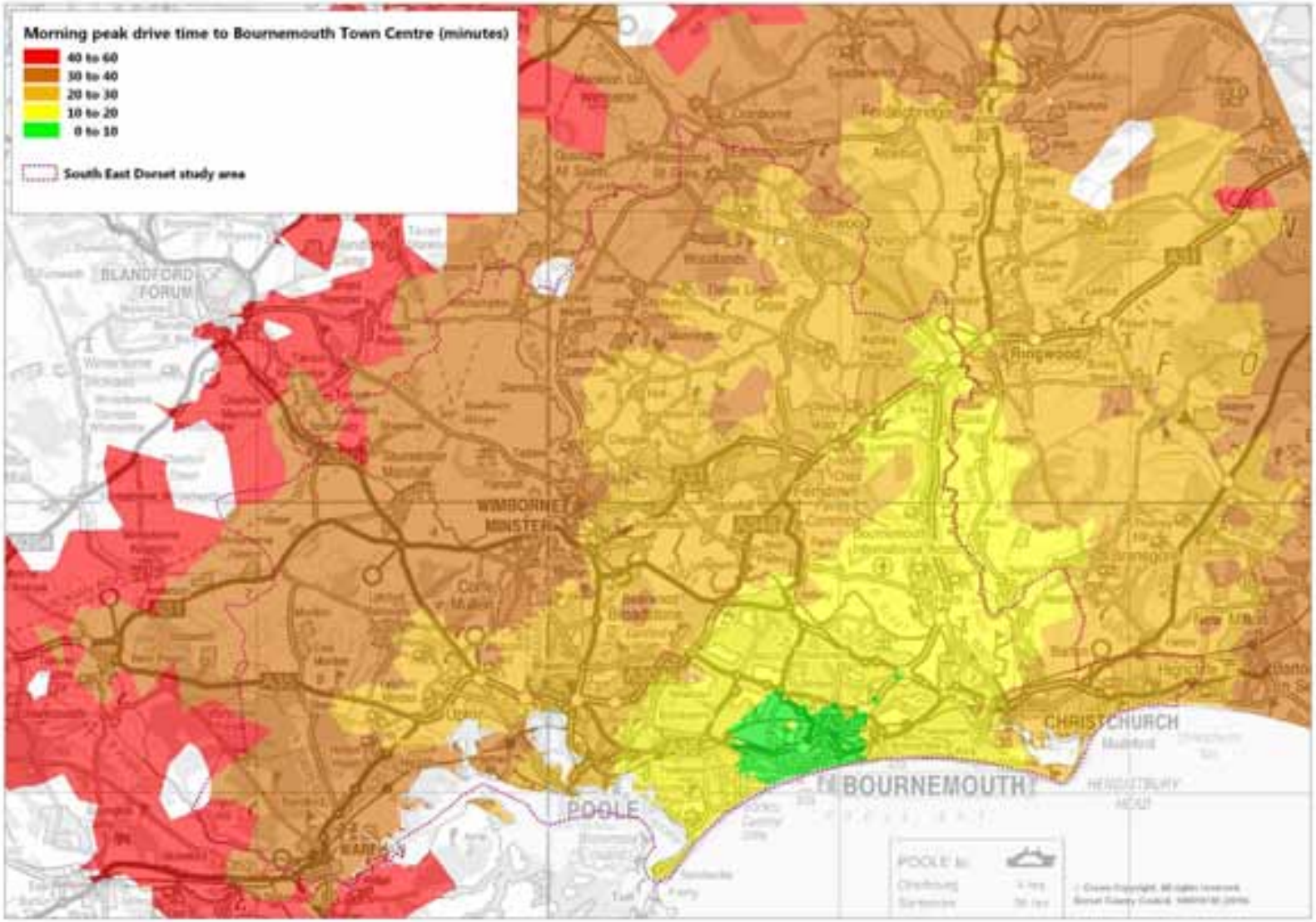
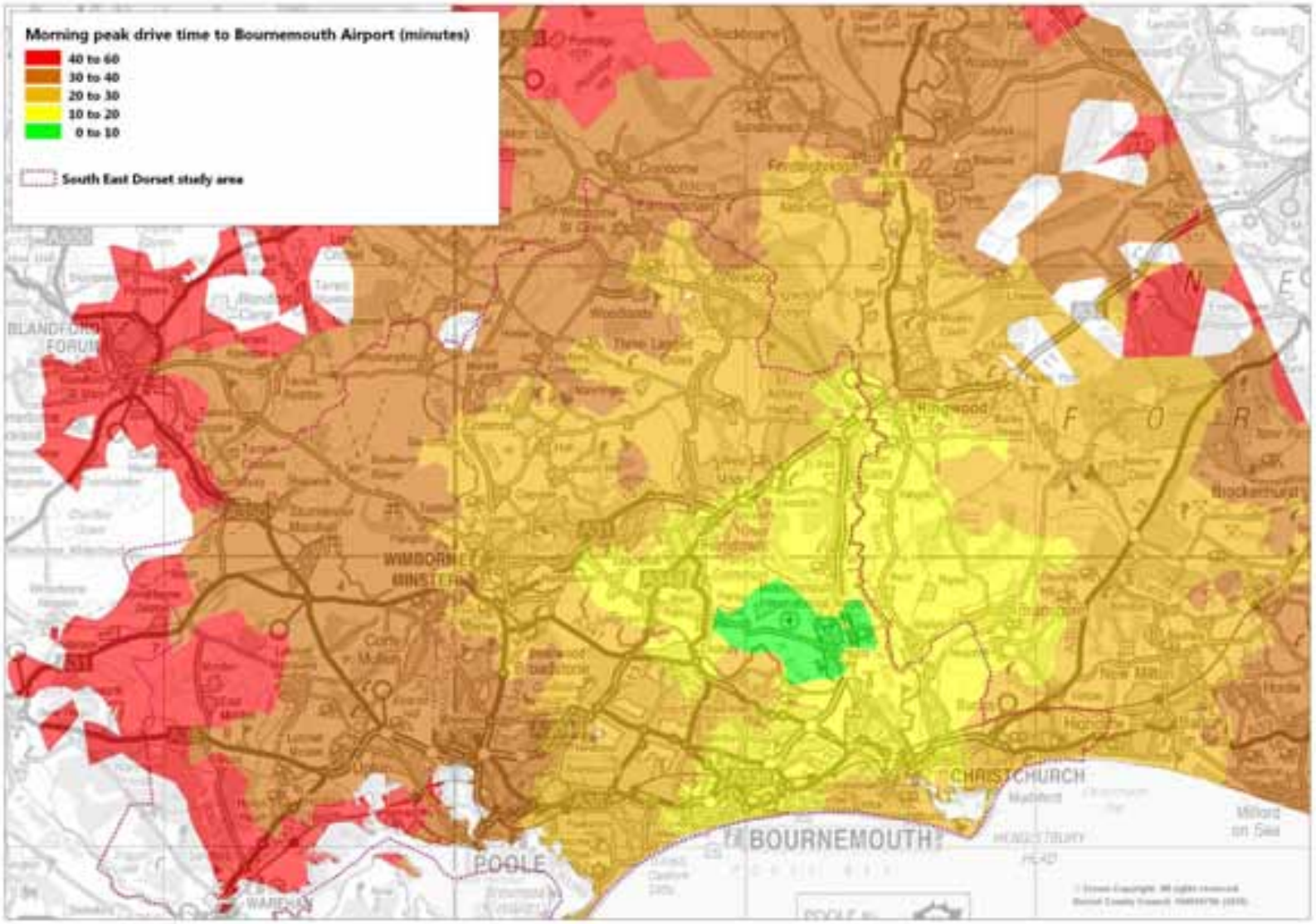


Figure D.18 – Morning Peak Drive Time to Bournemouth Airport



Appendix E – Consultation Leaflets

E.1 Problems & Issues Consultation Leaflet

South East Dorset Transport Study

SEDTS

Identifying the Transport Needs for South East Dorset

Summer 2009: An opportunity to have your say

DORSET County Council ATKINS Bournemouth Borough Council HIGHWAYS AGENCY

Background To The Study

Transport affects everyone in their daily lives whether it's travelling to work, school, college, the shops, the beach, the cinema or visiting friends.

Many of the things we do involve making a journey, whether on foot, by cycle or in a bus, train, taxi or car. The goods that we buy in shops will probably have been delivered by lorry or van.

Usually we want to be somewhere by a certain time and the congestion means that we have to allow more time for our journeys. We can't rely on reaching where we want to be on time. So we have to allow longer for the journey or risk being late.

Transport's also a subject on which almost everyone has a view. Often you hear people say the real problem is:

- There aren't enough buses and trains;
- Facilities for cyclists are poor;
- The road isn't wide enough for the amount of traffic;
- The buses are too slow;
- It's difficult for pedestrians to cross the road;
- The air quality is poor in some areas because of the traffic;
- The buses and trains are too expensive; or
- There are always delays and they've been getting worse, especially in the summer.

We're undertaking the study to identify the improvements that are needed over the next 20 years or so. By then there could be 15% more people living in the area and 45,000 extra jobs. Major schemes take a long time to plan and implement so we need to start developing them soon. We'll also be looking at measures that can be introduced quickly as part of the next Local Transport Plan which starts in 2011.

South East Dorset has probably fallen behind other areas of the South West in the amount of investment in transport. This study is aiming to change that, by providing the evidence to Government to justify improvements to the transport system.

In the first part of the study, we've collected data on how people travel at the moment within South East Dorset. This involved a series of interview surveys of people as they travelled around the area – at bus stops, train stations, car parks and during their journeys.

The next step is to get a clear understanding of what the situation is. We've got a pretty good idea of what the problems are. But we want to make sure we haven't missed anything. That's why we need you to take the opportunity to let us know what your views are.

A good quality transport system is essential to support the local economy and the quality of life for the people of South East Dorset. It must be developed sensitively to protect and enhance the special quality of our natural environment.

Transport consultant Atkins was chosen to carry out a study of the transport system in South East Dorset which runs for two years. They were appointed by a partnership group led by the Borough of Poole. The partnership includes:

- Borough of Poole;
- Bournemouth Borough Council;
- Dorset County Council;
- Highways Agency;
- Government Office for the South West;
- South West Councils; and
- South West Regional Development Agency.

The study area concentrates on the conurbation of Poole-Bournemouth-Christchurch and extends to Wareham, Verwood, and Ringwood.

We can't promise to solve all the problems but first of all we need to know what you think the problems are and which are the most important ones that should be given the highest priority when we develop solutions.

The rest of this newsletter gives the background to the study, the different stages (including when we will be asking you for your views about the schemes we develop) and its timetable. We've included a questionnaire in which we'd like you to identify what you think are the particular transport problems in South East Dorset.

We would be grateful if you could please spare a few moments to read this newsletter and complete the questionnaire.

Your views are important to us. You could win VIP tickets for the Bournemouth Air Festival on August bank holiday weekend by completing and returning the questionnaire by Friday 7th August 2009. Terms and conditions are on the website:

www.sedorsetmms.com

The Next Steps

The residents and visitors to South East Dorset, as well as those working in the area, now have the chance to have their say in this major transport study by filling in the questionnaire.

We will use the information to prepare a picture of the current problems for travel across the area. We will then explore how the problems change in the future as new housing is built and additional jobs are created.

We will develop a number of different strategies for resolving the transport problems. When we have assessed them, we will present them to you for your views in the second stage of consultation in spring 2010.

Contact Us

We hope that you will take the opportunity to express your views about the current problems on the transport system across South East Dorset.

These leaflets will be available in libraries, council offices and tourist offices where you will be able to set down your views. Please complete the questionnaire and post it back to us.

You can also access the questionnaire at the website:

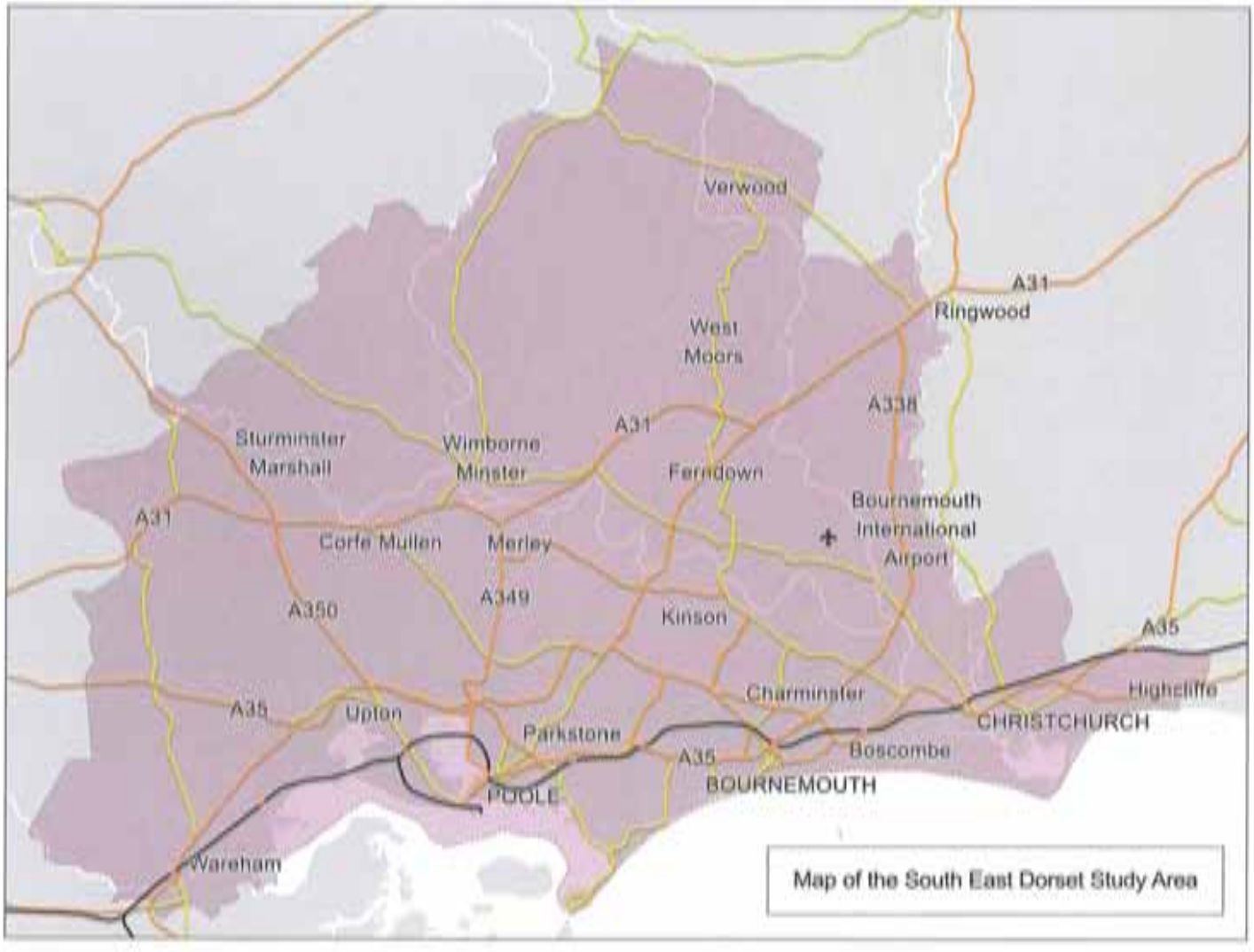
www.sedorsetmms.com

The website will be updated regularly to outline the study's progress. You will also be able to leave messages on the website at any time.

Alternatively, you can write to us at:

South East Dorset Transport Study Team,
Transportation Services, Borough of Poole,
St John's House, Serpentine Rd, Poole, BH15 2DX

Or email: SEDorset.transport@poole.gov.uk



Map of the South East Dorset Study Area

Questionnaire

Question 1:
Which method of transport do you use most often for each of the following journeys? Select only the most frequently used method.

	Car Driver	Car Passenger	Motorcycle	Bus	Train	Cycle	Walk	Other	N/A
Work (commuting)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9
Education	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9
Shopping	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9
Leisure / Social	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9
Health Care	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9

Question 2:
If you use a car for any of these journeys please say why. Please select up to 3 options.

Car is more convenient	☐ 1	Don't like using public transport	☐ 5	Cost of using public transport	☐ 9
Car is less stressful than alternatives	☐ 2	Personal disability makes it difficult	☐ 6	Indirect public transport route	☐ 10
Unreliable public transport	☐ 3	Takes too long without a car	☐ 7	Poor information on public transport services	☐ 11
It's too far to the nearest stop or station	☐ 4	Public transport does not run at suitable times	☐ 8	Other	☐ 12

Question 3:
If you currently use a car, what would encourage you to try other modes to make your journeys? Please select up to 3 options.

More frequent bus services	☐ 1	Cleaner public transport	☐ 8	Improved cycle lanes	☐ 15
Real-time bus information	☐ 2	Area-wide public transport tickets	☐ 9	Improved footpaths	☐ 16
Improved buses	☐ 3	Improved access to public transport	☐ 10	Improved personal security	☐ 17
More direct bus services	☐ 4	More reliable public transport	☐ 11	More pedestrian crossing facilities	☐ 18
Improved bus priority	☐ 5	More frequent rail services	☐ 12	Nothing – I will use my car anyway	☐ 19
Improved bus shelters	☐ 6	Improved station facilities	☐ 13	Other	☐ 20
Cheaper public transport	☐ 7	Improved trains	☐ 14		

Question 4:
How important are the following issues to you?

	Very Important	Important	Neutral	Not Important	Not At All Important	Don't Know
Air quality	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Climate change	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Access to key services	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Congestion management	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Quality of life	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Economic growth of the region	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Sustainable development of the region	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Road safety and security	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

Question 5:
Please consider the following statements about the existing transport in the South East Dorset area, and indicate to what extent you agree with them.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
Traffic congestion and delays are a major problem	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
A lack of funding prevents improvements to local transport	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
The transport system can't cope with growth in the local area	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
The transport system is put under too much pressure during peak holiday times	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Poor transport has worsened the quality of life in the area	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
The safety, security and health of local people are affected by a poor transport system	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
The air quality and impact on climate change can be improved by changes in how we travel	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
The bus system is an affordable transport option	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
The rail system is an affordable transport option	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
There is sufficient public transport available within the study area	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Cycling is not an attractive option due to a lack of cycling facilities in South East Dorset	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Walking is not an attractive option due to a lack of facilities in South East Dorset	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Access to Bournemouth International Airport by public transport is good	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Access to Bournemouth International Airport by car is good	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

Question 6:
Which approach to changes in the transport system do you most support? Please select one option.

	Preferred Approach
Established Approach: Support essential sustainable transport services and measures, but accept that the private car will be the main mode of transport for the foreseeable future.	☐ 1
Balanced Approach: Improve sustainable transport services and measures, and help to reduce reliance on private car in towns and cities.	☐ 2
Radical Approach: Prioritise sustainable transport services and measures, and discourage the use of the private car in urban areas.	☐ 3

Question 7:
What problems have you experienced, if any, in the following areas?

	Congestion	Parking	Poor road infrastructure	Poor public transport services	Poor walking/ cycling facilities	Other (Please state below)
Central Poole	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Central Bournemouth	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Central Christchurch	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Wimborne Minster	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Ferndown / Longham / Parley	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Ringwood	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Boscombe	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Ilford	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Parkstone / Branksome	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Wallisdown	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Hurn	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Northbourne	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
Wareham / Sandford	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
A31	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
A338 (Spur Road / Wessex Way)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	
A3049 (Dorset Way)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	

Question 8:
Please provide the post code in which you live and work. Note that all data will remain confidential. This information will be used purely for classification purposes, and will not allow responses to be individually attributed to respondents.

Live: Work:

Question 9:
Please indicate your age and gender.

	Under 16	16-25	26-35	36-45	46-55	56-65	Over 65
Male	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Female	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7

Question 10:
Do you have any disability that affects the way you travel?

No	☐ 1
Yes, please specify	☐ 2

Question 11:
Please indicate your working status.

Employed full-time	☐ 1
Employed part-time	☐ 2
Retired	☐ 3
Student	☐ 4
Stay at home caring for dependents	☐ 5
Unemployed	☐ 6
Voluntary worker	☐ 7
Other	☐ 8

Question 12:
In order to enter the free prize draw please complete your name and address:

Name:
Street:
Town:
Post code:

Please tick the box if you are willing to take part in further consultation ☐

If you have any other comments regarding transport in your area, please use the space below.

Please return this questionnaire to us FREEPOST, there is no need to include a stamp. Thank you for your time.

BUSINESS REPLY SERVICE
Licence No. BH53

2

SE Dorset Transport Study - Project Team
c/o TRANSPORTATION SERVICES
Borough of Poole
St John's House
Serpentine Road
POOLE
Dorset
BH15 2ZZ

An Opportunity To Have Your Say

Help us to help you

Please complete the questionnaire to provide your views on transport in South East Dorset. When you have completed the questionnaire, detach it and seal around the egde and post it back to us. If you return the questionnaire by Friday 7th August 2009 with your contact details, you could win VIP tickets to the Bournemouth Air Festival on the August bank holiday weekend.

Individuals should make one entry only, and the winner may be asked to participate in associated publicity. Full terms and conditions can be viewed on the website:

www.sedorsetmms.com

We appreciate your time spent completing the questionnaire and your response will be carefully considered when reviewing the proposals.

Under the Data Protection Act, the information which you have provided in this questionnaire will only be used in connection with this project. All responses will be kept confidential.

If you would like this information in a different format, for example Braille, audiotape, large print or another language please contact:

Rick Clayton

Telephone Number: 01202 262044

Email: SEDorset.transport@poole.gov.uk

DORSET County Council ATKINS Bournemouth Borough Council HIGHWAYS AGENCY

E.2 Strategy Options Consultation Leaflet

Welcome!

Thank you for picking up this leaflet. This is your chance to help shape the future of the transport network in South East Dorset.

Last year we asked for your views on the local transport system. Hundreds of questionnaires were filled in and from these we were able to build up a picture of the current problems.

We have now moved on to the next stage of the study. This has involved developing a wide range of options to deal with the problems raised during last year's consultations. These options will be tested using the study's computer model of South East Dorset's transport network.

Before we begin testing the options, we would like to hear your opinions.

Please take a few moments to read the information in this leaflet and complete the questionnaire. The questionnaire can be returned to the freepost address supplied. No stamp or envelope is needed!

Please return the questionnaire by **Friday 30th July 2010** to be entered into the prize draw for a chance to win a day out on the Swanage Railway.

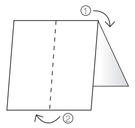
Alternatively the questionnaire may be completed online at www.sedorsetmms.com.

Comments

Do you have any further comments?

Under the Data Protection Act, the information which you have provided in this questionnaire will only be used in connection with this project. All responses will be kept confidential.

Please tear along perforation and fold as shown below.
Moisten gum flap, fold down and seal.



Please moisten gum flap, fold down and seal

Business Reply
License Number
BH53

SE Dorset Transport Study - Project Team
C/O Transportation Services
Borough Of Poole
St Johns House
Serpentine Road
Poole
Dorset
BH15 2ZZ

South East Dorset Transport Study

Transport affects everyone in their daily lives whether it's travelling to work, school, college, the shops, the beach, the cinema or visiting friends.

Many of the things we do involve making a journey, whether on foot, by bicycle or in a bus, train, taxi or car. The goods that we buy in shops will probably have been delivered by lorry or van.

Usually we want to be somewhere by a certain time and congestion means that we have to allow more time for our journeys. We can't rely on reaching where we want to be on time, so we have to allow longer for the journey or risk being late.

A good quality transport system is essential to support the local economy and the quality of life for the people of South East Dorset. It must be developed sensitively to protect and enhance the special quality of our natural environment.

In 2008, transport consultant Atkins was chosen to carry out a study of the transport system in South East Dorset. The study runs for two years and is due to be complete by the end of 2010. Atkins was appointed by a partnership group led by the Borough of Poole. The partnership includes:

- Borough of Poole;
- Bournemouth Borough Council;
- Dorset County Council;
- Highways Agency;
- Department for Transport;
- Government Office for the South West;
- South West Councils; and
- South West Regional Development Agency.

"Over 600 people filled in questionnaires and meetings were held with representatives from a variety of organisations in the area"

The study concentrates on the conurbation of Poole – Bournemouth – Christchurch, extending to Wareham, Wimborne, Verwood and Ringwood.

The study will identify the improvements that are needed over the next 20 years or so. Major transport schemes take a long time to plan and deliver, so we need to start developing them soon.

In the first part of the study (during 2008) we collected data on how people currently travel around South East Dorset. This involved interview surveys of people as they travelled around the area. From this data we were able to build a computer model of the transport network. The computer model will be used to test a range of alternative transport schemes.

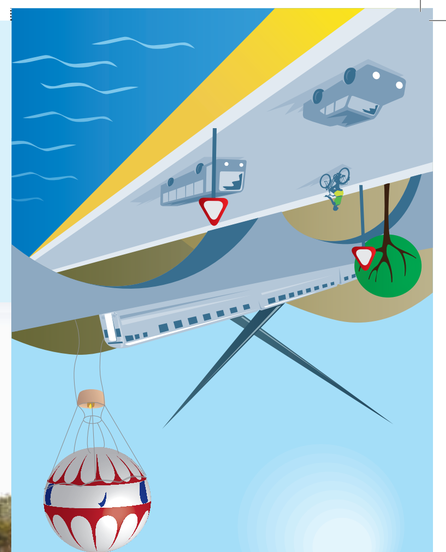
In the second part of the study (during 2009) we asked you to give us your views on the problems and issues with South East Dorset's transport network. Over 600 people filled in questionnaires. Meetings were held with representatives from a variety of organisations in the area. By combining people's opinions with the transport data collected in 2008, we were able to build up a detailed picture of the problems.

What will be happening next?

Before we begin testing the options, we would like to hear your opinions on the types of schemes that you would or would not like to see delivered. You can have your say by filling in the questionnaire included with this leaflet and posting it to the freepost address provided.

We will use your feedback to help narrow down the options, so that by September 2010 we will have a 'preferred strategy'. We will then give everyone the opportunity to comment on the proposals before a final decision is made on whether the strategy should be adopted by the local authorities.

The local authorities will then include the strategy in the Local Transport Plan.



South East Dorset Transport Strategy

Have your Say

Summer 2010

SEDTS

Problems & Issues – What You Told Us

Last year we asked for your views on the local transport system.

Here are some of the things that you told us:

"Cycling and walking routes need to be improved to encourage people to switch from using their car."

"Most people thought that growth in travel demand should be met by improved public transport, with some improvements to the road network."

"You want to be able to use the same ticket on different bus and rail services, rather than having a separate ticket for each service operator."

"Many people said that public transport fares are quite high. People also want to see more direct, more frequent and more reliable bus services right across South East Dorset."

"Improvements are needed to bus services to/from towns and villages in the surrounding countryside. At the moment there are few alternatives to using a car."

"The majority of people would prefer a 'balanced approach' to improving the transport system, as this would help reduce reliance on the private car particularly in built-up areas."

"It is difficult to reach Bournemouth Airport using public transport."

"Many people said that the A31 must be improved to reduce congestion and that new road links are needed for Poole."

Contact Us

Thank you for taking the time to express your views on the options for South East Dorset's transport system.

If you would like further information then you can contact us by:

EMAIL sedorset.transport@poole.gov.uk

01202 262044

POST South East Dorset Transport Study,
Transportation Services, Borough of Poole,
St John's House,Serpentine Rd,
Poole, BH15 2DX

WWW www.sedorsetmms.com

If you would like this leaflet in a different format, for example Braille, audiotape, large print or another language then please contact Rick Clayton. Telephone: 01202 262044.
E-mail: sedorset.transport@poole.gov.uk

Transport partnership by:

Bournemouth Borough Council · Dorset County Council · ATKINS · Highways Agency · South West of England Regional Development Agency

South East Dorset: Transport Themes

We have developed four themes based on the problems and issues that you told us about last year. These themes cover a full range of measures. The strategy that we select for South East Dorset will depend on the findings from this questionnaire and the results of assessments using the study's computer model of the transport network. The chosen strategy would be delivered between 2011 and 2026.

Important Note
These themes have been designed to generate discussion and feedback from the consultation process. The themes show the different ways in which measures could be combined to create completely different transport strategies to 2026. The final preferred strategy may not necessarily be one of these themes, but could be a combination of measures from across the themes. The final strategy would depend on consultation feedback and on how well schemes perform when using the computer model.

Theme A: Do-minimum

This theme would mean that we continue with our current policies and the type of transport measures that have been delivered over the last few years. This would need limited funding compared with the other themes. We would continue to deliver the following measures:

Greener Choices
- Promoting 'greener' travel options in workplaces and schools
- Some new cycle lanes and improvements for pedestrians

Public Transport
- Small-scale measures to improve bus reliability, such as new bus lanes
- Continue with community transport schemes
- Better information for passengers

Roads
- Twin Sails Bridge (new Poole Harbour bridge)
- Improve traffic signal timings to help traffic flow
- Local road safety schemes

How well might this perform?

Supporting the economy	--
Reducing Carbon emissions	++
Improving safety, security and health	++
Helping to achieve a fairer society	++
Improving everyone's quality of life	++
How easy would this be to deliver?	+
How affordable is this?	+

Theme B: Public transport improvements and 'greener' choices

This theme includes everything from Theme A plus more investment in public transport and 'greener' choices schemes.

Greener Choices
Same as Theme A, plus:
- Better walking and cycling access to rail stations
- Car clubs and car sharing schemes

Public Transport
Same as Theme A, plus:
- Measures to improve bus reliability, reduce journey times and improve bus stops along entire corridors – see map (Poole to Christchurch, Wallisdown Road, Bear Cross to Christchurch, Bear Cross to Poole along Ringwood Road, Charminster Road)
- Park & Ride sites at Creekmoor, Mannings Heath and Riverside Avenue (near Bournemouth Hospital)
- Network of faster express bus services to rural areas
- Smartcard ticketing (similar to London Oyster card)
- More community transport schemes
- More frequent rail services across the area (between Wareham and Brockenhurst)

Roads
Same as Theme A, plus:
- A31 widening at Ringwood and improvements at Canford Bottom
- Local junction improvements and new traffic control centre
- Parley Lane / Christchurch Road (B3073) improvements and widening near the airport
- Increased car parking charges in town centres and fewer long-stay parking spaces. Long-stay parking would be provided by the Park & Ride sites instead

How well might this perform?

Supporting the economy	++
Reducing Carbon emissions	+
Improving safety, security and health	+
Helping to achieve a fairer society	++
Improving everyone's quality of life	++
How easy would this be to deliver?	+
How affordable is this?	++

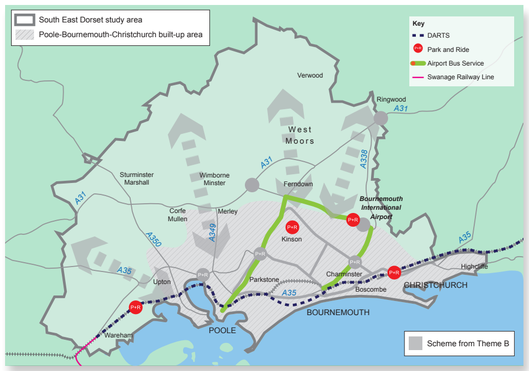
Theme C: More ambitious public transport and 'greener' choices, while discouraging car-based commuting

This theme includes everything from Themes A and B plus major investment in public transport and 'greener' choices schemes. A charge on workplace parking spaces and increased long-stay parking charges would be needed to fund these schemes.

Greener Choices
Same as Themes A and B, plus:
- Promote greener and healthier travel choices such as walking and cycling
- Encourage more environmentally friendly driving styles (eco-driving)
- Infrastructure for alternative fuel vehicles (such as electric car charging points)

Public Transport
Same as Themes A and B, plus:
- Dorset Area Rapid Transit System. Light rail from Wareham to New Milton using the existing rail line and on-street through Bournemouth. Vehicles would operate at least every 12 minutes
- More Park & Ride sites – at Christchurch (rail), New Road (Kinson), Holton Heath (rail) and Bournemouth Airport
- Improved express bus connections to/ from the airport
- Providing through trains to Swanage

Roads
Same as Themes A and B, plus:
- A charge on workplace parking spaces
- Reduced long-stay parking with increased charges in town centres
- Controlled parking zones to reduce on-street parking by non-residents



How well might this perform?

Supporting the economy	+
Reducing Carbon emissions	+
Improving safety, security and health	+
Helping to achieve a fairer society	++
Improving everyone's quality of life	+
How easy would this be to deliver?	--
How affordable is this?	--

Theme D: Highway and public transport improvements, while controlling demand for travel by car

This theme includes everything from Themes A and B along with an emphasis on increasing road capacity. A congestion charge would be needed to control traffic levels and to fund these schemes.

Congestion charging has been included in this theme to ensure that the process has considered all options. However it does not currently form part of the local authorities' policies.

Greener Choices
Same as Themes A and B

Public Transport
Same as Themes A and B

Roads
Same as Themes A and B, plus:
- Turning the A31 into a dual-carriageway between Ameysford and Merley
- New link road between Canford Bottom and Mannings Heath (A31 to Poole)
- Relief road in the Castle Lane West area and improvements from Riverside to Ilford
- Improvements to the Blackwater junction near the airport
- New East-West road link between Parley and Mannings Heath
- Widening the A338 Bournemouth Spur between the Blackwater and Cooper Dean junctions
- Improvements to St Paul's Roundabout, Cambridge Road junction, Fountain Roundabout and Stony Lane

and...
- A congestion charge (per km) across the built-up area of Poole, Bournemouth and Christchurch
- A charge on workplace parking spaces and doubled long-stay parking charges in town centres

How well might this perform?

Supporting the economy	+
Reducing Carbon emissions	--
Improving safety, security and health	++
Helping to achieve a fairer society	++
Improving everyone's quality of life	++
How easy would this be to deliver?	--
How affordable is this?	--

Questionnaire

We are keen to hear your views on the four transport themes for South East Dorset that are described in this leaflet. Please answer the questions below, detach the questionnaire and send to the freepost address provided. No stamp or envelope is needed!

Please return the questionnaire by **Friday 30th July 2010** to be entered into the prize draw for a chance to win a day out on the Swanage Railway. Individuals should make ONE entry only and the winner may be asked to participate in associated publicity. Full terms and conditions can be viewed at www.sedorsetmms.com. **The questionnaire may be completed online at www.sedorsetmms.com.**

1 Do you agree or disagree that the following types of measures should be included in the preferred strategy?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
Initiatives to encourage 'greener' travel	☐	☐	☐	☐	☐	☐
Walking and cycling routes	☐	☐	☐	☐	☐	☐
Public transport – bus	☐	☐	☐	☐	☐	☐
Public transport – Park & Ride	☐	☐	☐	☐	☐	☐
Public transport – rail and rapid transit	☐	☐	☐	☐	☐	☐
Improving existing roads	☐	☐	☐	☐	☐	☐
Building new road links	☐	☐	☐	☐	☐	☐
Measures to reduce private car use	☐	☐	☐	☐	☐	☐

2 How important would the following public transport measures be to you?

	Very important	Important	Neutral	Not important	Not at all important	Don't know
Dorset Area Rapid Transit System (see Theme C)	☐	☐	☐	☐	☐	☐
Rail services: more frequent trains on existing lines	☐	☐	☐	☐	☐	☐
Rail services: through trains to Swanage	☐	☐	☐	☐	☐	☐
Park & Ride sites serving Bournemouth	☐	☐	☐	☐	☐	☐
Park & Ride sites serving Christchurch	☐	☐	☐	☐	☐	☐
Park & Ride sites serving Poole	☐	☐	☐	☐	☐	☐
New faster bus services to rural areas	☐	☐	☐	☐	☐	☐
Improved bus connections to Bournemouth Airport	☐	☐	☐	☐	☐	☐
More frequent and reliable buses	☐	☐	☐	☐	☐	☐
Improved passenger information at bus stops	☐	☐	☐	☐	☐	☐
Public transport Smartcards (similar to Oyster in London)	☐	☐	☐	☐	☐	☐

3 How important would the following measures be to you?

	Very important	Important	Neutral	Not important	Not at all important	Don't know
New walking and cycling links in towns	☐	☐	☐	☐	☐	☐
New walking and cycling links in the countryside	☐	☐	☐	☐	☐	☐
Improved walking and cycling access to rail stations	☐	☐	☐	☐	☐	☐
Improved walking and cycling access to workplaces	☐	☐	☐	☐	☐	☐
Car clubs and car sharing	☐	☐	☐	☐	☐	☐
Promoting alternative fuel vehicles	☐	☐	☐	☐	☐	☐

4 To what extent would you agree or disagree with the following road measures?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
Junction alterations to reduce congestion	☐	☐	☐	☐	☐	☐
Widening the A31 around Wimborne	☐	☐	☐	☐	☐	☐
Widening the A338 Bournemouth Spur Road	☐	☐	☐	☐	☐	☐
New link road between Poole and A31	☐	☐	☐	☐	☐	☐
New roads to relieve congestion around Castle Lane and Ilford	☐	☐	☐	☐	☐	☐
New East-West link road between Parley and Mannings Heath	☐	☐	☐	☐	☐	☐
Road improvements around Bournemouth Airport	☐	☐	☐	☐	☐	☐

5 To what extent would you agree or disagree with the following measures to reduce private car use?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
Fewer long-stay parking spaces in town centres	☐	☐	☐	☐	☐	☐
Increased parking charges (perhaps doubled) in town centres	☐	☐	☐	☐	☐	☐
Controlled parking zones to prevent parking by non-residents	☐	☐	☐	☐	☐	☐
A charge on workplace parking spaces	☐	☐	☐	☐	☐	☐
Congestion charging across the built up area	☐	☐	☐	☐	☐	☐
Allocate more road space to public transport / cycling / walking	☐	☐	☐	☐	☐	☐

6 To what extent would you agree or disagree with measures to reduce private car use if...

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
No improvements were made to public transport	☐	☐	☐	☐	☐	☐
Any money raised was used to fund public transport improvements	☐	☐	☐	☐	☐	☐
Any money raised was used to fund road improvements	☐	☐	☐	☐	☐	☐

7 Please provide the postcode in which you live and work. Note that all data will remain confidential. This information will be used purely for classification purposes, and will not allow responses to be individually attributed to respondents.

Live: ..... Work: .....

8 Please indicate your age and gender:

Male ☐ Female ☐

Under 16	16-25	26-35	36-45	46-59	60-65	Over 65
☐	☐	☐	☐	☐	☐	☐

9 Do you have any disability that affects the way you travel?

No ☐ Yes ☐ Please Specify: .....

10 Do you use a car for any of the following journeys?

- Travelling to healthcare appointments ☐
- Travelling to school / college ☐
- Work / commuting ☐
- Shopping / Leisure ☐

11 Please indicate your working status:

Employed full-time	Employed part-time	Retired	Stay at home carer	Student	Unemployed	Voluntary worker	Other
☐	☐	☐	☐	☐	☐	☐	☐

Where did you pick up this leaflet? .....

If you have any further comments then please use the space provided overleaf.

In order to enter the free prize draw please provide your name and address:

Name: .....

Address: .....

.....

Postcode: .....

Thank you for completing this questionnaire

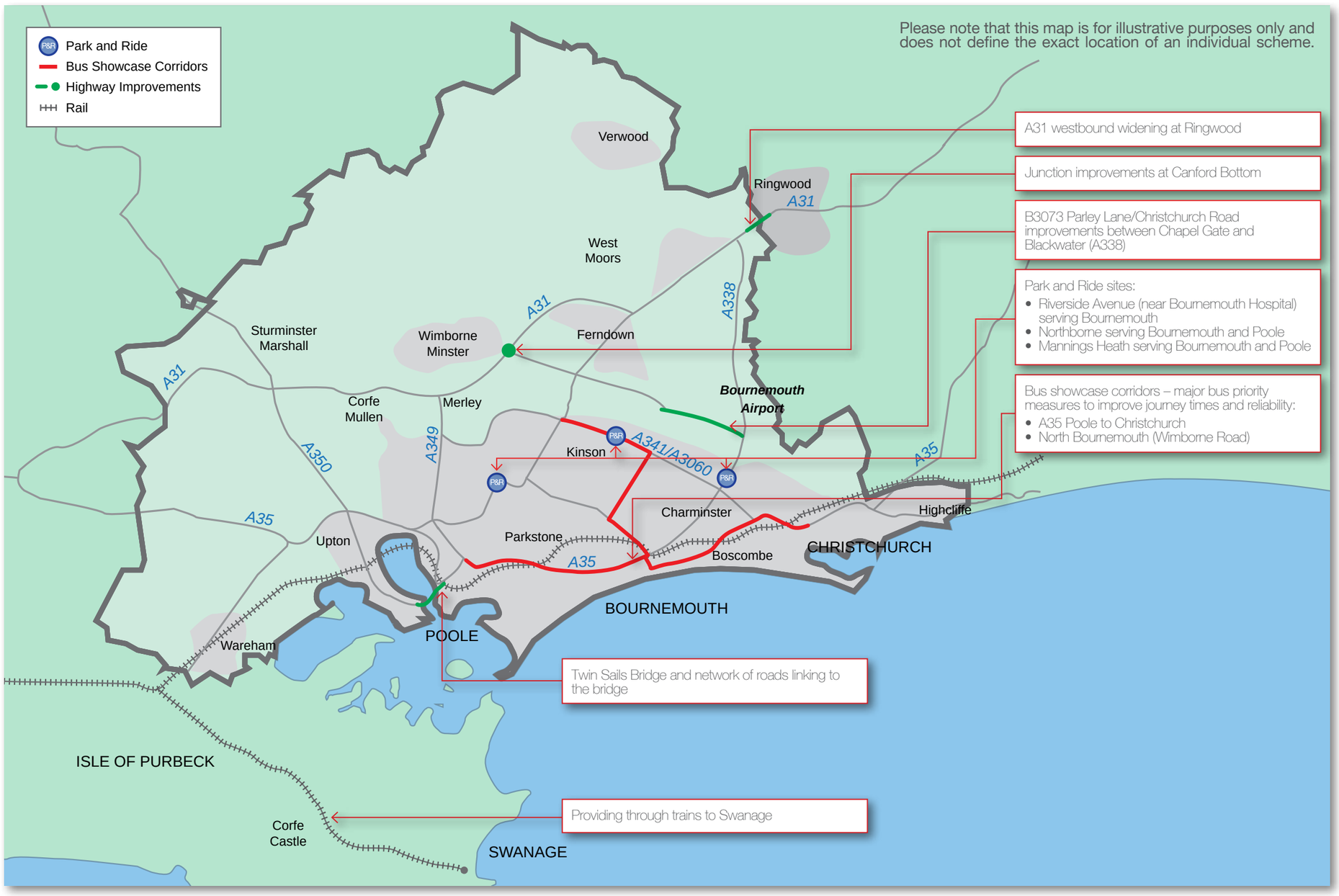
Please moisten gum flap, fold down and seal

E.3 Preferred Strategy Consultation Leaflet

Short and Medium Term Measures (up to 2020)

Across the Study Area

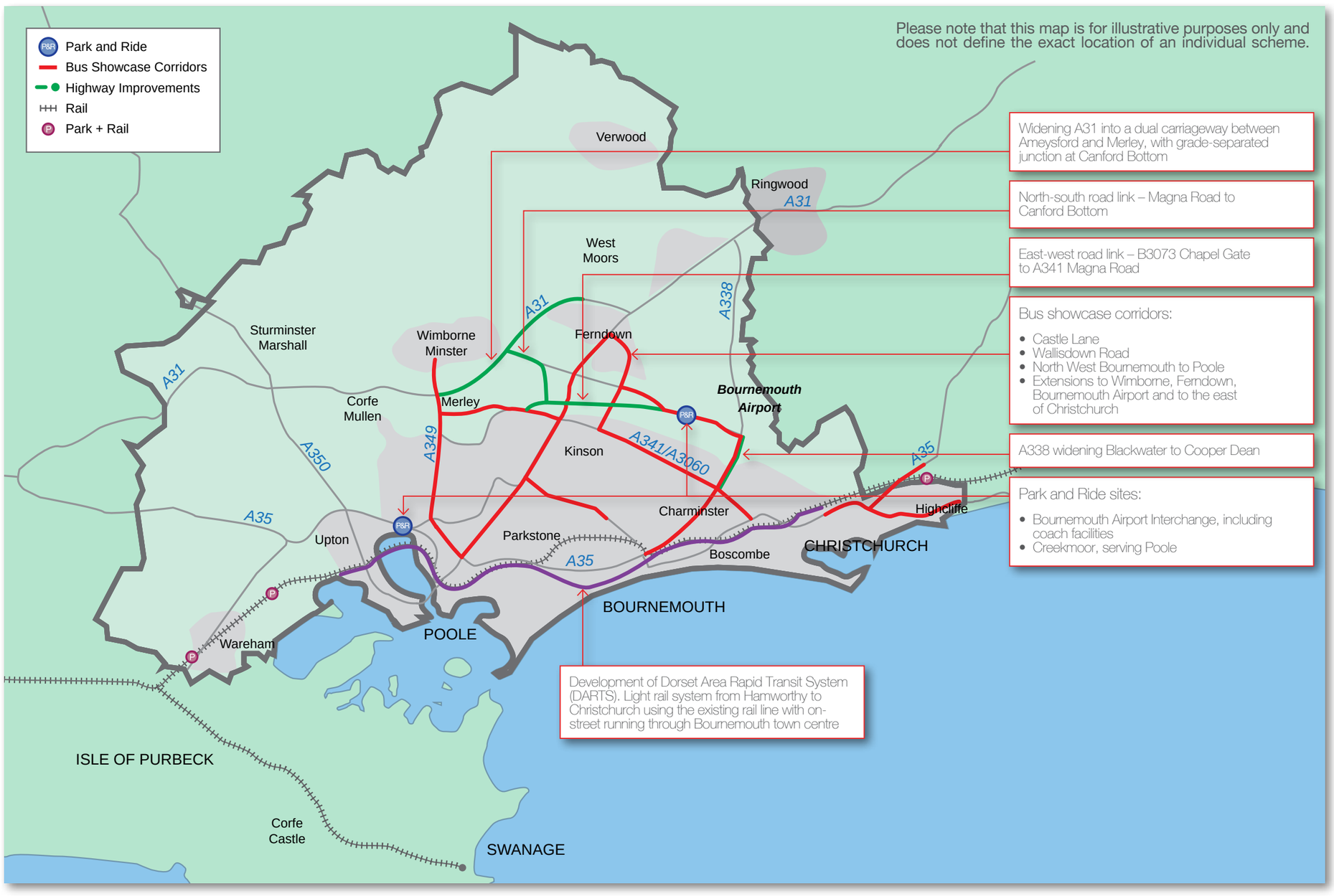
- Promoting 'greener' travel options, through travel plans, new car clubs, promotion of car sharing, promotion of teleworking and teleconferencing and travel awareness campaigns
- Personalised Travel Planning
- Improved broadband
- Comprehensive cycle network
- Increased cycle parking and improved pedestrian access to stations and town centres
- Improvements to walking routes including better crossing facilities, pavement surfaces and addressing parking on pavements
- Locate development close to public transport corridors and plan developments to encourage walking and cycling
- Introduce charging points for electric vehicles
- Express buses to outlying areas
- Community led bus services
- Increased rail frequency between Wareham and Brockenhurst
- Smartcard ticketing on buses and trains
- Quality passenger information along routes, shopping centres, libraries and offices
- Integrated Transport Authority (Bournemouth, Poole and Dorset)
- Designate lorry routes and produce updated freight map
- Junction improvements including revised traffic signal timings
- Creation of joint Traffic Control Centre
- Better driver information via Internet and Variable Message Signs
- Increased car parking charges in town centres and fewer long stay parking spaces, linked to Park and Ride improvements



Long Term Measures (beyond 2020)

Across the Study Area – build on the success of short and medium term measures including support of 'greener' travel options. The map below illustrates the measures required in the longer term, assuming the short and medium term measures shown above are implemented.

The different measures in this strategy are draft recommendations for new infrastructure and changes to local transport policies up to 2026. These changes are needed to accommodate the expected increases in housing and the growth of the local economy, while maintaining the quality of life in the area and helping to tackle climate change. Over the longer term, significant additional infrastructure will be required. This includes completion of the bus showcase corridor system with complementary Park & Ride sites, increased rail frequency alongside development of a light rail system, and a number of road building schemes.



Questionnaire

We are keen to hear your views on the different potential measures for South East Dorset described in this leaflet. Please answer the questions below, detach the questionnaire and send to the freepost address provided by 28 February 2011. No stamp or envelope is needed!

1 Do you support the strategies outlined in this leaflet?

	Yes	No	Don't Know
A. Short and Medium Term Measures	☐	☐	☐
B. Long Term Measures	☐	☐	☐

2 What **3 proposals** do you think are the most important in order to improve transport in the study area in the short/ medium term? What **3 proposals** do you think are the most important in order to improve transport in the study area in the Long Term? Please tick a maximum of 3 boxes in each column below.

	Short/ Medium Term	Long Term
A. Improved walking and cycling network	☐	☐
B. Bus showcase corridors	☐	☐
C. Park and Ride	☐	☐
D. Providing through trains to Swanage	☐	☐
E. Increased rail frequency between Wareham and Brockenhurst	☐	☐
F. Dorset Area Rapid Transit System (DARTS)	☐	☐
G. Greener travel options – travel plans, car clubs, car sharing, travel awareness campaigns	☐	☐
H. Increased parking charges	☐	☐
I. Smartcard ticketing on buses and trains	☐	☐
J. Quality passenger information at transport interchanges and stops	☐	☐
K. Junction improvements	☐	☐
L. Widening A31 between Ameysford and Merley	☐	☐
M. Improvements to B3073 Chapel Gate – Airport – A338	☐	☐
N. New highway link west of airport to Ringwood Road and Canford Bottom	☐	☐
O. Better driver information through improved communications and Variable Message Signs	☐	☐

3 What **3 proposals** do you think are least suitable for the South East Dorset area? Please tick a maximum of 3 boxes.

A. Improved walking and cycling network	☐
B. Bus showcase corridors	☐
C. Park and Ride	☐
D. Providing through trains to Swanage	☐
E. Increased rail frequency between Wareham and Brockenhurst	☐
F. Dorset Area Rapid Transit System (DARTS)	☐
G. Greener travel options – travel plans, car clubs, car sharing, travel awareness campaigns	☐
H. Increased parking charges	☐
I. Smartcard ticketing on buses and trains	☐
J. Quality passenger information at transport interchanges and stops	☐
K. Junction improvements	☐
L. Widening A31 between Ameysford and Merley	☐
M. Improvements to B3073 Chapel Gate – Airport – A338	☐
N. New highway link west of airport to Ringwood Road and Canford Bottom	☐
O. Better driver information through improved communications and Variable Message Signs	☐

4 Please provide the postcode in which you live and work. Note that all data will remain confidential. This information will be used purely for classification purposes, and will not allow responses to be individually attributed to respondents.

Live: ..... Work: .....

5 Please indicate your age and gender:

Male ☐ Female ☐

Under 16 ☐ 16-25 ☐ 26-35 ☐ 36-45 ☐ 46-59 ☐ 60-65 ☐ Over 65 ☐

6 Do you have any disability that affects the way you travel?

No ☐ Yes ☐ Please Specify: .....

7 Do you have access to a car for any of the following journeys? Please tick all that apply, even if you choose not to use a car when one is available.

A. Work / commuting	☐
B. Shopping / leisure	☐
C. Travelling to school / college	☐
D. Travelling to healthcare appointments	☐

8 Please indicate your working status:

Employed full-time ☐ Employed part-time ☐ Retired ☐ Student ☐ Stay at home carer ☐ Unemployed ☐ Voluntary worker ☐ Other ☐

9 Do you have any further comments?

.....

.....

.....

.....

.....

.....

Where did you pick up this leaflet? .....

Under the Data Protection Act, the information which you have provided in this questionnaire will only be used in connection with this project. All responses will be kept confidential.

Business Reply
Licence Number
BH53

SE Dorset Transport Study - Project Team
C/O Transportation Services
Borough Of Poole
St John's House
Serpentine Road
Poole
Dorset
BH15 2ZZ

SEDTS

South East Dorset Transport Strategy

Preferred Strategy – Have Your Say

Winter 2010/11

In the first part of the study (during 2008) we collected data on how people travel around South East Dorset involving a range of interview surveys. From this data we were able to build a computer model of the transport network. The computer model has been used to assess the impacts of a range of transport scheme options.

The South East Dorset Transport Study (SEDTS) has been reviewing the area's long term transport needs and is now reaching its conclusions.

The SEDTS concentrates on the conurbation of Poole – Bournemouth – Christchurch, extending to Wareham, Verwood and Ringwood.

The study has identified the improvements that are needed over the next 20 years or so and as major transport schemes take a long time to plan and deliver, we need to start developing them soon.

This leaflet summarises the measures in the draft strategy divided into short/medium and long term.

In 2009 we asked you to give us your views on the problems and issues with South East Dorset's transport network. Over 600 people filled in questionnaires and meetings were held with representatives from a variety of organisations in the area. By combining people's opinions with the transport data collected in 2008, we were able to build up a detailed picture of the problems.

Last summer we asked for your opinions on a number of transport themes based on the problems and issues established in the earlier rounds of consultation. We received over 2000 responses and also held a number of meetings and exhibitions across the study area.

Full details are available on the study's website www.sedorsetmms.com

The views received during consultation have been fully considered and combined with technical work looking at value for money, environmental impacts and engineering operational feasibility.

Study Information

What happens next?

Before we finalise our strategy, we would like to hear your opinions on the types of measures that you would like to see delivered over the next 20 years as part of the final strategy. You can have your say by filling in the questionnaire included with this leaflet and posting it to the freepost address provided.

We will use your feedback to help decide on the South East Dorset Transport Strategy which will then be adopted by Bournemouth Borough Council, Dorset County Council and Borough of Poole in spring 2011 as part of the third Local Transport Plan.

By 2026 on current projections, there could be more than 33,000 extra houses in South East Dorset. If no improvements are made to the transport system, overall vehicle mileage is predicted to increase by 30% in peak periods, with delays and related congestion set to more than double. To ensure this does not occur, we have identified those measures that could be introduced in the short/medium and long terms; these are highlighted in this leaflet. In parallel with this consultation, we will be preparing a detailed implementation programme for the measures included in the strategy.

Following the outcome of the Comprehensive Spending Review announced by the Chancellor in October, it is clear that the resources available for transport improvements will be limited in the short to medium term.

In the short term, the programme will therefore concentrate on low cost measures designed to make better use of the existing transport infrastructure and services; this will include initiatives to make everyone more aware of the alternative ways that are already available of travelling around South East Dorset.

At the same time, we will start to plan the major transport improvements, many of which will have a long lead time to implementation.

Many of the initiatives that we have identified will require funding from government covering at least part of their costs. We will therefore be preparing the evidence demanded by government to support our requests for funding. At the same time, we will need to be flexible about the contents of the strategy, taking into account the speed of developments, other local initiatives and changes to government policy.

The benefit of the work that we have carried out so far is that we have developed a strong evidence base, including an up-to-date transport model. This should put us ahead of other local authorities who will be competing with us for the scarce government funds.

As we take forward each of the schemes, we will need to carry out a more detailed assessment which will often include further consultation with you on the precise details of the measures.

Contact Us

Thank you for taking the time to express your views on the options for South East Dorset's transport system.

If you would like further information then you can contact us by:

EMAIL sedorset.transport@poole.gov.uk

01202 262044

POST South East Dorset Transport Study,
Transportation Services, Borough of Poole,
St John's House, Serpentine Rd,
Poole, BH15 2DX

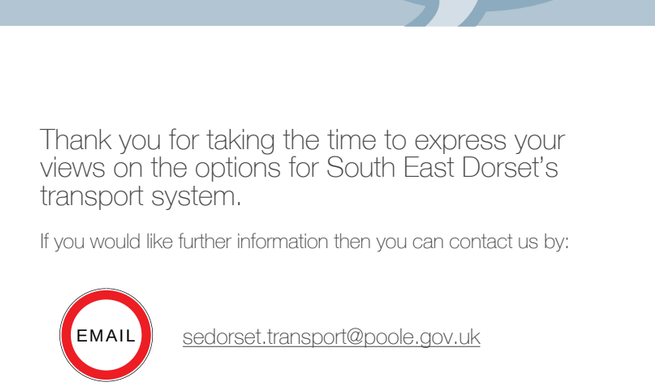
WWW www.sedorsetmms.com

If you would like this leaflet in a different format, for example Braille, audiotape, large print or another language then please contact Rick Clayton.

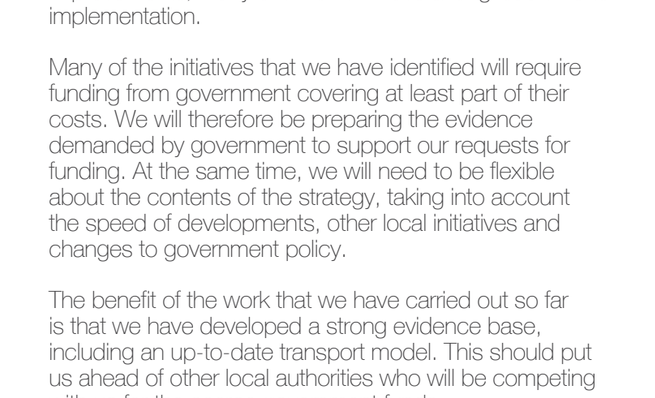
Telephone: 01202 262044

E-mail: sedorset.transport@poole.gov.uk

"Cycling and walking routes need to be improved to encourage people to switch from using their car."



"Improvements are needed to bus services to/from towns and villages in the surrounding countryside. At the moment there are few alternatives to using a car."



Transport partnership by:

Bournemouth Borough Council · Dorset County Council · ATKINS · Highways Agency · South West of England Regional Development Agency

Appendix F – Strategic Appraisal Framework

F.1 Public Transport

a) Brockenhurst to Ringwood rail connection

b) A35 Poole to Christchurch BSC

c) North Bournemouth BSC

d) Wallisdown to Bournemouth BSC

e) Castle Lane BSC

f) Poole to North West Bournemouth BSC

g) Extended Bus Showcase Corridors

h) Dorset Area Rapid Transit System

i) Express bus services - network of routes to rural areas

j) Park & Ride sites (3): Creekmoor, Mannings Heath & Riverside Avenue

k) Park and Ride sites (8): Creekmoor, Mannings Heath, Riverside Avenue, Northbourne, Hinton Admiral, Holton Heath, Wareham (Park and Rail), Bournemouth International Airport (Hub/Interchange)

l) More frequent rail services across the area (between Wareham and Brockenhurst)

m) Smartcard ticketing (similar to London Oyster card)

n) Re-opening of the Swanage rail line with potential Park & Ride

o) Water Taxi Service

Table 1 - Strategic Appraisal of Public Transport Measures

r Adverse, 4= Neutral, 7= Major Benefi	1a) Brockenhurst to Ringwood rail connection	1b) Bus Showcase Corridors	1c) Dorset Area Rapid Transit System	1d) Express bus services - network of routes to rural areas	1e) Park & Ride sites (x3)	1f) Park and Ride sites (x8)	1g) More frequent rail services across the area (between Wareham and Brockenhurst)	1h) Smartcard ticketing (similar to London Oyster card)	1i) Re-opening of the Swanage rail line with potential Park & Ride	1i) Water Taxi Service
Support economic competitiveness and	5	6	7	5	6	6	6	6	7	5
Tackle climate change	6	6	7	5	6	6	6	6	6	5
Better safety, security and health	3	5	5	5	5	5	5	5	5	5
Promote equality of opportunity	6	6	6	6	5	5	4	5	6	5
Improve quality of life and natural enviro	1	5	5	0	0	4	5	6	5	5
Affordability	1	6	2	6	6	2	5	6	3	1
Implementability	1	6	2	6	3	3	5	4	7	2
Goal: Support Economic Competitiveness and										
Improve Connectivity (impact on journ	Moderate Beneficial	Major Beneficial	Major Beneficial	Slight Beneficial	Slight Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Major Beneficial	Slight Beneficial
Improve Reliability (impact on day to d	Slight Beneficial	Moderate Beneficial	Major Beneficial	Slight Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial
Wider Impacts (cost greater than £20m	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Neutral	Neutral	Neutral	Moderate Beneficial	Neutral	Neutral	Moderate Beneficial
Delivery of housing (facilitate or prever	No Impact	Slight Beneficial	Moderate Beneficial	No Impact	No Impact	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	No Impact
Resilience (against acts of terrorism, se	Slight Beneficial	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	Moderate Beneficial	No Impact
Goal: Reduce transport's emissions of carbon										
Reduce Carbon Emissions (carbon int	Moderate Beneficial	Moderate Beneficial	Major Beneficial	Slight Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Moderate Beneficial	No Impact
Goal: Better Safety, Security and Health										
Air Quality	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial
Improve health through physical activ	Slight Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Moderate Beneficial	Slight Beneficial
Reduce the risk of death or injury	Don't Know	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	No Impact	No Impact	Moderate Beneficial	Slight Beneficial
Reduce vulnerability to terrorism (doe	N/A	N/A	N/A	N/A	N/A	N/A	Slight Beneficial	N/A	Moderate Beneficial	N/A
Reduce crime (impact on crime and fea	Don't Know	Moderate Beneficial	Slight Beneficial	No Impact	Slight Beneficial	Slight Beneficial	No Impact	Slight Beneficial	No Impact	No Impact
Goal: Greater Equality of Opportunity										
Social Inclusion (accessibility, availabil	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	No Impact	No Impact	Slight Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial
Accessibility (in terms of bus journey ti	Major Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	No Impact	No Impact	Slight Beneficial	Slight Beneficial	Major Beneficial	Slight Beneficial
Social and distributional impacts (on	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Slight Beneficial	No Impact	No Impact	No Impact	Moderate Beneficial	No Impact	No Impact
Regeneration (impact on a targeted reg	No Impact	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Moderate Beneficial	Slight Beneficial	Slight Beneficial	Neutral	No Impact
Sub-regional imbalance (impact on we	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

r Adverse, 4= Neutral, 7= Major Benefi	1a) Brockenhurst to Ringwood rail connection	1b) Bus Showcase Corridors	1c) Dorset Area Rapid Transit System	1d) Express bus services - network of routes to rural areas	1e) Park & Ride sites (x3)	1f) Park and Ride sites (x8)	1g) More frequent rail services across the area (between Wareham and Brockenhurst)	1h) Smartcard ticketing (similar to London Oyster card)	1i) Re-opening of the Swanage rail line with potential Park & Ride	1i) Water Taxi Service
Goal: Improve Quality of Life and Promote Healthy N										
Traffic Related Noise	Moderate Adverse	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Don't Know	Slight Beneficial	Slight Beneficial	Slight Beneficial
Biodiversity	Major Adverse	No Impact	No Impact	No Impact	Major Adverse	Major Adverse	No Impact	No Impact	No Impact	No Impact
Geodiversity	Slight Adverse	No Impact	No Impact	No Impact	Slight Adverse	Moderate Adverse	No Impact	No Impact	No Impact	No Impact
Historic Environment	Slight Adverse	No Impact	Slight Adverse	Moderate Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	No Impact	No Impact	No Impact
Landscape Character and Open Spac	Major Adverse	No Impact	No Impact	No Impact	Slight Adverse	Moderate Adverse	No Impact	No Impact	No Impact	No Impact
Land Resources	Major Adverse	No Impact	No Impact	No Impact	Slight Adverse	Moderate Adverse	No Impact	No Impact	No Impact	No Impact
Flood Risk	Slight Adverse	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Experience of travel	Moderate Beneficial	Slight Beneficial	Major Beneficial	Moderate Beneficial	Slight Beneficial	Slight Adverse	Slight Beneficial	Major Beneficial	Major Beneficial	Moderate Beneficial
Urban environment	No Impact	Major Beneficial	No Impact	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	No Impact	No Impact	No Impact

Assessment Sheet	**Option Name/No.**	1a) Brockenhurst to Ringwood rail connection

1.) Summary of option		
Description and objective	The proposed link is a single track electrified line, using the formation of the former Brockenhurst – Wimborne - Poole line. The scheme would extend for about 10 miles from Lymington Junction (Brockenhurst) across New Forest National Park to Ringwood. Four level crossings would be required. The scheme would also include reopening Holmsley station and construction of a station at Ringwood at a new location. The scheme has recently been promoted by the ATOC report into new rail connections. An hourly service has formed the basis of the assessment, provided by a diverted service from Waterloo. Alternatively the Victoria – Southampton service could be extended, with the option for passengers to change to fast Waterloo services at Southampton. The objective of the scheme is to provide a rail connection to Ringwood, linking it into the rail network. However the scheme would not enhance links to the South East Dorset conurbation.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Support economic competitiveness and growth	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services.	

2.) Cost and likely value for money		
Capital Cost (£m)?	**50-100**	Indicative capital cost: £70m (source: Connecting Communities Expanding Access to the Rail Network, June 2009)).
Revenue Costs (£m)? (per annum)	**None**	Estimated cost £1.58m per annum to operate - fare income unknown. It is assumed that a new service would be included in a new rail franchise and not require subsidy by the local authorities.
Where is funding coming from?	Network Rail.	
Any income generated to local authority (£m)? (per annum)	**Yes**	Unknown
i.Overall cost risk? ii.Other costs?	**1.High**	High cost risk as no engineering feasibility work has been undertaken. Although parts of the original alignment exist, in many places the track bed has been built over.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	No funding stream has been identified in the ATOC document.
Likely value for money?	**Low 1-1.5**	BCR of 1.5 identified by ATOC report although no indication of methodology. Scheme lies outside SE Dorset model and hence would not be feasible to develop alternative appraisal

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long delivery timescales assumed as this is a rail scheme.
Public acceptability	**1. Low**	Medium-high due to political support. However, New Forest National Park Authority could oppose as the reinstated line would use the existing cycle path and bridleway.

Practical feasibility	**2. Low-medium**	The track layout is suitable at Brockenhurst; however, a new alignment and terminus would be required at Ringwood. The area around the old Ringwood station has been developed as mixed development, with industrial manufacturing units, superstores/ warehouses and residential units. The main station building no longer exists. According to the ATOC report, the formation is intact, but blocked at Ringwood by the A31. However, whilst parts of the original alignment exist, in many places the track bed has been built over, for example: - Embankment Way, east of Ringwood station - Station Road, east of A35 junction in New Forest National Park - Other informal roads. Proposal is outside South East Dorset, therefore councils in South East Dorset would be unable to fund it even if general funding was available.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (5)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**3**	Addresses three of the DaSTS goals.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Would provide a strategic public transport link from Ringwood to the existing mainline, although outside South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Rail links are a well established type of intervention.
Social and distributional impacts? (on low income or vulnerable groups)	Scheme would benefit those on low income who do not own a car, improving access to/from Ringwood.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes, and the scheme lies outside South East Dorset.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**2. Low-medium**	Proposal has not been modelled. The proposed alignment has been reviewed using aerial mapping.
Previous Studies	**Yes**	Connecting Communities Expanding Access to the Rail Network (June 2009) by ATOC.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**2**	Little clear evidence to support conclusions in the ATOC report
Key Uncertainties/risks (external factors)	Potentially very sensitive due to alignment through New Forest and replacement of existing cycle paths/bridleways.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability. Route would need to be delivered as a whole.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	ATOC report indicated scheme would reduce pressure at Southampton Airport Parkway station. Current rail access for Ringwood is via Bournemouth or Christchurch, although traffic congestion is a constraint, particularly in the peak periods. Access to Southampton Airport Parkway via the A31/M27/M3.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Would improve public transport access to Ringwood, and encourage mode shift to rail.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	No Impact	Scheme in isolation is unlikely to facilitate new housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	Would provide a non-road public transport alternative to/from Ringwood.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Would encourage mode shift to public transport.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift away from the car would improve air quality slightly.
Improve health through physical activity	Slight Beneficial	Would encourage more people to walk/cycle to rail station.
Reduce the risk of death or injury	Neutral	Small diversion from car would reduce accidents but only by negligible amount.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Neutral	No significant impact
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Proposal would benefit those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Moderate Beneficial	A station at Ringwood would serve the East Dorset communities spread along the A 31, including Ferndown, West Moors and Wimborne, as well as the rural area to the north, including Verwood, but would involve car access in many cases. Benefits from reduced journey time and interchange. Current bus & rail journey time from Brockenhurst to Ringwood: 56 minutes with 1 interchange, as compared to 24 minutes direct train journey with the scheme.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Proposal would benefit those on low incomes in Ringwood who do not have access to a car.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	Noise from rail along the very peaceful New Forest corridor. Change in noise level on road network from reduction in car use would be minimal.
Biodiversity	Major Adverse	Potentially very sensitive due to alignment through New Forest.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Major Adverse	The reinstated line would run through the New Forest National Park - potentially very sensitive.
Land Resources	Major Adverse	Potentially very sensitive due to alignment through New Forest.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Rail option would improve the experience of travel compared to the car or bus.
Urban environment	No Impact	No impact on the urban area apart from minor effect in Ringwood and Brockenhurst.

Assessment Sheet	Option Name/No.	1b) A35 Poole to Christchurch BSC

1.) Summary of option	
Description	The overall aim is to improve the A35 for bus movements by encouraging cars and goods vehicles onto a parallel route through general highway improvements between Iford and Bournemouth (along Castle Lane East and dual carriageway). Measures to improve bus reliability, reduce journey times, and improve bus stops along the A35 Poole to Christchurch corridor, include: - South-west bus lane on B3068 Longfleet Road, Poole; - South-west bus lane between Station Road and Brittania Road, Parkstone; - Eastbound bus lane approaching Richmond Road, Parkstone; - Bus priority at North Road traffic signals, Poole; - Westbound bus lane at Branksome railway bridge; - Potential for reorganisation of Gervis Place and Westover Road bus stops, Bournemouth; - Bus lanes approaching St Swithun's and Lansdowne roundabouts, Bournemouth; - Eastbound bus lane on Christchurch Road near Drummond Road, Boscombe; - Additional eastbound bus lane on Christchurch Road near Pokesdown Stn; - BBC proposals for Iford Roundabout and Christchurch Road; - Additional westbound bus lanes near the River Stour, Iford; and - Eastbound bus lane to bypass Bailey Roundabout, Christchurch. - Rationalisation of on-street parking - improved layout and less constricting for bus (and all traffic) movements, e.g. relocating parking spaces onto side streets where possible; Measures will include use of MOVA at signals, banning movements at selected junctions; RTPI, signing, improvements to bus stop facilities, reviewing signal timings, and bus pre-signals. It is planned that bus operators would make improvements to bus operations as part of the overall package. Overall the objective is to improve the general passenger experience.
Key DfT Goal	Reduce carbon emissions
Secondary Goal	Promote Equality of Opportunity
Scenario or scheme objectives	- Help create a modern, efficient and integrated public transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.

2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	£22million in total.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs.
Where is funding coming from?	Various sources (e.g. LSTF bid, major scheme funding, LTP, developer funding).	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Cost of relocating any services. Stats enquiries will be made at the appropriate point - cost of relocating services would be high, regardless of distance moved.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of the bus showcase corridor would be phased if funding was not available through a LSTF bid or major scheme funding.
Likely value for money?	**Medium 1.5-2**	Estimated BCR of 1.9.

3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Phased delivery through to 2015. The preferred option is to implement a type of measure for the entire length of a corridor e.g. bus stop improvements or signalised junction reconfiguration. Complete the proposed types of measure in sequence.
Public acceptability	**3. Medium**	Whilst there will be support for public transport improvements, there are likely to be objections to changes to some on-street parking which currently obstructs the passage of buses. It will be necessary to convey to the general public that the schemes form part of a suite of measures that would also benefit cars by rationalising road space. Proposals also include improvements to parallel routes for cars and goods vehicles.
Practical feasibility	**5. High**	Feasible in both technical/engineering and operational terms. Proposed measures have been reviewed in terms of their feasibility. Measures along the corridor run on the existing highway network. However, any need to divert services would increase the cost of the schemes. Generally, the need to purchase land is being avoided, to improve deliverability.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (7)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (7)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	A priority challenge raised in the DaSTS Phase 1 Report with about 20% of consultation respondents saying they would travel by bus if buses were more reliable. Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08. Will have a medium impact on the identified challenges - but would score higher if introduced in conjunction with demand management and smarter choices measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The Gervis Place/Westover Road proposals will require their own separate detailed study in conjunction with wider town centre developments. The South East Dorset Bus Showcase Corridor Study has prioritised the BSC, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.
Is the option innovative and/or encourage better use?	**Well-established**	Measures associated with the Bus Showcase Corridors (e.g. bus priority, bus stop upgrades, signing) are well established types of intervention.
Overall strategic fit?	**5. High**	Good fit - the option fits very well with other policies affecting the study area.

7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The South East Dorset Bus Showcase Corridor Study has prioritised the BSC, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.
Previous Studies	**Yes**	- South East Dorset Bus Showcase Corridor Study (Atkins, 2011), as part of the South East Dorset Transport Study. - Major Scheme Business Case Bus Showcase Corridors Scoping Study (Mouchel, 2008). '- Poole/Bournemouth Public Transport Study (1992). - A number of studies have been carried out relating to individual proposals which were reviewed as part of the Atkins study.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is strong consensus that good public transport schemes can encourage mode shift away from the car.
Key Uncertainties/risks (external factors)	Opposition to schemes which reduce capacity for cars. The extent of the need to divert utilities is currently unknown (with associated cost implications).	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	The A35 bus corridor scheme could be easily scaled up or down, selecting individual key measures and/or phased.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Journey times would improve along the A35. New improved bus services would be delivered in partnership by the bus operators.
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	Should reduce variability along the A35 corridor as a result of mode shift to bus and not increase number of incidents. Using the strategic transport model, the A35 corridor (along with the North Bournemouth Corridor) was highlighted as offering the greatest benefits of the series of BSCs that were tested. This was shown by the greater increase in bus patronage on links on these corridors (increases of up to 100 passengers).
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Scheme would not be sufficient on its own to facilitate or prevent housing, but would to make a contribution.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Scheme is within the existing highway.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Major Beneficial	Decrease in CO2 emissions due to a reduction in travel by car.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality along the A35 corridor.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people using public transport and therefore walking to bus stops.

Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.

Reduce crime (impact on crime and fear of crime).	Moderate Beneficial	Measures to improve bus reliability may incorporate improved walking routes to bus stops to increase surveillance. Also, improved bus stop facilities would help people feel safer. Increased passenger numbers would increase the feeling of security.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the BSC improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of public transport journey times/areas served)	Major Beneficial	New/improved bus services will improve accessibility through reducing bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	Major Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some bus services, thus reducing operating costs which may help keep down fares. This proposal should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall. Scheme would benefit residents of Boscombe, an area with high level of deprivation.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefitting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment. Also, would serve the regeneration area in Poole.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	No Impact	Majority of works would be within highway boundary.
Geodiversity	No Impact	Majority of works would be within highway boundary.
Historic Environment	No Impact	Majority of works would be within highway boundary.
Landscape Character and Open Space	No Impact	Majority of works would be within highway boundary.
Land Resources	No Impact	Majority of works would be within highway boundary.
Flood Risk	No Impact	Majority of works would be within highway boundary.
Experience of travel	Slight Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users.
Urban environment	Major Beneficial	Measures include improving consistency of street furniture and improved bus stop facilities.

Assessment Sheet	Option Name/No.	1c) North Bournemouth BSC

1.) Summary of option	
Description	The aim is to encourage private cars and goods vehicles to use Boundary Road, parallel to Wimborne Road through Winton Banks, to allow the introduction of improved public realm and enhanced bus movements. This could be further encouraged by 'bus only' sections of Wimborne Road to remove through traffic from this route. Measures to improve bus reliability, reduce journey times, and improve bus stops along the North Bournemouth Corridor, include: - Eastbound bus lane from Whitelegg Way to Castle Lane West traffic signals; - Junction layout amendments at Ensbury Park Road to improve Wimborne Road traffic movement and bus manoeuvres into/out of Ensbury Park Road; - Signalise Withermoor Road junction with bus priority; - Bus priority at Alma Road/Talbot Road junction; - All buses through Kinson to travel anti-clockwise around triangle with larger layover areas, bus stop rationalisation and parking controls on local roads; - North-westbound bus lane approaching East Avenue r'bout with pre-signals; - Bus pre-signals on the south-eastbound approach to Cemetery Junction; - South-eastbound bus lane between Beechey Road and Coach House Place with bus priority at signals; - Bus priority at Alma Road/Charminster Road junction; - Rationalisation of on-street parking - improved layout and less constricting for bus (and all traffic) movements, e.g. relocating parking spaces onto side streets where possible; - Junction turning movement bans; - Urban Realm and bus movement improvements on Wimborne Road through Winton Banks would be supported by encouraging general traffic to use the parallel route along Boundary Road; and - Improved signing of travel (especially bus) options at Bournemouth station. Other measures will include RTPI, signing, improvements to bus stop facilities, and reviewed signal timings. It would be expected that bus operators would make improvements to bus operations as part of the overall package. The general intention is to improve the general passenger experience.
Key DfT Goal	Reduce carbon emissions
Secondary Goal	Promote Equality of Opportunity
Scenario or scheme objectives	- Help create a modern, efficient and integrated public transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.

2.) Cost and likely value for money		
Capital Cost (£m)?	**5-10**	£5.3million in total.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs.
Where is funding coming from?	Various sources (e.g. major scheme funding, LTP, developer funding, Local Sustainable Transport Fund Bid).	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Cost of relocating any services. Stats enquiries will be made at the appropriate point in time - cost of relocating services is high, regardless of distance moved.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of the bus showcase corridors would be phased by corridor.
Likely value for money?	**Medium 1.5-2**	Estimated BCR of 1.74.

3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Phased delivery through to 2018, with preparatory work commencing in 2012. Timescales vary between specific elements.
Public acceptability	**3. Medium**	Whilst there will be support for public transport improvements, there are likely to be objections to changes to some on-street parking which currently obstructs the passage of buses. It will be necessary to convey to the general public that the schemes form part of a suite of measures that would also benefit cars by rationalising road space. Proposals also include improvements to parallel route for general traffic on Boundary Road.
Practical feasibility	**5. High**	Feasible in both technical/engineering and operational terms. Corridor runs on the existing highway network. However, any need to divert utilities would increase the cost of the schemes. Generally, the need to purchase land is avoided, to improve deliverability.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (7)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	A priority challenge raised in the DaSTS Phase 1 Report with about 20% of consultation respondents saying that they would travel by bus if buses were more reliable. Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08. Will have a medium impact on the identified challenges - would score higher in conjunction with demand management and smarter choices measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	The North Bournemouth BSC addresses all of the DfT goals, as well as the South East Dorset specific objective of implementability. Classed as network specific as it focuses on access within South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Measures associated with the Bus Showcase Corridors (e.g. bus priority, bus stop upgrades, signing) are well established types of intervention.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The South East Dorset Bus Showcase Corridor Study has prioritised the BSCs, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.

Previous Studies	**Yes**	- South East Dorset Bus Showcase Corridor Study (Atkins, 2011), as part of the South East Dorset Transport Study. - Major Scheme Business Case Bus Showcase Corridors Scoping Study (Mouchel, 2008). - Poole/Bournemouth Public Transport Study (1992). - A number of studies have been carried out relating to individual proposals which were reviewed as part of the Atkins study.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus that good public transport schemes can encourage mode shift away from the car.
Key Uncertainties/risks (external factors)	Opposition to schemes which take out capacity for cars. The extent of the need to divert utilities is currently unknown (with potential cost implications).	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	The North Bournemouth BSC scheme could be easily scaled up or down, and/or phased. The North Bournemouth corridor would tie in with the potential Northbourne Park and Ride site.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Journey times would improve along the North Bournemouth corridor. New improved bus services would be delivered by the bus operators in partnership.
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	Should reduce variability along the North Bournemouth corridor as a result of mode shift to bus without increasing the number of incidents. The North Bournemouth Corridor (along with the A35 Corridor) was highlighted by the strategic transport model as offering the greatest benefits of the BSC tested. This was shown by the greater increase in bus patronage on links on these corridors (increases of up to 100 passengers).
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Scheme would not be sufficient on its own to facilitate or prevent housing, but would to make a contribution.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Scheme is within the existing highway.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Major Beneficial	Reduction in CO2 emissions expected due to a reduction in travel by car.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people using public transport and therefore walking to bus stops.
Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Moderate Beneficial	Measures to improve bus reliability may incorporate improved walking routes to bus stops to increase surveillance. Also, improved bus stop facilities would help people feel safer. Increased passenger numbers would increase the feeling of security.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of public transport journey times/areas served)	Major Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the BSC improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some services, thus reducing operating costs which may help keep down fares. The measures would lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefitting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	No Impact	Majority of works would be within highway boundary.
Geodiversity	No Impact	Majority of works would be within highway boundary.
Historic Environment	No Impact	Majority of works would be within highway boundary.
Landscape Character and Open Space	No Impact	Majority of works would be within highway boundary.
Land Resources	No Impact	Majority of works would be within highway boundary.
Flood Risk	No Impact	Majority of works would be within highway boundary.
Experience of travel	Slight Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users.
Urban environment	Major Beneficial	Measures would include improving consistency of street furniture and improved bus stop facilities.

Assessment Sheet	Option Name/No.	1d) Wallisdown to Bournemouth BSC

1.) Summary of option		
Description	Measures to improve bus reliability, reduce journey times, and improve bus stops along the Wallisdown to Bournemouth Corridor, including: - existing BBC proposals for Wallisdown Road; - Additional westbound bus lanes on A3049 Wallisdown Road and Talbot Road; - Additional eastbound bus lane on A3049 Talbot Road; - Freeflow westbound bus lane at Boundary Roundabout; - Rationalisation of on-street parking - improved layout and less constricting for bus (and all traffic) movements, e.g. relocating parking spaces onto side streets where possible; - Improved signing of travel (especially bus) options at the rail station. - Travel interchange at the University to allow easy movements between services if journeys do not naturally fall on a single route. This could act as a focus for future express routes from outlying settlements and any Park & Ride sites that might be introduced in the longer term. Other measures will include RTPI, signing, improvements to bus stop facilities, and reviewing signal timings. It would be expected that bus operators would make improvements to bus operations as part of the overall package. Overall the intention is to improve the general passenger experience.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Promote Equality of Opportunity	
Scenario or scheme objectives	- Help create a modern, efficient and integrated public transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	Under £5m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs.
Where is funding coming from?	Various sources (e.g. major scheme funding, LTP, developer funding, Local Sustainable Transport Fund Bid).	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Cost of relocating any utilities. Stats enquiries will be made at the appropriate point in time - cost of relocating services is high, regardless of distance moved.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of the bus showcase corridors would be phased by corridor.
Likely value for money?	**Medium 1.5-2**	Estimated BCR of 1.66
3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Phased delivery through to 2020, with preparatory work commencing in 2015. Timescales vary between specific elements.
Public acceptability	**3. Medium**	Whilst there will be support for public transport improvements, there is likely to be objections to removing some on-street parking which obstructs the passage of buses. It will be necessary to convey to the general public that the schemes form part of a suite of measures that would also benefit cars by rationalising road space.

Practical feasibility	**5. High**	Feasible in both technical/engineering and operational terms. Corridor runs on the existing highway network. However, any need to divert services would increase the cost of the schemes. Generally, the need to purchase land is avoided, to improve deliverability.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	A priority challenge raised in the DaSTS Phase 1 Report is that about 20% of consultation respondents said they would travel by bus if buses were more reliable. Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08. Will have a medium impact on the identified challenges - would score higher in conjunction with demand management and smarter choices measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scenario addresses all but one of the DfT goals, as well as the South East Dorset specific objective of implementability. Classed as network specific as many of the schemes focus on access within South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Measures associated with the Bus Showcase Corridors (e.g. bus priority, bus stop upgrades, signing) are well established types of intervention.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The South East Dorset Bus Showcase Corridor Study has prioritised the BSCs, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.
Previous Studies	**Yes**	- South East Dorset Bus Showcase Corridor Study (Atkins, 2011), as part of the South East Dorset Transport Study. - Major Scheme Business Case Bus Showcase Corridors Scoping Study (Mouchel, 2008). '- Poole/Bournemouth Public Transport Study (1992). - A number of studies have been carried out relating to individual proposals which were reviewed as part of the Atkins study.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus that good public transport schemes can encourage mode shift away from the car.
Key Uncertainties/risks (external factors)	Opposition to schemes which take out capacity for cars. The extent of the need to divert utilities is currently unknown (cost implications).	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	The bus corridor schemes could be easily scaled up or down. Bus Showcase Corridors are likely to be delivered in phases (by corridor).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Journey times would improve. New improved bus services would be delivered in partnership by the bus operators.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Would reduce variability as a result of mode shift to bus and would not increase number of incidents.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Scheme would not be sufficient on its own to facilitate or prevent housing, but would to make a contribution.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Scheme is within the existing highway.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Reduction in CO2 emissions due to a reduction in travel by car.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people using public transport and therefore walking to bus stops.
Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Moderate Beneficial	Measures to improve bus reliability may incorporate improved walking routes to bus stops to increase surveillance. Also, improved bus stop facilities would help people feel safer. Increased passenger numbers would increase the feeling of security.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of public transport journey times/areas served)	Moderate Beneficial	New/improved bus services will improve accessibility through reducing bus journey times. Would include new travel hub at the University and improvements to travel interchange at the rail station.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some services, thus reducing operating costs which may help keep down fares. This proposal should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefitting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	No Impact	Majority of works would be within highway boundary.
Geodiversity	No Impact	Majority of works would be within highway boundary.
Historic Environment	No Impact	Majority of works would be within highway boundary.
Landscape Character and Open Space	No Impact	Majority of works would be within highway boundary.
Land Resources	No Impact	Majority of works would be within highway boundary.
Flood Risk	No Impact	Majority of works would be within highway boundary.
Experience of travel	Slight Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users.
Urban environment	Major Beneficial	Measures would include improving consistency of street furniture and improved bus stop facilities.

Assessment Sheet	**Option Name/No.**	1e) Castle Lane BSC

1.) Summary of option		
Description	Measures to improve bus reliability, reduce journey times, and improve bus stops along the A3060 Castle Lane Corridor: - Additional eastbound including towards Cooper Dean roundabout and roundabout with Charminster Road; - Additional westbound bus lanes, including near the Cooper Dean roundabout and between Cox Avenue and Muscliffe Lane; and - Rationalisation of on-street parking - improved layout and less constricting for bus (and all traffic) movements, e.g. relocating parking spaces onto side streets where possible; Other measures will include RTPI, signing, improvements to bus stop facilities, and reviewing signal timings. It would be expected that bus operators would make improvements to bus operations as part of the overall package. Overall the intention is to improve the general passenger experience.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Promote Equality of Opportunity	
Scenario or scheme objectives	- Help create a modern, efficient and integrated public transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	Under £5m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs.
Where is funding coming from?	Various sources (e.g. major scheme funding, LTP, developer funding, Local Sustainable Transport Fund Bid).	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Cost of relocating any utilities. Stats enquiries will be made at the appropriate point in time - cost of relocating services is high, regardless of distance moved.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of the bus showcase corridors would be phased by corridor.
Likely value for money?	**Medium 1.5-2**	Estimated BCR of 1.62.
3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Phased delivery through to 2020, with preparatory work commencing in 2015. Timescales vary between specific elements.
Public acceptability	**3. Medium**	Whilst there will be support for public transport improvements, there is likely to be objections to removing some on-street parking which currently obstructs the passage of buses. It will be necessary to convey to the general public that the schemes form part of a suite of measures that would also benefit car movements by rationalising road space.
Practical feasibility	**5. High**	Feasible in both technical/engineering and operational terms. Corridor runs on the existing highway network. However, any need to divert utilitieses would increase the cost of the schemes. Generally, the need to purchase land is being avoided, to improve deliverability.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	A priority challenge raised in the DaSTS Phase 1 Report is that about 20% of consultation respondents said they would travel by bus if buses were more reliable. Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08. Will have a medium impact on the identified challenges - would score higher in conjunction with demand management and smarter choices measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scenario addresses all but one of the DfT goals, as well as the South East Dorset specific objective of implementability. Classed as network specific as many of the schemes focus on access within South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Measures associated with the Bus Showcase Corridors (e.g. bus priority, bus stop upgrades, signing) are well established types of intervention.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The South East Dorset Bus Showcase Corridor Study has prioritised the BSC, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.
Previous Studies	**Yes**	- South East Dorset Bus Showcase Corridor Study (Atkins, 2011), as part of the South East Dorset Transport Study. - Major Scheme Business Case Bus Showcase Corridors Scoping Study (Mouchel, 2008). '- Poole/Bournemouth Public Transport Study (1992). - A number of studies have been carried out relating to individual proposals which were reviewed as part of the Atkins study.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus that good public transport schemes can encourage mode shift away from the car.
Key Uncertainties/risks (external factors)	Opposition to schemes which take out capacity for cars. The extent of the need to divert utilities is currently unknown (cost implications).	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	The bus corridor schemes could be easily scaled up or down. Bus Showcase Corridors are likely to be delivered in phases (by corridor).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Journey times would improve. New improved bus services would be delivered in partnership by the bus operators.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Should reduce variability as a result of mode shift to bus and not increase number of incidents.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Scheme would not be sufficient on its own to facilitate or prevent housing, but would to make a contribution.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Scheme is within the existing highway.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Reduction in CO2 emissions expected due to a reduction in travel by car.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people using public transport and therefore walking to bus stops.
Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Moderate Beneficial	Measures to improve bus reliability may incorporate improved walking routes to bus stops to increase surveillance. Also, improved bus stop facilities would help people feel safer. Increased passenger numbers would increase the feeling of security.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of public transport journey times/areas served)	Moderate Beneficial	New/improved bus services will improve accessibility through reducing bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some services, thus reducing operating costs which may help keep down fares. This proposal should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefitting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	No Impact	Majority of works would be within highway boundary.
Geodiversity	No Impact	Majority of works would be within highway boundary.
Historic Environment	No Impact	Majority of works would be within highway boundary.
Landscape Character and Open Space	No Impact	Majority of works would be within highway boundary.
Land Resources	No Impact	Majority of works would be within highway boundary.
Flood Risk	No Impact	Majority of works would be within highway boundary.
Experience of travel	Slight Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users.
Urban environment	Major Beneficial	Measures would include improving consistency of street furniture and improved bus stop facilities.

Assessment Sheet	**Option Name/No.**	1f) Poole to North West Bournemouth BSC

1.) Summary of option		
Description	Measures to improve bus reliability, reduce journey times, and improve bus stops along the Poole to North West Bournemouth Corridor (A348/B3068 Ringwood Road and B3061 Seaview Road), including: - Northbound bus lanes on B3068 Ringwood Road; - Additional southbound bus lanes on B3068 Ringwood Road and B3061 Seaview Road; and - Rationalisation of on-street parking - improved layout and less constricting for bus (and all traffic) movements, e.g. relocating parking spaces onto side streets where possible; Other measures will include RTPI, signing, improvements to bus stop facilities, and reviewing signal timings. It would be expected that bus operators would make improvements to bus operations as part of the overall package. Overall the intention is to improve the general passenger experience.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Promote Equality of Opportunity	
Scenario or scheme objectives	- Help create a modern, efficient and integrated public transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	Under £5m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs.
Where is funding coming from?	Various sources (e.g. major scheme funding, LTP, developer funding, Local Sustainable Transport Fund Bid).	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Cost of relocating any utilities. Stats enquiries will be made at the appropriate point in time - cost of relocating services is high, regardless of distance moved.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of the bus showcase corridors would be phased by corridor.
Likely value for money?	**Medium 1.5-2**	Estimated BCR of 1.59
3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Phased delivery through to 2020, with preparatory work commencing in 2015. Timescales vary between specific elements.
Public acceptability	**3. Medium**	Whilst there will be support for public transport improvements, there is likely to be objections to removing some on-street parking which obstructs the passage of buses. It will be necessary to convey to the general public that the schemes form part of a suite of measures that would also benefit cars by rationalising road space.
Practical feasibility	**5. High**	Feasible in both technical/engineering and operational terms. Corridor runs on the existing highway network. However, any need to divert services would increase the cost of the schemes. Generally, the need to purchase land is being avoided, to improve deliverability.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	A priority challenge raised in the DaSTS Phase 1 Report is that about 20% of consultation respondents said they would travel by bus if buses were more reliable. Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08. Will have a medium impact on the identified challenges - would score higher in conjunction with demand management and smarter choices measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scenario addresses all but one of the DfT goals, as well as the South East Dorset specific objective of implementability. Classed as network specific as many of the schemes focus on access within South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Measures associated with the Bus Showcase Corridors (e.g. bus priority, bus stop upgrades, signing) are well established types of intervention.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The South East Dorset Bus Showcase Corridor Study has prioritised the BSC, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.
Previous Studies	**Yes**	- South East Dorset Bus Showcase Corridor Study (Atkins, 2011), as part of the South East Dorset Transport Study. - Major Scheme Business Case Bus Showcase Corridors Scoping Study (Mouchel, 2008). '- Poole/Bournemouth Public Transport Study (1992). - A number of studies have been carried out relating to individual proposals which were reviewed as part of the Atkins study.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus that good public transport schemes can encourage mode shift away from the car.
Key Uncertainties/risks (external factors)	Opposition to schemes which take out capacity for cars. The extent of the need to divert utilities is currently unknown (cost implications).	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	The bus corridor schemes could be easily scaled up or down. Bus Showcase Corridors are likely to be delivered in phases (by corridor).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Journey times would improve. New improved bus services would be delivered in partnership by the bus operators.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Should reduce variability as a result of mode shift to bus and not increase number of incidents.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Scheme would not be sufficient on its own to facilitate or prevent housing, but would to make a contribution.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Scheme is within the existing highway.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Reduction in CO2 emissions expected due to a reduction in travel by car.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people using public transport and therefore walking to bus stops.
Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Moderate Beneficial	Measures to improve bus reliability may incorporate improved walking routes to bus stops to increase surveillance. Also, improved bus stop facilities would help people feel safer. Increased passenger numbers would increase the feeling of security.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of public transport journey times/areas served)	Moderate Beneficial	New/improved bus services will improve accessibility through reducing bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some services, thus reducing operating costs which may help keep down fares. This proposal should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefitting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment. Also, would serve the regeneration area in Poole.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	No Impact	Majority of works would be within highway boundary.
Geodiversity	No Impact	Majority of works would be within highway boundary.
Historic Environment	No Impact	Majority of works would be within highway boundary.
Landscape Character and Open Space	No Impact	Majority of works would be within highway boundary.
Land Resources	No Impact	Majority of works would be within highway boundary.
Flood Risk	No Impact	Majority of works would be within highway boundary.
Experience of travel	Slight Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users.
Urban environment	Major Beneficial	Measures would include improving consistency of street furniture and improved bus stop facilities.

Assessment Sheet	**Option Name/No.**	1g) Extended Bus Showcase Corridors

1.) Summary of option		
Description	Measures to improve bus reliability, reduce journey times, and improve bus stops, building upon the A35 and North Bournemouth Bus Showcase Corridors. Includes extensions to: - Bournemouth International Airport; - Ferndown (Uddens) Business Park; and - Extensions to the study area: Wimborne and Highcliffe. Proposals include: - Travel Interchange - improvements to circulation; - Signalise Airport access junction and incorporate bus priority; - Signalise Hurn Roundabout and incorporate bus priority; - Incorporate bus priority into signal timing at Blackwater Junction; - Southbound bus lane on B3073 Oakley Hill between River Stour Bridge and Oakley Lane junction; - Signalise Longham Roundabouts and incorporate bus priority using UTC; - Southbound bus lane approaching Bear Cross Roundabout; - Ringwood Rd additional south-westbound bus lane from Loewy Crescent; - Additional north-eastbound bus lane approaching mini-roundabout on Ringwood Road; - Additional southbound bus lane from Haskells Road to Sea View Road on Ringwood Road with pre-signals at the junction. - Rationalisation of on-street parking - improved layout and less constricting for bus (and all traffic) movements, e.g. relocating parking spaces onto side streets where possible; Park and Ride extensions include: - Signalising the Alderney Roundabout; - Additional bus lanes on Ringwood Road on sections between Mannings Heath and Poole; and - Additional bus lane on Wallisdown Road. Other measures RTPI, signing, improvements to bus stop facilities, reviewing signal timings. It would be expected that bus operators would make improvements
Key DfT Goal	Reduce carbon emissions
Secondary Goal	Promote Equality of Opportunity
Scenario or scheme objectives	- Help create a modern, efficient and integrated public transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.

2.) Cost and likely value for money		
Capital Cost (£m)?	**5-10**	£6.3 million in total.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs.
Where is funding coming from?	Various sources (e.g. major scheme funding, LTP, developer funding, Local Sustainable Transport Fund Bid).	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Cost of relocating any utilities. Stats enquiries will be made at the appropriate point in time - cost of relocating services is high, regardless of distance moved.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of the bus showcase corridor schemes would be phased by corridor.
Likely value for money?	**Medium 1.5-2**	No BCR available, but would be expected to achieve a moderate BCR.

3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Phased delivery through to 2026, with preparatory work commencing in 2022. Timescales vary between specific elements. Elements related to Park & Ride sites would only be progressed if there is a decision to progress Park & Ride site proposals.
Public acceptability	**3. Medium**	Whilst there will be support for public transport improvements, there is likely to be objections to removing some on-street parking which obstructs the passage of buses. It will be necessary to convey to the general public that the schemes form part of a suite of measures that would also benefit cars by rationalising road space.
Practical feasibility	**5. High**	Feasible in both technical/engineering and operational terms. Corridor runs on the existing highway network. However, any need to divert services would increase the cost of the schemes. Generally, the need to purchase land is being avoided, to improve deliverability.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	A priority challenge raised in the DaSTS Phase 1 Report is that about 20% of consultation respondents said they would travel by bus if buses were more reliable. Whilst 92% of buses started their route on time in 2008/09, the figure was only 70% in 2007/08. Will have a medium impact on the identified challenges - would score higher in conjunction with demand management and smarter choices measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scenario addresses all but one of the DfT goals, as well as the South East Dorset specific objective of implementability. Classed as network specific as many of the schemes focus on access within South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Measures associated with the Bus Showcase Corridors (e.g. bus priority, bus stop upgrades, signing) are well established types of intervention.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.

7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Bus Showcase Corridors have been modelled in the strategic model as part of the SEDMMTS. The South East Dorset Bus Showcase Corridor Study has prioritised the BSC, and identified measures for the A35 and North Bournemouth corridors, and longer term corridors.
Previous Studies	**Yes**	- South East Dorset Bus Showcase Corridor Study (Atkins, 2011), as part of the South East Dorset Transport Study. - Major Scheme Business Case Bus Showcase Corridors Scoping Study (Mouchel, 2008). '- Poole/Bournemouth Public Transport Study (1992). - A number of studies have been carried out relating to individual proposals which were reviewed as part of the Atkins study.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus that good public transport schemes can encourage mode shift away from the car.
Key Uncertainties/risks (external factors)	Opposition to schemes which take out capacity for cars. The extent of the need to divert utilities is currently unknown (cost implications).	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	The bus corridor schemes could be easily scaled up or down. Bus Showcase Corridors are likely to be delivered in phases (by corridor).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Journey times would improve. New improved bus services would be delivered in partnership by the bus operators.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Should reduce variability as a result of mode shift to bus and not increase number of incidents.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Scheme would not be sufficient on its own to facilitate or prevent housing, but would to make a contribution.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Scheme is within the existing highway.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Reduction in CO2 emissions expected due to a reduction in travel by car.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people using public transport and therefore walking to bus stops.
Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Moderate Beneficial	Measures to improve bus reliability may incorporate improved walking routes to bus stops to increase surveillance. Also, improved bus stop facilities would help people feel safer. Increased passenger numbers would increase the feeling of security.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Bus operators would deliver improved bus services in partnership, as a result of the improvements. This would improve links between housing and employment, and could benefit people living in deprived areas.
Accessibility (in terms of public transport journey times/areas served)	Moderate Beneficial	New/improved bus services will improve accessibility through reducing bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Measures to improve reliability would help to reduce the peak vehicle requirement on some services, thus reducing operating costs which may help keep down fares. This proposal should lead to positive impacts on low income and/or vulnerable groups, and help to address issues such as unemployment, by linking deprived areas to employment opportunities. Improved accessibility overall.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Improved bus services, benefitting from bus priority measures, would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment. Also, would serve the regeneration area in Poole.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	No Impact	Majority of works would be within highway boundary.
Geodiversity	No Impact	Majority of works would be within highway boundary.
Historic Environment	No Impact	Majority of works would be within highway boundary.
Landscape Character and Open Space	No Impact	Majority of works would be within highway boundary.
Land Resources	No Impact	Majority of works would be within highway boundary.
Flood Risk	No Impact	Majority of works would be within highway boundary.
Experience of travel	Slight Beneficial	Improvements such as bus lanes will improve the experience of travel for bus users.
Urban environment	Major Beneficial	Measures would include improving consistency of street furniture and improved bus stop facilities.

Assessment Sheet	**Option Name/No.**	1h) Dorset Area Rapid Transit System

1.) Summary of option		
Description	The DARTS is proposed as a new Rapid Transit (RT) system running across the conurbation, potentially between terminals at Christchurch and Hamworthy although with operations between intermediate points. DARTS tram-train vehicles would have the capability of running of the existing heavy rail network, but with some on-street running through Bournemouth Town Centre to provide increased penetration of the main retail and business area..	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	DARTS is estimated to cost £212million, including two new stations on rail system and enhanced stops in Bournemouth town centre.
Revenue Costs (£m)? (per annum)	**None**	Operating cost = £6m per year - however, it is estimated that the operating costs would be covered by system revenue with moderate revenue surplus.
Where is funding coming from?	Major scheme funding, developer contributions	
Any income generated to local authority (£m)? (per annum)	**Yes**	100-250
i.Overall cost risk? ii.Other costs?	**1.High**	Cost of new rail tram-trains, new stations, modification to existing stations, construction of on-street alignment/stops.
Affordability (1= not affordable, 5 = affordable)	**2**	Whilst the proposal makes use of the existing rail network (in part), there are still significant infrastructure costs that would be incurred.
Likely value for money?	**Medium 1.5-2**	BCR of 1.86
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Due to its cost, DARTS would be a longer term proposal. Long implementation timescales due to tram/train interface feasibility issues that will need to be overcome. Also need to take into account the progress on wider Network Rail development of tram-train concept and trials elsewhere
Public acceptability	**4. Medium-high**	Medium-high owing to irregular service pattern; possible concerns over street running.

Practical feasibility	**2. Low-medium**	Likely to be a number of issues over tram/train interface even though it is accepted in principle. Some of the issues that will need to be resolved with the development of the town centre route include: • the route through Bournemouth West Rail Depot may pose track and signal standards issues; • merging DARTS services onto the heavy rail tracks east of Bournemouth station may create some issues with the physical capacity of the local roads; • the existing one way junction between Holdenhurst Road and the approach road to Bournemouth station would need to be re-configured; • structural works would be required at the crossing of Suffolk Road with Cambridge Road; • the street running section underneath the Queen's Road over-bridge will require careful detailed design. General issue of on-street running through Bournemouth town centre.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (7)
	Goal&colour	Tackle climate change (7)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (2)
	Goal&colour	Implementability (2)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**5. Significant impact**	Addresses a large number of the DfT goals.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This is a strategic, cross-South East Dorset scheme.
Is the option innovative and/or encourage better use?	**Innovative**	Proposal aims to make better use of the existing transport network but would be innovative use of existing infrastructure.
Overall strategic fit?	**4. Medium-high**	Excellent fit - option complements other policies/proposals affecting study area, detailed design would need to take particular account of minimising significant negative impacts on other modes (especially existing heavy rail operations and operation of other transport operation in Bournemouth town centre) or outcomes and demonstrates 'doing more with less'.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Scheme has been assessed using the strategic model.
Previous Studies	**Unknown**	Proposals from LA21. Desktop study by R. Clayton (2001).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	Mixed views - particular support by South East Dorset residents who would be able to access DARTS and hence benefit from its operation.
Key Uncertainties/risks (external factors)	Integration of tram rail services with heavy rail services - support will be needed from Network Rail.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Proposal would need to be delivered in its entirety. Timing would be driven by funding availability, feasibility, and interfaces with the heavy rail services. Although potential for extension of the scheme in the longer term (not included in this assessment).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Journey time benefits from increased frequency, and journey time savings for journeys through Bournemouth Town Centre. Based on the modelling, in the morning peak hour, the dominant passenger movement is towards Bournemouth with a peak load of around 400 from Christchurch and 300 passengers on the Hamworthy service, with the reverse direction showing 175 and 200 passengers respectively.
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	Would reduce variability in journey times through mode shift onto public transport, and not increase number of incidents.

Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	Would contribute to delivery of housing by enhancing public transport supply and capacity.

Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No effect on resilience.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Major Beneficial	Reduction in CO2 emissions due to a reduction in travel by car and shift to less carbon intensive form of travel.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	DARTS would have a positive impact on air quality by encouraging mode shift onto public transport.
Improve health through physical activity	Moderate Beneficial	Physical activity will improve through more people walking to stops to access DARTS.
Reduce the risk of death or injury	Moderate Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.follwing change in mode split
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	Would include improved stops in Bournemouth Town Centre, with additional passenger volumes and activity increasing security.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	DARTS serves town centres of Poole, Bournemouth and Christchurch and improves public transport links to employment and services such as healthcare.
Accessibility (in terms of public transport journey times/areas served)	Moderate Beneficial	DARTS would help improve rail provision for local journeys. Journey time benefits from faster journeys and increased frequency, and journey time benefits from Bournemouth town centre.
Social and distributional impacts (on low income and vulnerable groups)	Slight Beneficial	Proposal would benefit those on low incomes who are more likely to use public transport.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Would serve new housing and employment developments and thus contribute towards regeneration, as well as serving areas with high unemployment.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift away from the car would help to reduce traffic related noise.
Biodiversity	No Impact	No known impact.
Geodiversity	No Impact	No known impact.
Historic Environment	Slight Adverse	New infrastructure could impact the historic urban environment, however the impact is unknown.
Landscape Character and Open Space	No Impact	No known impact.
Land Resources	No Impact	No known impact.
Flood Risk	No Impact	No known impact.
Experience of travel	Major Beneficial	High quality tram-trains would improve the experience of travel.
Urban environment	No Impact	On-street running would be integrated into urban realm improvements.

Assessment Sheet	**Option Name/No.**	1i) Express bus services - network of routes to rural areas

1.) Summary of option		
Description	Network of express services from outlying areas into principal urban areas, including: - Verwood-West Moors-Ferndown-Bournemouth. - Verwood-West Moors-Wimborne-Poole. - Highcliffe-Christchurch-Boscombe-Bournemouth. - Lytchett Minster-Upton-Hamworthy-Poole. - Improved services between Wimborne and Bournemouth. - Improved bus services on north-south routes.	
Key DfT Goal	Promote Equality of Opportunity	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**None**	Assumes that bus operator funds any new buses as part of overall package including Bus Showcase Corridors (BSC).
Revenue Costs (£m)? (per annum)	**None**	It is anticipated that express bus services would be delivered commercially as part of Quality Bus Partnership agreements.
Where is funding coming from?	Bus operators.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	Revenue funding might be needed to kick start improved services.
Affordability (1= not affordable, 5 = affordable)	**3**	Dependent on whether of revenue funding is needed to kick start improved services.
Likely value for money?	**Medium 1.5-2**	BCR of 1.65
3.) Deliverability		
Implementation timetable from inception to delivery	**6-12 months**	Depends on level of support from the bus operators to implement the new services. Otherwise it may be necessary to tender for the services. There may be a delay whilst the bus operator obtains additional buses. Timescales would be longer if delivered in conjunction with Bus Showcase Corridors.
Public acceptability	**4. Medium-high**	Should be a relatively acceptable scheme. Possible objections if there are a large number of buses using a particular road (e.g. there are issues with the number of buses stopping at Christchurch High Street). Also may be issues with the local authority spending on kick starting express bus services without improving bus reliability.
Practical feasibility	**4. Medium-high**	Dependent upon procurement of new buses if are required.

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (5)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (5)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (0)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**3**	Addresses three of the DfT goals. Scale of impact is expected to be limited in the absence of associated bus priority schemes, demand management and smarter choices (as buses will still be affected by congestion).
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	Benefits are expected to be specific to South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	Express bus services are a well established type of intervention.
Overall strategic fit?	**5. High**	Excellent fit - option complements other policies/proposals affecting study area, has no negative impacts on other modes or outcomes and demonstrates 'doing more with less'.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Express bus services have been modelled.
Previous Studies	**Unknown**	- Poole/Bournemouth Public Transport Study (1992)
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is majority consensus that if bus services are faster they will be more attractive to car users.
Key Uncertainties/risks (external factors)	Depends on level of support from bus operators and availability of revenue funding to potentially fund services initially.	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	Delivery of express services could be phased.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Limited stop services will help to reduce journey times.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Will encourage mode shift away from the private car, but this would not be significant without associated bus priority schemes.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Scheme costs under £20m.
Delivery of housing (facilitate or prevent new housing)	No Impact	The express bus services will not facilitate or prevent new housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact on resilience.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Small reduction in carbon emission due to change in mode shift away from the private car, but would not be significant without associated bus priority schemes.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus wll improve air quality due to reduced car dependency.
Improve health through physical activity	Slight Beneficial	Physical activity will improve through more people walking to bus stops.
Reduce the risk of death or injury	Slight Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	No associated security improvements.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Express bus services will help accessibility and acceptability.
Accessibility (in terms of public transport journey times/areas served)	Moderate Beneficial	Enhanced accessibility, and beneficial to the rural areas. Implementation of limited stop services will reduce overall journey times and improve accessibility for those living further out of the study area. 'Stopping services' would still be in place so that accessibility is not reduced.
Social and distributional impacts (on low income and vulnerable groups)	Slight Beneficial	Limited stop services will help to reduce journey times. Level of impact depends on whether these are new services or if some existing services would become limited stop.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Beneficial	Positive impact on a regeneration area and other areas.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus will reduce traffic related noise.
Biodiversity	No Impact	No known impact.
Geodiversity	No Impact	No known impact.
Historic Environment	Moderate Beneficial	Reducing transport congestion in the urban areas will benefit the historic environment.
Landscape Character and Open Space	No Impact	No known impact.
Land Resources	No Impact	No known impact.
Flood Risk	No Impact	No known impact.
Experience of travel	Moderate Beneficial	Experience of travel will improve for those people who previously used "stopping services".
Urban environment	Slight Beneficial	Urban centres will be improved due to less traffic congestion.

Assessment Sheet	**Option Name/No.**	1j) Park & Ride sites (3): Creekmoor, Mannings Heath & Riverside Avenue

1.) Summary of option		
Description	First phase of Park and Ride sites including - Public use of the former Creekmoor site, serving Poole. - New site at Riverside Avenue, north of Bournemouth Hospital, serving Bournemouth. - New site at Mannings Heath, at the junction of Canford Way and Mannings Heath Road, serving Bournemouth and Poole.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Improve journey time reliability.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	- Creekmoor = small cost to construct a waiting area at the former site. - Mannings Heath = £5million. - Riverside Avenue (near Bournemouth Hospital) = £5million.
Revenue Costs (£m)? (per annum)	**0-5**	It is anticipated that the Park and Ride sites and services would need some revenue support, higher initially and declining to: - Creekmoor: £10k per annum. - Mannings Heath: £45k per annum. - Riverside: £20k per annum. - Total: £75k per annum.
Where is funding coming from?	Major scheme funding, LTP funding, developer funding.	
Any income generated to local authority (£m)? (per annum)	**Yes**	0-5
i.Overall cost risk? ii.Other costs?	**4. Low-medium**	Park and Ride sites are likely to need some revenue support, reducing over time. Town centre parking charges would not change as part of this option, which raises the cost risk, but the number of spaces would be reduced.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Depends on specification of Park & Ride site. An initial cost of £5m per site is assumed, except for Creekmoor where site already exists.
Likely value for money?	**Medium 1.5-2**	BCR of 1.7
3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Depends on whether Park & Ride site forms part of a major scheme bid.
Public acceptability	**3. Medium**	- Creekmoor = Medium. - Mannings Heath = Low-medium due to potential environmental concerns. - Riverside Avenue (near Bournemouth Hospital) = Medium.
Practical feasibility	**3. Medium**	- Creekmoor = High - could be served by existing services. - Mannings Heath = Less feasible in technical/ engineering terms, although operationally feasible. - Riverside Avenue (near Bournemouth Hospital) = Feasible in technical/engineering and operational terms.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (5)
	Goal&colour	Improve quality of life and natural environment (0)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (3)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**3**	Park and Ride provides an alternative for car drivers, but does not improve the situation for those without a car (except for users able to cycle to Park and Ride site).
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Will provide an alternative for those driving into Bournemouth and Poole from outside urban area.
Is the option innovative and/or encourage better use?	**Well-established**	Park and Ride is a well established type of intervention.
Overall strategic fit?	**2. Low-medium**	Would fit well as part of wider parking policy, however the multi centred conurbation would not be easily served by Park and Ride.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Park and Ride sites have been modelled.
Previous Studies	**Yes**	- Poole/Bournemouth Public Transport Study (Colin Buchanan and Partners, 1992). - South East Dorset Second Local Transport Plan (2006-2011).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	There is a general consensus that appropriately located and priced Park and Ride sites can improve traffic conditions - however the multi-centred connurbation would not be easily served by Park and Ride.
Key Uncertainties/risks (external factors)	Environmental risks as the sites will be built outside the highway boundary. Subject to outcome of Phase 1 Habitat Surveys and subsequent Phase 2 species specific surveys if required, and obtaining planning permission.	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	Delivery of the three Park and Ride sites could be phased (e.g. one site at a time). Also each site could be delivered in phases, expanding the size of site and frequency of services when demand requires it.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Journey times would improve and the cost of travel may be improved (at least by public transport). Possible negative impacts on local traffic in vicinity of Park and Ride sites.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Would slightly reduce journey time variability and not increase number of incidents, however numbers transferring from car are relatively low and would continue to drive to P&R site.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Under £20m and within a Functional Urban Region, would have a neutral impact.
Delivery of housing (facilitate or prevent new housing)	No Impact	Not expected to facilitate or prevent new housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact on resilience.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Slight reduction in CO2 emissions due to a reduction in travel by car into the town centres - however car journeys will still be made to access the Park & Ride sites.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Slight Beneficial	People would be able to walk/cycle to Park & Ride sites.
Reduce the risk of death or injury	Slight Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres. However, this would be marginal as it is only the last part of the journey which is affected.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	New Park & Ride sites would include security measures such as CCTV.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	No Impact	No particular impact on deprived areas.
Accessibility (in terms of public transport journey times/areas served)	No Impact	No impact on accessibility (Park & Ride would benefit those who have access to a car).
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No particular impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	Park & Ride will help remove car trips into the regeneration area and therefore contribute positively. Will also provide similar benefits for other areas served by the Park & Ride.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to bus would reduce traffic related noise.
Biodiversity	Major Adverse	Various Park and Ride proposals are located within/adjacent to SPAs and SACs. Loss of open space may impact local biodiversity.
Geodiversity	Slight Adverse	Development on greenfield may occur.
Historic Environment	Slight Beneficial	Reducing transport congestion in the urban areas will benefit the historic environments.
Landscape Character and Open Space	Slight Adverse	Development on greenfield may occur, resulting in increase land take.
Land Resources	Slight Adverse	Development on greenfield may occur.
Flood Risk	No Impact	Park and Ride sites would include use of SUDS (Sustainable Urban Drainage Systems) and not worsen flood risk.
Experience of travel	Slight Beneficial	Improvement to experience of travel assuming new buses.
Urban environment	Slight Beneficial	Urban centres will be improved due to less traffic congestion.

Assessment Sheet	**Option Name/No.**	1k) Park and Ride sites (8): Creekmoor, Mannings Heath, Riverside Avenue, Northbourne, Hinton Admiral, Holton Heath, Wareham (Park and Rail), Bournemouth International Airport (Hub/Interchange)

1.) Summary of option		
Description	The full set of Park and Ride measures contains eight sites containing bus and rail based schemes: - Creekmoor. - Mannings Heath. - Riverside Avenue (near Bournemouth Hospital). - Northbourne/New Road. - Park and Rail at Hinton Admiral, Holton Heath and Wareham with additional parking at existing stations. - Bournemouth International Airport.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Improve journey time reliability.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	Total cost of about £16m split between individual sites - Creekmoor = small cost to construct a waiting area at the former site. - Mannings Heath = £5m. - Riverside Avenue (near Bournemouth Hospital) = £5m. - Northbourne = £5m. - Hinton Admiral (rail) = £0.23m. - Holton Heath (rail) = £0.23m. - Wareham (rail) = £0.23m. - Bournemouth Airport Interchange/Hub = small cost anticipated.
Revenue Costs (£m)? (per annum)	**0-5**	It is anticipated that the bus-based Park and Ride sites and services would need some revenue support, higher initially and declining to: - Creekmoor: £10k per annum. - Mannings Heath: £45k per annum. - Riverside: £20k per annum. - Northbourne (Kinson) = £50k per annum. - Bournemouth Airport Interchange/Hub = £40k per annum. - Total: £165k per annum.
Where is funding coming from?	Major scheme funding, LTP funding, developer funding (Riverside Avenue).	
Any income generated to local authority (£m)? (per annum)	**Yes**	0-5
i.Overall cost risk? ii.Other costs?	**4. Low-medium**	It is anticipated that the Park and Ride sites would need some revenue support, which would be higher initially. Town centre parking charges would not change as part of assessing this option, which raises the cost risk, but the number of town centre spaces would be reduced.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Depends on specification of Park & Ride site. An initial cost of £5m per site is assumed.
Likely value for money?	**High 2-4**	BCR of 1.6 for full package of sites
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long timescales expected for full set of sites due to the higher number of Park and Ride sites.

Public acceptability	**3. Medium**	- Creekmoor = Medium. - Mannings Heath = Low-medium due to environmental concerns. - Riverside Avenue (near Bournemouth Hospital) = High. - Hinton Admiral (rail) = High. - Holton Heath (rail) = High. - Wareham (rail) = High. - Northbourne = Low-medium due to environmental concerns. - Bournemouth International Airport = High.
Practical feasibility	**4. Medium-high**	- Creekmoor = Both technically/engineering and operationally feasible. - Mannings Heath = Less feasible in technical/engineering terms but operationally feasible. - Riverside Avenue (near Bournemouth Hospital) = Less feasible in technical/engineering terms but operationally feasible. - Northbourne (Kinson) = Both technically/engineering and operationally feasible. - Hinton Admiral (rail) = Both technically/engineering and operationally feasible. - Holton Heath (rail) = Both technically/engineering and operationally feasible. - Wareham (rail) = Both technically/engineering and operationally feasible. - Bournemouth International Airport = Both technically/engineering and operationally feasible.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (5)
	Goal&colour	Improve quality of life and natural environment (4)
Additional network goals:	*Goal&colour*	Affordability (2)
	Goal&colour	Implementability (3)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	Park and Ride provides an alternative for car drivers, but does not improve the situation for those without a car (apart from people who cycle to a Park and Ride site). Higher impact compared with the 3 Park & Ride scheme option.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Will provide an alternative for those driving into Bournemouth and Poole from outside the urban area.
Is the option innovative and/or encourage better use?	**Well-established**	Park and Ride is a well established form of intervention.
Overall strategic fit?	**3. Medium**	Would fit well as part of wider parking policy, however the multi-centred conurbation creates some difficulties in identifying financially sustainable Park and Ride sites because of range of city centre destinations. In the medium term, Park and Ride can be provided at the proposed hub/interchange at Bournemouth Airport (with the provision of waiting facilities at the existing car park) and at rail stations. Park and Rail complements the separate proposal to increase the cross conurbation rail frequency or the introduction of DARTS .
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	The impact of the series of Park and Ride sites have been modelled.

Previous Studies	**Unknown**	- Poole/Bournemouth Public Transport Study (1992)
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a general consensus that appropriately located and priced Park and Ride sites can improve traffic conditions - however the multi-centred connurbation would not be easily served by Park and Ride.
Key Uncertainties/risks (external factors)	Environmental risks as the sites will be built outside the highway boundary. Subject to outcome of Phase 1 Habitat Surveys and subsequent Phase 2 species specific surveys if required.	

Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	Delivery of the eight Park and Ride sites could be phased (e.g. one site at a time). Also each site could be delivered in phases, e.g. 300 spaces at the opening, increasing to 500 spaces or more when demand requires.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Journey times would improve and the cost of travel may be improved (at least by public transport). Possible negative impacts on local traffic in vicinity of Park and Ride sites due to generation of cars seeking to access the site.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Should slightly improve journey time variability and not increase number of incidents, however numbers transferring are relatively low.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Scenario is within a Functional Urban Area and costs less than £20m.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Would not directly facilitate delivery of housing, although Park & Ride could help improve general traffic conditions.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact on resilience.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Reduction in CO2 emissions due to a reduction in travel by car into the town centres - however car journeys will still be made to the Park and Ride sites and hence will be a local increase in emissions in vicinity of each site.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to bus would improve air quality.
Improve health through physical activity	Slight Beneficial	People would be able to walk/cycle to Park & Ride sites.
Reduce the risk of death or injury	Slight Beneficial	Number of people Killed and Seriously Injured (KSI) would decrease, due to a reduction in vehicle kilometres. However, this is likely to be marginal as only part of the journey is affected.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	New Park & Ride sites would include security measures such as CCTV.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	No Impact	No particular impact on deprived areas.
Accessibility (in terms of public transport journey times/areas served)	No Impact	No impact on accessibility (Park & Ride would benefit those who have access to a car).
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No particular impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	Park and Ride services will serve (or be associated with) some new housing and employment developments and thus will contribute towards regeneration.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift away from the car would help to reduce traffic related noise.
Biodiversity	Major Adverse	Various Park and Ride proposals are located within/adjacent to SPAs and SACs. Loss of open space may impact local biodiversity.
Geodiversity	Moderate Adverse	Development on greenfield may occur.
Historic Environment	Slight Beneficial	Reducing transport congestion in the urban areas will benefit the historic environments.
Landscape Character and Open Space	Moderate Adverse	Development on greenfield may occur, resulting in increase land take.
Land Resources	Moderate Adverse	Development on greenfield land might occur.
Flood Risk	No Impact	Park and Ride sites would include use of SUDS (Sustainable Urban Drainage Systems) and not worsen flood risk.
Experience of travel	Slight Adverse	Small impact although impact would be strengthened by any bus priority schemes.
Urban environment	Slight Beneficial	Urban centres will be improved due to reduced traffic congestion.

Assessment Sheet	**Option Name/No.**	1l) More frequent rail services across the area (between Wareham and Brockenhurst)

1.) Summary of option		
Description	Increase frequency of service between Wareham and Brockenhurst using existing turnaround facilities at each location. In this way local rail services in the conurbation would be increased without the constraints of restrictions from longer distance services to/from London Waterloo.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Enhance connectivity and help to overcome regional peripherality. - Promote alternatives to the car and encourage behavioural change.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**None**	No capital cost.
Revenue Costs (£m)? (to 2026)	**25-50**	£3.1m per year.
Where is funding coming from?	Network Rail, train operating companies.	
Any income generated (£m)? To local authority	No	5-10
i.Overall cost risk? ii.Other costs?	**1.High**	Depends on level of support from Network Rail and the train operating companies. No income generated for the local authorities although up to £6.4m additional revenue for train operating companies
Affordability (1= not affordable, 5 = affordable)	**3**	Depends on whether frequency upgrade would require subsidy.
Likely value for money?	**High 2-4**	BCR of 2.1
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	It is anticipated that rail service proposals would have a long lead time.
Public acceptability	**5. High**	Increases in rail service frequency are likely to be popular, with no increase in infrastructure producing an improved rail service.
Practical feasibility	**3. Medium**	Using existing turnaround facilities, service would need to run between Wareham and Brockenhurst. By constructing new turn back facility at Christchurch and upgrade to turn back facility at Hamworthy, it would be feasible to offer a more focussed cross-conurbation service with lower operating costs. It would then be possible to extend existing Waterloo-Poole service to Hamworthy and run an additional short Hamworthy-Christchurch journey to give even 30 min headway across the conurbation.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (4)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (5)
	Goal&colour	Implementability (5)
5.) Scale of Impact		

To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	Addresses all of the DfT goals, particularly the economic goal.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	Improves rail frequencies within South East Dorset.
Is the option innovative and/or encourage better use?	**Well-established**	The proposal is making better use of the existing rail infrastructure.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies for the study area.

7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**5. High**	Rail frequency enhancements have been modelled in the strategic model.
Previous Studies	**Unknown**	No previous studies known.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a concensus that improved rail service frequency will make the route more attractive.
Key Uncertainties/risks (external factors)	Depends on level of support from Network Rail and the train operating companies.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Proposal would need to fit in with other Network Rail plans. Services were last improved in December 2007, when the Wareham – Brockenhurst service was replaced, with the frequencies between London Waterloo and Weymouth increasing to two trains per hour.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Involves improving the frequency of an existing railway line. Beneficial to local communities, tourists, employers.
Improve Reliability (impact on day to day variablility and number of incidents)	Moderate Beneficial	Mode shift to rail may help improve journey time reliability.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Scheme cost over £20m and within a Functional Urban Area.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Would not facilitate or prevent housing, but would make a contribution to developments in the vicinity of stations.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Proposal does not include any additional infrastructure or improve the resilience of existing infrastructure.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Mode shift to rail would help reduce congestion carbon emissions but not by a significant amount.
Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Will reduce congestion, thus improve air quality.
Improve health through physical activity	Slight Beneficial	Physical activity will improve through more people walking or cycling to the railway stations
Reduce the risk of death or injury	No Impact	No significant impact expected.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	Slight Beneficial	Scheme would be based on existing rail security and hence would represent slight improvement to overall security.
Reduce crime (impact on crime and fear of crime).	No Impact	No significant impact expected.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Benefits from increased frequency with up to 4 tph service each way throughout the conurbation.
Accessibility (in terms of public transport journey times/areas served)	Slight Beneficial	Rail frequency enhancement will improve travel opportunities, and connections with other services.
Social and distributional impacts (on low income and vulnerable groups)	Slight Beneficial	Improved travel opportunities for those without access to private car. Note that Hamworthy, Parkstone, Holton Heath, Pokesdown and Branksome stations are not fully compliant with DDA requirements and hence would restrict benefits to some vulnerable groups - rating would improve if proposal included improvements to these stations.

Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	Will not serve new housing and employment developments - but improved rail services in the locality may make the area more attractive to developers.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Don't Know	
Biodiversity	No Impact	No significant impact expected, no major infrastructure.
Geodiversity	No Impact	No significant impact expected, no major infrastructure.
Historic Environment	Slight Beneficial	Reducing transport congestion in the urban areas will benefit the historic environment.
Landscape Character and Open Space	No Impact	No significant impact expected, no major infrastructure.
Land Resources	No Impact	No significant impact expected, no major infrastructure.
Flood Risk	No Impact	No significant impact expected, no major infrastructure.
Experience of travel	Slight Beneficial	More frequent services would reduce time waiting for rail connections.
Urban environment	Slight Beneficial	Reducing transport congestion in the urban areas will benefit townscape.

Assessment Sheet	**Option Name/No.**	1m) Smartcard ticketing (similar to London Oyster card)

1.) Summary of option		
Description	Use of stored value tickets (Oyster type) to improve journey times - multi-operator and/or multi-modal. The main focus for smartcard ticketing improvements in South East Dorset (and the wider Dorset area) is the migration to an ITSO compliant smartcard. An interoperable ticket has been identified (the Getting About Card) which will become a smartcard as part of the implementation of ITSO compliant Electronic Ticket Machines (ETM). The South West Smartcard Board, comprising local authorities, operators and passenger interests, was established to drive forward the delivery of a Host Operator Processing System (HOPS) for the South West Region. The HOPS is specified so that it can be scaled to a size that can deliver the functionality across the whole South West region.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Promote Equality of Opportunity	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Promote alternatives to the car and encourage behavioural change.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	Smartcard bid - £1.67m. Both capital and revenue.
Revenue Costs (£m)? (per annum)	**0-5**	Smartcard bid - £1.67m. Both capital and revenue.
Where is funding coming from?	BBC, BoP and DCC, in partnership with Go South Coast and Bournemouth Transport Ltd, have made a bid to the 'ITSO Migration Capital Grant Fund'. This bid is aimed at developing an ITSO based environment across three authorities of Dorset, Poole and Bournemouth. Scheme would increase revenue to operators but would not have impact on any income to local authorities.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**5. Low**	An ITSO based environment is planned across three authorities of Dorset, Poole and Bournemouth, therefore the risks are assumed to be low. The larger operators in the region are already ITSO members or are planning to become members. The Getting About card will become 'smart' as part of the implementation of ITSO compliant Electronic Ticketing Machines.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Smartcards are affordable, depending on the overall cost of package of measures. Bid to the ITSO Migration Capital Grant Fund was succesful.
Likely value for money?	**Low 1-1.5**	Smartcard ticketing on its own will not encourage significant mode shift to public transport, but will contribute as part of overall package of public transport improvements.
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Lead times depends on compatibility with on-bus equipment.
Public acceptability	**5. High**	A smartcard ticketing system is likely to be popular with the public.
Practical feasibility	**4. Medium-high**	Compatibility with on-bus equipment may be an issue. Rail stations in the study area already have Oyster Card readers installed although these are not yet operational.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (5)
	Goal&colour	Improve quality of life and natural environment (6)
Additional network goals:	*Goal&colour*	Affordability (6)
	Goal&colour	Implementability (4)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**3**	Relatively low impact in isolation, unless delivered in conjunction with other measures to encourage mode shift (e.g. improved bus routes, bus priority, better integration of pub;lic transport services and modes).
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Proposal relates to the whole of the South East Dorset area.
Is the option innovative and/or encourage better use?	**Well-established**	Smartcards are a well established type of intervention.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**3. Medium**	Cannot be assessed using the transport model, but there are well established and successful examples, e.g. London Oystercard.
Previous Studies	**Unknown**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is majority consensus about the benefits of smartcard ticketing, including quicker boarding and tickets that can be used across different operators.
Key Uncertainties/risks (external factors)	Technology risk should be relatively low assuming a system similar to Oyster. Compatibility with on-bus equipment could be an issue.	
Flexibility (1 = static, 5 = dynamic)	**3**	Could be rolled out for rail before extending to buses. There are smartcard readers at some rail stations in South East Dorset already.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Faster boarding times enabling shorter journey times and better reliability. Also will help improve integration between bus and rail and encourage mode shift.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	The benefits of smartcards can include increases in passenger satisfaction, resulting in modal shift. Shorter boarding times enabling buses to run more reliably, with shorter journey times
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Option costs less than £20m and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Option is unlikely to facilitate new housing, but may make the area more attractive for development.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Mode shift to public transport will help to reduce carbon emissions. The use of the South West Host Operator Processing System (HOPS) is estimated to result in a CO2 reduction of 4,300 tonnes over 5 years, valued at £110,000.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift to public transport will have a positive affect on air quality. Use of the South West Host Operator Processing System (HOPS) is estimated to result in NOx reductions of 20 tonnes over 5 years, valued at £45,000.
Improve health through physical activity	Slight Beneficial	Slight benefit from increased public transport through more people walking to bus stops.
Reduce the risk of death or injury	No Impact	No impact.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	Reductions in fraud. Smart enabled buses and from enhanced data and fraud reduction; efficiency gains over 5 years of £880,000.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Associated simplified fare structures would remove the ambiguity in purchasing the cheapest possible fare for a given journey. Potential monetary savings on tickets purchased would benefit those on low incomes.
Accessibility (in terms of public transport journey times/areas served)	Slight Beneficial	Shorter boarding times enabling buses to run faster, which would reduce journey times and improve accessibility from the outskirts of South East Dorset. The full bid will deliver 557 ITSO equipped vehicles in the three local authorities, many of which will also be operating in the neighbouring authority of Wiltshire giving additional benefit beyond the area of the participating local authorities.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Beneficial	Associated simplified fare structures would removes the ambiguity in purchasing the cheapest possible fare for a given journey. Potential monetary savings on tickets purchased would benefit those on low incomes. Depends on the minimum amount that a user is required to keep on their smartcard/how much they have to 'top up' at a time.
Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	Positive impact on a regeneration area and other areas.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift to public transport would help reduce traffic related noise, but impacts in isolation are expected to be limited.
Biodiversity	No Impact	No known impact.
Geodiversity	No Impact	No known impact.
Historic Environment	No Impact	No known impact.
Landscape Character and Open Space	No Impact	No known impact.
Land Resources	No Impact	No known impact.
Flood Risk	No Impact	No known impact.
Experience of travel	Major Beneficial	Reduced boarding times. Increased convenience of fare payment and hence makes using public transport easier.
Urban environment	No Impact	No known impact.

Assessment Sheet	**Option Name/No.**	1n) Re-opening of the Swanage rail line with potential Park & Ride

1.) Summary of option		
Description	Reconnecting the Swanage railway to the South Western mainline. The existing line from Wareham to Swanage is single track throughout. The Swanage Railway currently operates as a preserved line between Norden and Swanage, with up to 3 trains every 2 hours. The section south-east of Wareham is a disused freight line for the oil plant at Furzebrook. The scheme would require extensive signalling and junction works at the Worgret junction, and upgrading the track to 25mph speed between Wareham and Norden. 1 tph with leased 2-car diesel trains, paid staff is assumed. There is an associated proposal to develop the existing Wareham station as a Park & Rail station by adding to the existing station car parking (current capacity: 70 cars). Land availability is quite limited in the area adjoining the station. There is a parcel of land 2800 sq.m. in area which could potentially be used for developing a car park. This could potentially accommodate an additional 132 cars, taking the total up to 202. There is a building on the site at present, and land acquisition costs may be incurred.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Help create a modern, efficient and integrated transport system. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	£3.5m at 2010 prices for reopening Swanage line. £0.18m for Park & Rail at Wareham.
Revenue Costs (£m)? (to 2026)	**10-25**	£1.5m per year, at 2010 prices.
Where is funding coming from?	The income from the Purbeck Interim Contributions scheme (operational since 2007) will be allocated on Dorset's ~£3m contribution towards the cost of signalling and other measures which will allow regular rail services between Swanage and the main line rail network at Wareham; this will be undertaken by Network Rail as part of the wider Poole to Wool area resignalling (scheduled for completion in 2013).	
Any income generated (£m)? (to 2026)	**Yes**	0-5
i.Overall cost risk? ii.Other costs?	**1.High**	Dependent on Network Rail resignalling of the wider area. Signalling needed for trains to come onto the Swanage Line from the mainline (and vice versa). It is anticipated that service frequency along the line would be built up in line with growth in demand.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	DCC has provided the funding which will be repaid through the Purbeck Interim Contributions scheme.
Likely value for money?	**Medium 1.5-2**	BCR 1.9
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	The through line from Wareham to Swanage has already been opened to occasional special charter services, often using steam locomotives. However, regular passenger services are dependent on Network Rail's resignalling of the wider area (Poole to Wool re-signalling work - 2013). Signalling needed for trains to come onto the Swanage Line from the mainline (and vice versa).
Public acceptability	**5. High**	This is a popular proposal with the public. There is greater support to the west of the study area.

Practical feasibility	**3. Medium**	- Re-opening of the Swanage rail line: Technical/Engineering feasible with track and signal changes at Wareham. Operationally feasible. - Park and Rail at Wareham: Technical/Engineering feasible. Operationally feasible.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (7)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (6)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (3)
	Goal&colour	Implementability (7)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	Addresses all of the DfT goals. Mainly benefits the west of the study area.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This would improve public transport access from the west of the study area.
Is the option innovative and/or encourage better use?	**Well-established**	This is a well established type of scheme.
Overall strategic fit?	**4. Medium-high**	Good fit - the option fits very well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	The impact of thr rail service to Swanage was modelled in the strategic model.
Previous Studies	**Unknown**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a majority consensus in favour of the rail reconnection.
Key Uncertainties/risks (external factors)	Further improvements are needed to the rail line between Worgret junction and Swanage.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Will need to fit in with Network Rail plans and programmes (e.g. resignalling of the wider area).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Will reduce journey times by public transport along this route. Journey time benefits for most journeys to and from the Swanage branch stations. Bus journey time: 68 mins as compared to train journey time: 40 mins. Diversion from car to rail will create reduced traffic levels on the A351.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Would help improve traffic conditions to the west of the study area, with reduced traffic on the A351.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Capital cost under £20m, therefore neutral impact assumed - no need to assess Wider Economic Impacts.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Would not facilitate or prevent housing, but would make a contribution by improving accessibility.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	Provides an alternative travel route/option.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Proposal would encourage mode shift from car to rail and create moderate reduction in carbon consumption.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift away from the car would help to improve air quality along the A351.
Improve health through physical activity	Moderate Beneficial	More people walking/cycling to the railway stations.
Reduce the risk of death or injury	Moderate Beneficial	A decrease in people killed or seriously injured in transport accidents due to mode shift from car to rail. Also a reduction in KSI per kilometre travelled.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	Moderate Beneficial	Any rail proposals would be designed to be compliant with security regulations.
Reduce crime (impact on crime and fear of crime).	No Impact	Assumed to have no impact on crime or people's fear of crime.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Beneficial	Would significantly improve public transport options for people living in Swanage who do not have access to a car.
Accessibility (in terms of public transport journey times/areas served)	Major Beneficial	Journey time benefits for most public transport journeys to and from the Swanage branch stations. Bus journey time: 68 mins as compared to train journey time: 40 mins.
Social and distributional impacts (on low income and vulnerable groups)	Slight Beneficial	Improvement in accessibility by the improvement to public transport would provide benefits to vulnerable groups. Whilst trains and all Swanage Line stations are DDA compliant, Wareham station is not yet compliant.
Regeneration (impact on a targeted regeneration area, and any other areas)	Neutral	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift away from the car would help to reduce traffic related noise.
Biodiversity	No Impact	No significant impact.
Geodiversity	No Impact	No significant impact.
Historic Environment	No Impact	No significant impact.
Landscape Character and Open Space	No Impact	No significant impact.
Land Resources	No Impact	No significant impact.
Flood Risk	No Impact	No significant impact.
Experience of travel	Major Beneficial	Proposal would give the opportunity to travel by rail instead of by car.
Urban environment	No Impact	No impact on the urban environment.

Assessment Sheet	**Option Name/No.**	1o) Water Taxi Service

1.) Summary of option		
Description and objective	Range of potential schemes are included in the package: - Swanage – Bournemouth – Boscombe – ferry service. - Poole – Swanage high frequency water taxis. - Poole – Bournemouth high frequency water taxis. - Christchurch - extend existing local ferry services with longer operating period and improved frequency. The aim is to encourage mode shift from car to water, to reduce traffic on the road network, for both commuter and tourism journeys.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Support economic competitiveness and growth	
Scenario or scheme objectives	- Improve journey time reliability. - Promote alternatives to the car and encourage behavioural change. - Improve accessibility to work, education, shopping, leisure and healthcare services.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**50-100**	Estimated to be £7m per annum - lease cost of vehicles. Does not include cost of improving landing stages/piers which would increase the capital cost further. Therefore costs of over £50m are assumed.
Revenue Costs (£m)? (per annum)	**Don't know**	Estimated to cost £10m per annum to operate. Fare income unknown.
Where is funding coming from?	Unknown.	
Any income generated to local authority (£m)? (per annum)	**Yes**	Unknown
i.Overall cost risk? ii.Other costs?	**1.High**	Estimates of shift from road to water are currently hypothetical. Modelling of future demand is required. The earlier study hypothesised that "*there is a large potential market for water based commuter services within Christchurch Bay / Poole Bay, on the scale of tens of thousands per day (30,000 each way). For the Jurassic Coast, water based commuter services would have a potential market on the scale of hundreds of passengers per day. Three or four such services might remove say 300 to 400 car journeys per day* ".
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	No funding sources have been identified. The Dorset and East Devon Waterborne Passenger Transport scoping report states that "the funding is there for transport – it is just that transport by sea is not considered".
Likely value for money?	**Low 1-1.5**	It is assumed that the BCR would be low against the high capital cost. Also, the water taxi is more likely to be attractive to tourists rather than commuters, and therefore not address the issue of peak hour congestion.
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long delivery timescales assumed as this is a new operation.
Public acceptability	**4. Medium-high**	It is assumed that a waterborne service would be popular; however actual usage is not expected to be high due to the distances (landside) that would need to be travelled to access the piers. In general, the piers are not located close to the destinations of commuters.

Practical feasibility	**4. Medium-high**	Operators report that lack of suitable landing points is a major impediment to the development of sea services. The scoping study states that there has never been an attempt at a systematic and coordinated upgrading to provide a network of landing facilities for appropriate classes of boat. Impact of tide action and weather conditions on the reliability of sea based public transport is not known, and needs more investigation.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (5)
	Goal&colour	Tackle climate change (5)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (5)
	Goal&colour	Improve quality of life and natural environment (5)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (2)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Addresses several of the DfT goals; however the impacts are minor as patronage is likely to be low.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Could provide alternative links for public transport connections, if competitive journey times, frequency, reliability can be provided at an attractive fare
Is the option innovative and/or encourage better use?	**Innovative**	Waterborne transport is generally not used as a means of transport for commuting in South East Dorset.
Social and distributional impacts? (on low income or vulnerable groups)	Impact on low income or vulnerable groups is likely to depends on the level of fares and scale of accessibility.	
Overall strategic fit?	**3. Medium**	Would provide additional strategic link
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**1. Low**	Water taxi service not modelled in the strategic model. Estimates of shift from road to water are currently hypothetical, based on the output from earlier study. Modelling of future demand is required.
Previous Studies	**Yes**	Dorset and East Devon Waterborne Passenger Transport (September 2009).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	There are mixed views about the costs and benefits that this proposal could have.
Key Uncertainties/risks (external factors)	Impact of tide action and weather conditions on reliability of sea based public transport is not known, and needs more investigation.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Proposal has not been modelled. A scoping assessment for the Dorset and East Devon Waterborne Passenger Transport Study was undertaken in September 2009. The study hypothesised that there is potential for removing at least 1,000 car journeys per day in summer on the Jurassic Coast in the short-term (5 to 10 years). However, there appears to be no basis for this figure in the report.

Improve Reliability (impact on day to day variability and number of incidents)	Slight Adverse	It would be difficult to have regular services serving the piers, due to insufficient depth caused by receding tides. Also, the distance of most piers from their corresponding town centres is further than the usual maximum walking distance. For example in Bournemouth, the end of the pier is more than 800m away from Gervis Place which is about the centre of the town.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	No Impact	Unlikely to facilitate new housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	Potentially it would provide an alternative option if there was an incident on the road network; however in reality, the road network would be used to access the ferry/ water taxi in the first place.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	No Impact	The overall impact on carbon emissions would be minimal due to the need to drive to piers to travel by ferry/ water taxi.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	The proposal will help to improve air quality by encouraging mode shift to public transport.
Improve health through physical activity	Slight Beneficial	People may be encouraged to walk/cycle to the piers.
Reduce the risk of death or injury	Slight Beneficial	Proposal will reduce number of KSIs on the road - however people would need to use their cars to access the piers.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Would benefit those without a car who are within walking distance of the piers.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	The distance of most piers from their corresponding town centres is further the usual maximum walking distance. Although not by a great margin, the water route has the potential to offer shorter journey times, including walking to and from the piers. Water based journeys from Poole are longer than existing bus journeys, primarily due to the harbour being a long distance (1.6 miles) from the town centre.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	Depends on the cost of tickets and the accessibility of the services.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Assume that proposal would reduce traffic related noise.
Biodiversity	No Impact	No significant impact.
Geodiversity	No Impact	No significant impact.
Historic Environment	No Impact	No significant impact.
Landscape Character and Open Space	No Impact	No significant impact.
Land Resources	No Impact	No significant impact.
Flood Risk	No Impact	No significant impact.
Experience of travel	Moderate Beneficial	Likely to improve experience of travel compared with travelling by road.
Urban environment	No Impact	No significant impact.

F.2 Demand Management

a) More controlled parking zones

b) A charge on workplace parking spaces, with reduced town centre long stay parking and doubled charges.

c) Congestion charge (10p/km) in area south of River Stour

Table 2 - Strategic Appraisal of Demand Management Measures

Summary (*1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact*)	2a) More controlled parking zones	2b) A charge on workplace parking spaces, with reduced town centre long stay parking and doubled charges	2c) Congestion charge (10p/mile) in area south of River Stour
Support economic competitiveness and growth	5	6	4
Tackle climate change	5	6	7
Better safety, security and health	5	6	6
Promote equality of opportunity	3	2	1
Improve quality of life and natural environment	6	6	4
Affordability	4	4	2
Implementability	3	1	1
Goal: Support Economic Competitiveness and Growth			
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Neutral	Neutral
Delivery of housing (facilitate or prevent new housing)	No Impact	Moderate Adverse	Moderate Adverse
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	No Impact	No Impact
Goal: Reduce transport's emissions of carbon dioxide			
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Slight Beneficial	Moderate Beneficial
Goal: Better Safety, Security and Health			
Air Quality	Slight Beneficial	Slight Beneficial	Major Beneficial
Improve health through physical activity	Slight Beneficial	Moderate Beneficial	Slight Beneficial
Reduce the risk of death or injury	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	N/A	N/A
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	No Impact	No Impact
Goal: Greater Equality of Opportunity			
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Moderate Adverse	Major Adverse
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Major Adverse	Major Adverse
Social and distributional impacts (on low income and vulnerable groups)	Slight Adverse	Moderate Adverse	Moderate Adverse
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	Moderate Adverse	Major Adverse
Sub-regional imbalance (impact on weak regions)	N/A	N/A	N/A
Goal: Improve Quality of Life and Promote Healthy Natural Environment			
Traffic Related Noise	Slight Beneficial	Slight Beneficial	Moderate Beneficial
Biodiversity	No Impact	No Impact	No Impact
Geodiversity	No Impact	No Impact	No Impact
Historic Environment	No Impact	Slight Beneficial	No Impact
Landscape Character and Open Space	No Impact	No Impact	No Impact
Land Resources	No Impact	No Impact	No Impact
Flood Risk	No Impact	No Impact	No Impact
Experience of travel	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial
Urban environment	Moderate Beneficial	Slight Adverse	No Impact

Assessment Sheet	**Option Name/No.**	2a) More controlled parking zones

1.) Summary of option		
Description and objective	More controlled parking zones (residents parking schemes) to reduce on-street parking by non-residents. These measures are a way to protect residents from the problems caused by commuter or visitor parking in residential streets. The schemes control parking through the implementation of parking restrictions. Each scheme is designed to give residents increased likelihood of parking close to home.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Improve Quality of Life and a Healthy Natural Environment	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Enhance the safety of users of the transport system. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	Capital costs would include lining and signing of CPZ parking bays.
Revenue Costs (£m)? (per annum)	**0-5**	Revenue cost would include running the scheme and enforcement.
Where is funding coming from?	LTP funding, revenue funding.	
Any income generated to local authority (£m)? (per annum)	**Yes**	0-5
i.Overall cost risk? ii.Other costs?	**5. Low**	The councils already operate some controlled parking - implementing more zones is relatively low risk.
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	Roll out of new CPZ could be phased in line with funding availability.
Likely value for money?	**Medium 1.5-2**	The benefits of CPZ could be high if rolled out as part of a package (e.g. in conjunction with Bus Showcase Corridors) and a review of on-street parking provision and charges.
3.) Deliverability		
Implementation timetable from inception to delivery	**2-5 years**	Timescales assume public consultation and TRO implementation.
Public acceptability	**3. Medium**	Likely to be supported in general by residents who have problems parking near their home. Level of support likely to be determined by the level of charge per residents parking permit.
Practical feasibility	**5. High**	Relatively easy to implement - but subject to level of public support.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (5)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (5)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (3)
	Goal&colour	Improve quality of life and natural environment (6)
Additional network goals:	*Goal&colour*	Affordability (4)
	Goal&colour	Implementability (3)

5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Would have a larger impact as part of a package of measures.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Cross-Cutting**	CPZ would address a range of objectives including quality of life.
Is the option innovative and/or encourage better use?	**Well-established**	Residents parking zones are a well established type of intervention.
Overall strategic fit?	**3. Medium**	Reasonable fit - overall the option fits well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	The councils in South East Dorset already have some CPZ; however, CPZ cannot be modelled in the strategic model.
Previous Studies	**Unknown**	No previous studies have been identified.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is evidence from areas in South East Dorset where CPZ have been introduced.
Key Uncertainties/risks (external factors)	Level of support for CPZ will vary depending on the particular area in question and how bad any parking problems are.	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	Delivery of new CPZ can be phased.

Performance Against DfT Goals - RAG Assessment

	RAG status	**Any further information/evidence to back up RAG**
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Will help discourage car use by non-residents, which would improve journey times assuming some of them shift to walking/cycling/PT.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Will help discourage car use by non-residents, which would improve journey time reliability, assuming some of them shift to walking/cycling/PT.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Assumed to cost less than £20m.
Delivery of housing (facilitate or prevent new housing)	No Impact	No impact on the delivery of houses.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	Reduction in illegally parked cars will improve the flow of traffic.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Will help discourage car use by non-residents, which would improve journey time reliability, assuming some of them shift to walking/cycling/PT - however overall impact on emissions is assumed to be low.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Will help discourage car use by non-residents, which would improve journey time reliability, assuming some of them shift to walking/cycling/PT - however overall impact on emissions is assumed to be low.
Improve health through physical activity	Slight Beneficial	Commuter parking may be displaced to other areas outside the controlled parking zone, which may increase the distances that people have to walk.
Reduce the risk of death or injury	Slight Beneficial	Controlled parking zones should reduce illegal parking across dropped kerbs and road junctions. This will improve road safety as well as helping people with mobility problems.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	Slight Beneficial	There should be an improvement in security as parking attendants are conspicuous as they patrol the streets.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	CPZ aim to allow for a fair distribution of parking spaces for local residents by removing commuter parking. This is achieved by the creation of a permit-parking scheme. Cost of residents parking permits could be a problem for those on a low income.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Reduction in illegally parked cars will improve the flow of traffic.
Social and distributional impacts (on low income and vulnerable groups)	Slight Adverse	Could affect people on low incomes who have been parking on residential roads rather than pay for parking.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Will help discourage car use by non-residents, which would improve journey time reliability, assuming some of them shift to walking/cycling/PT. However, overall impact is expected to be low.
Biodiversity	No Impact	No impact.
Geodiversity	No Impact	No impact.
Historic Environment	No Impact	No impact.
Landscape Character and Open Space	No Impact	No impact.
Land Resources	No Impact	No impact.
Flood Risk	No Impact	No impact.
Experience of travel	Moderate Beneficial	Will make it easier for residents to find a parking space (but this is a relatively small part of the typical journey).
Urban environment	Moderate Beneficial	It creates a more pleasant residential environment due to the reduction in drivers seeking parking spaces.

Assessment Sheet	**Option Name/No.**	2b) A charge on workplace parking spaces, with reduced town centre long stay parking and doubled charges.

1.) Summary of option		
Description	A charge to employers on the number of parking spaces at the workplace combined with reduced long stay parking in town centre car parks and doubled	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal		
Scenario or scheme objectives	- Improve journey time reliability. - Promote alternatives to the car and encourage behavioural change. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	There would be some capital costs associated with setting up a Workplace Parking Levy (WPL) scheme. The costs associated with implementing WPL are not insignificant, in particular scheme development work, deciding the area to be charged, consulting businesses, initial set-up costs (e.g. IT procurement and staffing) etc.
Revenue Costs (£m)? (per annum)	**None**	The scheme would make a net profit, with the magnitude depending on the scale of charge.
Where is funding coming from?	Initial set-up costs would be covered by revenue funding, developer funding, LTP funding.	
Any income generated to local authority (£m)? (per annum)	**Yes**	10-25
i.Overall cost risk? ii.Other costs?	**5. Low**	Level of income from WPL is currently unknown - depends on number of workplace parking spaces, level of charge, geographical coverage and levels of exemption. In Nottingham (where WPL is to be introduced), it is estimated that the WPL scheme will raise, on average, £14 million per year over a 23 year period. Doubling long stay charges in the town centres would encourage mode shift away from the car, which could negatively impact on parking revenues (depending on how this is offset by the increased income from those who still choose to park).
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	No associated capital costs. One or more of the councils would need to manage the WPL scheme.
Likely value for money?	**Very High >4**	BCR of 6.7 due to the combined impact of revenue generated by the scheme and reduced congestion as a result of the diversion from car.
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Depends on level of political support - currently low.
Public acceptability	**1. Low**	Introducing WPL on its own will be unpopular with business community although this may be offset if the revenue is used to fund transport improvement schemes. Introducing or increasing charges for parking is likely to be unpopular. Also reducing long stay parking in town centres, without introducing Park & Ride sites will also be unpopular.
Practical feasibility	**2. Low-medium**	There is a large amount of background work that would have to be undertaken prior to submission of a Workplace Parking Levy Order to the Secretary of State.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (6)
	Goal&colour	Promote equality of opportunity (2)
	Goal&colour	Improve quality of life and natural environment (6)
Additional network goals:	*Goal&colour*	Affordability (4)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	Addresses a large proportion of the DfT goals, but has a negative impact on promoting equality of opportunity.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Combination of WPL and increased parking charges will stimulate a change in mode towards public transport across the area. The reinvestment of the revenue in transport improvements could satisfy further strategic transport objectives.
Is the option innovative and/or encourage better use?	**Innovative**	WPL is a relatively new and innovative type of intervention. Modifying parking charges/availability is a well established type of intervention.
Overall strategic fit?	**2. Low-medium**	Although the outcome of reduced congestion fits well with other policies affecting the study area, the introduction of charging does not fit with local strategic policies.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**1. Low**	Initial estimate of the impacts has been udertaken using the strategic transpor model. More evidence about the volume and location of PNR spaces in South East Dorset is required if the policy is taken further.
Previous Studies	**Yes**	Bournemouth: Town Centre and Lansdowne Parking Strategy and Parking Study (2006).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a consensus over the effect that demand management measures can have.
Key Uncertainties/risks (external factors)	Public acceptability of WPL in South East Dorset is unlikely to be favourable. South East Dorset Members have indicated they have no desire for implementing WPL.	
Flexibility (1 = static, 5 = dynamic)	**4**	WPL scheme could be phased in terms of area covered.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Journey times would reduce, but this would be counteracted by higher money costs due to WPL charge and doubled long stay charges.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Should reduce day to day variability in journey times. WPL would directly influence travel demand by encouraging employers to reduce their employees' car use and will also enable a programme of transport improvements to be funded by the net WPL revenues.

Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Option costs less than £20m and is within an Functional Economic Region, hence neutral impact. The wider impact on the economy of South East Dorset would depend upon how businesses react to the cost of the levy and the benefits of the overall transport package that the levy could potentially fund.
Delivery of housing (facilitate or prevent new housing)	Moderate Adverse	WPL would probably deter developers.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact - although WPL and increased parking charge would reduce the number of vehicles on the road, particularly in peak periods, and therefore there would be more capacity in the event of an incident.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	WPL and increased town centre long stay charges will encourage people to drive less, and encourage mode shift to sustainable modes where alternatives are available. Benefits are concentrated on town centres

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Mode shift away from the car would help to improve air quality.
Improve health through physical activity	Moderate Beneficial	Should lead to an increase in walking and cycling.
Reduce the risk of death or injury	Moderate Beneficial	Number of people KSI would decrease due to reduction in vehicle km.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Does not include any schemes which would reduce crime or fear of crime. However, if people feel safer in their cars then policies which encourage them out of their cars could make them feel less safe.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Moderate Adverse	The prime objective of the measure is influence the behaviour of car commuters. However, the cost of WPL is imposed on employers and it is not clear whether they would absorb the levy or pass it on to the driver, i.e. their employee. The latter could cause difficulties for drivers with no public transport alternative and who are on low incomes. There would threfore need to be a clear rationale in defining the charging areas for the WPL (i.e. taking into account boundary effects), or if certain types of business are exempted. Increased parking charges may not be affordable for all members of the community.
Accessibility (in terms of bus journey times/areas served)	Major Adverse	Problems for those who cannot afford the charges and who do not have public transport alternative.
Social and distributional impacts (on low income and vulnerable groups)	Moderate Adverse	Recognising that many employers would be likely to pass on at least part of the charge to their employees, it is important that the impacts on lower paid workers are considered. WPL could cause problems for people on low income, with no public transport alternative who cannot afford to pay the charge. Increased parking charges may not be affordable for all members of the community.
Regeneration (impact on a targeted regeneration area, and any other areas)	Moderate Adverse	The WPL could have a negative effect on a regeneration area without supporting public transport measures. The level of WPL charge should not significantly reduce business profitability and must not constrain inward investment in South East Dorset.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Beneficial	Mode shift away from the car would help to reduce traffic related noise.
Biodiversity	No Impact	No known impact.
Geodiversity	No Impact	No known impact.
Historic Environment	Slight Beneficial	Reducing transport congestion in the urban areas will benefit the historic environment.
Landscape Character and Open Space	No Impact	No known impact.
Land Resources	No Impact	No known impact.
Flood Risk	No Impact	No known impact.
Experience of travel	Moderate Beneficial	Experience of travel could improve for those who decide to drive.
Urban environment	Slight Adverse	Encourages parking in residential areas. Reduced congestion in the urban areas will improve townscape.

Assessment Sheet	**Option Name/No.**	2c) Congestion charge (10p/km) in area south of River Stour

1.) Summary of option		
Description and objective	As an indication of the impact of congestion charging, the measure includes the introduction of a distance-based charge of 10p/km for all journeys in the peak periods in an area south of the River Stour.	
Key DfT Goal	Reduce carbon emissions	
Secondary Goal	Improve quality of life and a healthy natural environment	
Scenario or scheme objectives	- Improve journey time reliability. - Promote alternatives to the car and encourage behavioural change. - Reduce the impact of transport on the environment and enhance the quality of life of residents.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	This is an indicative figure - initial cost likely to be mid-range. Depending on technology adopted there would also be capital replacement costs (e.g. £10-15m every 7-10 years for tag & beacon technology, which has a limited lifespan). If the scheme was part of a national congestion charging scheme then the set up costs would be reduced.
Revenue Costs (£m)? (per annum)	**0-5**	This is an indicative figure (likely to be at lower end of range) to cover start up costs and ongoing operation. The charge would be set so that more revenue is generated than the operating costs.
Where is funding coming from?	The scheme would need to be self-financing within a relatively short period.	
Any income generated to local authority (£m)? (per annum)	**Yes**	25-50
i.Overall cost risk? ii.Other costs?	**1.High risk**	Distance-based charging can now be achieved, in principle, through the use of GPS-based systems which are being developed for use in many parts of the world although a number of technical, administrative and political issues need to be resolved before a full system can be implemented. Road user charging could generate substantial revenues, which could be used to fund other transport schemes. Local schemes (cordon or urban area charges) could generate around £15 million per annum, while area-wide schemes would generate up to £50 million per annum, depending on the level of charge. It should be noted, however, that the figures quoted assume the same charge would be levied in the inter-peak period as in the morning peak period; in practice the inter-peak and off-peak charges, and hence the revenue, would be lower.
Affordability (1= not affordable, 5 = affordable)	**2**	Could be expensive to implement due to costs of setting up back office system, charging, invoicing, etc.

Likely value for money?	**Low 1-1.5**	Proposal would only ever realistically be introduced as part of a national scheme to minimise scheme to minimise set up costs, and thus maximise benefits. BCR would be higher if the scenario included supporting public transport measures, as without these supporting measures there is little alternative but to pay the charge. With the distance-based charge, a wide range of different charge levels were examined ranging from 10p/km to 50p/km Results show that in general, the delay declines slightly as the charge increases from 10p/km upwards, due to a combination of drivers switching to alternative modes and diverting to routes outside the charged area. However, at the 50pence/km charge the level of delay starts to rise again (albeit slightly) as the congestion increases outside the charged area due to the volume of traffic diverting to outside the charged area. Hence, as far as the congestion on the network is concerned, the optimum change is around 40p/km.
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Assume long delivery timescales due to difficulties in gaining consensus.
Public acceptability	**1. Low**	There is likely to be opposition without providing more public transport alternatives (not included in this scenario). The experiences in Manchester and Edinburgh, in which a local referendum on congestion charging demonstrated significant opposition to the measure, highlight that, whatever the technical case, there are strong political and local implementation aspects that need to be taken into account before including such measures within a policy.
Practical feasibility	**5. High**	Depends on coverage of road user charging scheme.
4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (4)
	Goal&colour	Tackle climate change (6)
	Goal&colour	Better safety, security and health (6)
	Goal&colour	Promote equality of opportunity (1)
	Goal&colour	Improve quality of life and natural environment (4)
Additional network goals:	*Goal&colour*	Affordability (2)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Strong contribution to climate change goal - but there are issues relating to the other goals (e.g. economic growth) by not providing public transport alternative - therefore scored Small Impact overall.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Measure will address the tackling climate change goal.
Is the option innovative and/or encourage better use?	**Innovative**	This does not involve building any new schemes, using the existing road network.

Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled in the strategic model. It should be noted that assumptions made regarding people's response to urban area RUC schemes are largely untested in the UK outside London.
Previous Studies	**None**	
Degree of consensus over outcomes? (1= little, 5 = majority) - *evidence rather than support*	**4**	There is a consensus about the outcomes that RUC can have - but this should not be inferred as a high level of support.
Key Uncertainties/risks (external factors)	Key risk is deliverability due to potential opposition with implementation of demand management with no supporting public transport measures.	
Flexibility (1 = static, 5 = dynamic)	**5. Dynamic**	Scale of charging scheme would be flexible (e.g. area vs. cordon, level of charge, coverage).

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Journey times would reduce, but this would be counteracted by higher money costs due to road user charging.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Should reduce day to day variability in journey times. However, the removal of traffic from an area can cause secondary effects such as induced traffic and the re-routeing of traffic previously travelling around the controlled area.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Option costs less than £20m and is within an Functional Economic Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Adverse	Road user charging alone would deter developers.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact - although road user charging would reduce the number of vehicles on the road, and therefore there would be more capacity in the event of an incident.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Road user charging will encourage people to drive less, and encourage mode shift to sustainable modes where alternatives are available.
Goal: Better Safety, Security and Health		
Air Quality	Major Beneficial	Would help to reduce the amount of travel by car and thus improve air quality.
Improve health through physical activity	Slight Beneficial	Congestion charging would encourage more people to cycle.
Reduce the risk of death or injury	Moderate Beneficial	Number of people KSI would decrease as vehicle km would reduce.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Congestion charging scheme does not include any schemes which would reduce crime or fear of crime. However, if people feel safer in their cars then polices which encourage them out of their cars could make them feel less safe.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Major Adverse	Road user charging could cause problems for people with no public transport alternative who are on low incomes.
Accessibility (in terms of bus journey times/areas served)	Major Adverse	Problems for those on low incomes who do not have a public transport alternative.

Social and distributional impacts (on low income and vulnerable groups)	Moderate Adverse	Potential negative impacts on low income and/or vulnerable groups - e.g. for those who cannot afford the charges who do not have a public transport alternative (or cannot afford to use public transport if available).
Regeneration (impact on a targeted regeneration area, and any other areas)	Major Adverse	Could have a negative effect on a regeneration area without supporting public transport measures.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Beneficial	Would help to reduce the amount of travel by car and thus reduce traffic related noise.
Biodiversity	No Impact	No significant impact.
Geodiversity	No Impact	No significant impact.
Historic Environment	No Impact	No significant impact.
Landscape Character and Open Space	No Impact	No significant impact.
Land Resources	No Impact	No significant impact.
Flood Risk	No Impact	No significant impact.
Experience of travel	Moderate Beneficial	Experience of travel could improve for those who continue to travel. Congestion charging would help to control the amount of new traffic that would be induced when congestion in an area is reduced.
Urban environment	No Impact	No schemes to be built - so no urban realm improvements assumed to be included in this scenario.

F.3 Highways

a) Local junction improvements and new traffic control centre

b) A31 Widening westbound at Ringwood

c) Canford Bottom junction (A31) - redesign of junction

d) A31 dualling between Ameysford and Merley and grade separated junctions

e) A338 northern link road to airport (part of airport access)

f) A338 widening from Ashley Heath junction with A31 to Cooper Dean

g) A338 widening between Blackwater and Cooper Dean junctions

h) A338 Wessex Way widening to 3 lanes between St Paul's Roundabout and Horseshoe Common Roundabout (Richmond Hill)

i) Castle Lane Relief Road

j) Christchurch Bypass

k) Kinson Relief Road

l) Blackwater Junction improvement

m) Parley Lane/Christchurch Road (B3073) improvements.

n) New East-West road link between Parley and Mannings Heath

o) New East-West road link between Parley and Magna Road

p) New link road between Canford Bottom and Magna Road

q) Sandford and Holton Heath Bypass

r) Three Legged Cross Link Road

s) West Moors Bypass

t) Wallisdown Branksome Relief Road

Table 3 - Strategic Appraisal of Highway Measures

Summary (*1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact*)	3a) Local junction improvements and new traffic control centre	3b) A31 Widening at Ringwood	3c) Canford Bottom junction (A31) - redesign of junction	3d) A31 dualling between Ameysford and Merley and grade separated junctions	3e) A338 northern link road to airport (part of airport access)	3f) A338 widening from Ashley Heath junction with A31 to Cooper Dean	3g) A338 widening between Blackwater and Cooper Dean junctions	3h) A338 Wessex Way widening to 3 lanes between St Paul's roundabout & Horseshoe Common Roundabout	3i) Castle Lane Relief Road	3j) Christchurch Bypass
Support economic competitiveness and growth	6	7	7	7	6	7	6	6	7	6
Tackle climate change	5	2	2	2	2	2	2	2	1	1
Better safety, security and health	5	4	4	3	5	5	3	3	5	5
Promote equality of opportunity	0	0	0	0	0	0	0	0	0	3
Improve quality of life and natural environment	0	2	3	2	1	1	3	3	1	1
Affordability	3	4	5	4	1	1	1	1	1	1
Implementability	6	6	6	5	3	3	5	2	1	1
Goal: Support Economic Competitiveness and										
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Major Beneficial	Moderate Beneficial	Major Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Moderate Beneficial	Slight Beneficial
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Major Beneficial	Moderate Beneficial	Major Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Moderate Beneficial	Slight Beneficial
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Neutral	Neutral	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	Don't Know	Moderate Beneficial	Moderate Beneficial
Delivery of housing (facilitate or prevent new housing)	Neutral	Moderate Beneficial	Major Beneficial	Major Beneficial	No Impact	No Impact	No Impact	No Impact	Neutral	No Impact
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	Slight Beneficial	No Impact	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Beneficial	No Impact	Major Beneficial	Moderate Beneficial
Goal: Reduce transport's emissions of carbon										
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse	Moderate Beneficial	Moderate Adverse
Goal: Better Safety, Security and Health										
Air Quality	Slight Beneficial	Neutral	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Slight Adverse	Moderate Beneficial	Moderate Adverse
Improve health through physical activity	Slight Beneficial	No Impact	No Impact	No Impact	Neutral	Neutral	No Impact	Slight Adverse	Slight Adverse	Slight Adverse
Reduce the risk of death or injury	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Slight Adverse	Slight Beneficial	Slight Beneficial	Slight Adverse	Slight Adverse	Moderate Beneficial	Slight Beneficial
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reduce crime (impact on crime and fear of crime).	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Goal: Greater Equality of Opportunity										
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	No Impact	Slight Adverse	Slight Adverse
Accessibility (in terms of bus journey times/areas served)	No Impact	No Impact	No Impact	Neutral	No Impact	Slight Beneficial	Slight Beneficial	No Impact	Slight Beneficial	Slight Beneficial
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No Impact	No Impact	Slight Beneficial	Major Beneficial	Slight Beneficial	No Impact	No Impact	No Impact	No Impact
Sub-regional imbalance (impact on weak regions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal: Improve Quality of Life and Promote Healthy										
Traffic Related Noise	Don't Know	Slight Adverse	Slight Adverse	Moderate Adverse	Neutral	Slight Adverse	Slight Adverse	Slight Adverse	Moderate Beneficial	Moderate Adverse
Biodiversity	No Impact	Slight Adverse	Slight Adverse	Moderate Adverse	Major Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Major Adverse
Geodiversity	No Impact	Slight Adverse	Slight Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Historic Environment	No Impact	Slight Adverse	Slight Adverse	Slight Adverse	No Impact	No Impact	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Landscape Character and Open Space	No Impact	Moderate Adverse	Slight Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Moderate Adverse
Land Resources	No Impact	Slight Adverse	Slight Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Flood Risk	No Impact	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Moderate Adverse
Experience of travel	Slight Beneficial	Slight Beneficial	Major Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial
Urban environment	Slight Beneficial	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	Slight Adverse	No Impact	No Impact

Table 3 - Strategic Appraisal of Highwa

Summary (*1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact*)	3k) Kinson Relief Road	3l) Blackwater Junction improvement	3m) Parley Lane/Christchurch Road (B3073) improvements	3n) New East-West road link between Parley and Mannings Heath	3o) New East-West road link between Parley and Magna Road	3p) New link road between Canford Bottom and Magna Road	3q) Sandford and Holton Heath Bypass	3r) Three Legged Cross Link Road	3s) West Moors Bypass	3t) Wallisdown Branksome Relief Road
Support economic competitiveness and growth	7	6	7	7	7	7	6	5	6	7
Tackle climate change	1	3	2	1	1	1	2	4	6	1
Better safety, security and health	3	4	4	3	3	3	5	6	4	3
Promote equality of opportunity	0	3	0	0	0	0	0	0	0	0
Improve quality of life and natural environment	1	3	1	1	2	1	1	3	1	1
Affordability	1	3	3	1	1	2	1	1	1	1
Implementability	1	5	6	1	2	2	2	5	2	1
Goal: Support Economic Competitiver										
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Moderate Beneficial	Major Beneficial	Major Beneficial	Major Beneficial	Major Beneficial	Moderate Beneficial	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Major Beneficial	Major Beneficial	Moderate Beneficial	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	Slight Beneficial	Slight Beneficial	Moderate Beneficial	Slight Beneficial	Slight Beneficial	Moderate Beneficial	No Impact	Moderate Beneficial	Moderate Beneficial
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Major Beneficial	No Impact	Slight Beneficial	Moderate Beneficial	Major Beneficial	Major Beneficial	Moderate Beneficial	Slight Beneficial	Major Beneficial	Moderate Beneficial
Goal: Reduce transport's emissions of										
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Neutral	Moderate Adverse	Major Adverse	Major Adverse	Major Adverse	Moderate Beneficial	Neutral	Moderate Beneficial	Moderate Adverse
Goal: Better Safety, Security and Healt										
Air Quality	Moderate Adverse	Neutral	Neutral	Moderate Adverse	Slight Adverse	Slight Adverse	Moderate Beneficial	Slight Adverse	Moderate Beneficial	Moderate Adverse
Improve health through physical activity	Slight Adverse	No Impact	Moderate Adverse	Slight Adverse	No Impact	No Impact	Neutral	No Impact	Slight Adverse	Slight Adverse
Reduce the risk of death or injury	Slight Adverse	Neutral	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Beneficial	Slight Beneficial	Moderate Beneficial	Slight Adverse
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reduce crime (impact on crime and fear of crime).	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Goal: Greater Equality of Opportunity										
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	No Impact	Neutral	Slight Adverse	Slight Adverse
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Slight Beneficial	Slight Beneficial	Slight Beneficial	Neutral	Neutral	No Impact	Slight Beneficial	Slight Beneficial	Slight Beneficial
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No Impact	No Impact	No Impact	Don't Know	Don't Know	Slight Beneficial	No Impact	No Impact	No Impact
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No Impact	Slight Beneficial	Don't Know	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Sub-regional imbalance (impact on weak regions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal: Improve Quality of Life and Pron										
Traffic Related Noise	Moderate Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse	Moderate Beneficial	Slight Adverse	Moderate Beneficial	Moderate Adverse
Biodiversity	Major Adverse	Slight Adverse	Slight Adverse	Major Adverse	Moderate Adverse	Moderate Adverse	Major Adverse	Slight Adverse	Major Adverse	Major Adverse
Geodiversity	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Historic Environment	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Major Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Landscape Character and Open Space	Slight Adverse	Slight Adverse	Slight Adverse	Major Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Land Resources	Slight Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Flood Risk	Slight Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse
Experience of travel	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial	Moderate Beneficial
Urban environment	Slight Beneficial	No Impact	No Impact	No Impact	Slight Adverse	Slight Adverse	Slight Beneficial	No Impact	Slight Beneficial	Slight Adverse

Assessment Sheet	**Option Name/No.**	3a) Local junction improvements and new traffic control centre

1.) Summary of option		
Description	New traffic control centre (operated jointly by local authorities) and local junctions improvements, including: - Cemetery Junction. - Wallisdown Crossroads. - Bear Cross. - Mountbatten Arms. - Iford. - Castle Lane East/West. - Pottery Junction. - Ashley Road. - Bournemouth Road/St Osmunds Road. - Ensbury Park Gyratory.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance the safety of users of the transport system.	

2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	The costs of the local junction improvements are currently unknown. Indicative £10m+ figure included. Traffic control centre is estimated to cost £3.7m.
Revenue Costs (£m)? (per annum)	**None**	No revenue cost included, as proposal involves consolidation of existing separate traffic control centres.
Where is funding coming from?	LTP funding, developer funding.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**2. Medium-high**	Depends on compatibility between existing systems and/or procurement of a new system. Low cost risk for the local junction improvements, subject to feasibility work.
Affordability (1= not affordable, 5 = affordable)	**2**	Relatively high set-up costs.
Likely value for money?	**Medium 1.5-2**	Local junction improvements would help to unlock congestion pinch points.

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	A joint traffic control centre has been a long term aspiration of the three councils. Local highway junction schemes can be phased to minimise disruption.
Public acceptability	**4. Medium-high**	No objection to improved coordination between the councils.
Practical feasibility	**3. Medium**	Depends on compatibility between existing systems and/or procurement of a new system. Local junction improvements would be within the highway boundary.

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (5)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (0)
Additional network goals:	*Goal&colour*	Affordability (3)
	Goal&colour	Implementability (6)

5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Addressing congestion problems at key locations will have a moderate beneficial impact on one of the DfT goals - supporting economic competitiveness and growth, and minor beneficial impacts on two other goals.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Joint Traffic Control Centre will benefit South East Dorset, as well as the wider Dorset area.
Is the option innovative and/or encourage better use?	**Innovative**	Innovative - as proposal for the joint Traffic Control Centre forms part of the South East Dorset ITS Strategy.
Overall strategic fit?	**5. High**	High fit - overall the option fits well with other policies affecting the study area.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Evidence in support of the traffic control centre would be qualitative. Local junction improvements can be modelled using junction modelling software.
Previous Studies	**Unknown**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a majority consensus about the benefits that a joint Traffic Control Centre could have, and that local junction improvements are required to address congestion hot spots.
Key Uncertainties/risks (external factors)	Depends on compatibility of existing systems/procurement of new system.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Delivery of local junction improvements can be phased. Joint traffic control centre proposal is linked to other proposals to upgrade the UTC system in advance of Bus Showcase Corridor implementation.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Traffic control centre would help to reduce journey times, improving coordination between Poole and Bournemouth traffic control systems. Local junction improvements would help to unlock pinch points.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	A key benefit frim the joint traffic control centre is improved journey time reliability. Combined traffic control centre would enable the councils to deal with incidents in a coordinated manner and cater for with cross-boundary congestion issues.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Option costs less than £20m and is within an Functional Economic Region.
Delivery of housing (facilitate or prevent new housing)	Neutral	Not expected to facilitate or prevent new housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	Traffic control centre will help improve resilience - reducing the disruption caused by major incidents. Joint traffic control centre would provides accurate real time information that all three councils can access at the same time and make joint decisions.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	Traffic control centre would help traffic to run more smoothly. Local junction improvements would help unlock pinch points.

Goal: Better Safety, Security and Health		
Air Quality	Slight Beneficial	Should help improve air quality at congestion hotspots.
Improve health through physical activity	Slight Beneficial	Local junction improvements are likely to incorporate improved facilities for pedestrians and cyclists as part of the design process.
Reduce the risk of death or injury	Moderate Beneficial	Management of traffic and incidents should help to reduce the number of accidents, and take into account any road safety issues that can be addressed as part of the scheme designs.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	No impact on crime or personal security.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Beneficial	Junction improvements would benefit local bus services, as well as general traffic.
Accessibility (in terms of bus journey times/areas served)	No Impact	Local junction improvements would benefit some bus services but it is unlikely to have a significant impact on overall accessibility.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable group.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Don't Know	
Biodiversity	No Impact	No impact as majority of improvements would be within the highway boundary.
Geodiversity	No Impact	No impact as majority of improvements would be within the highway boundary.
Historic Environment	No Impact	No impact as majority of improvements would be within the highway boundary.
Landscape Character and Open Space	No Impact	No impact as majority of improvements would be within the highway boundary.
Land Resources	No Impact	No impact as majority of improvements would be within the highway boundary.
Flood Risk	No Impact	No impact as majority of improvements would be within the highway boundary.
Experience of travel	Slight Beneficial	Reduced driver stress.
Urban environment	Slight Beneficial	More car park VMS signs would help to reduce traffic searching for parking spaces.

Assessment Sheet	**Option Name/No.**	3b) A31 Widening westbound at Ringwood

1.) Summary of option		
Description	Widening of the A31 at Ringwood (westbound). The A31 trunk road in the study area carries strategic traffic between London and the South East to South East Dorset conurbation, the rest of Dorset and south Devon, as well as local traffic to/from developments along the route. On the approaches to South East Dorset, the A31 runs around Ringwood where it is constrained by developments to the north and south of the alignment which limits the scope for widening. At the same time, in the vicinity of Ringwood there are a number of junctions including, from east to west, Picket Post, central Ringwood, A338 (to/from Fordingbridge and Salisbury), the B3081 (to Verwood) and the A338 (to/from Bournemouth and the airport). The closeness of the junctions, the design of the route (particularly at the junction with the A338 Salisbury Road) and the volume of weaving combine to limit the capacity of this section of the A31 and create significant delays which are exacerbated because the section forms the viaduct over the River Avon and the Bickerley Mill Stream.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	

2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	Scheme is estimated to cost £11m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs apart from highways maintenance.
Where is funding coming from?	Highways Agency.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**2. Medium-high**	Assessed to be high risk as it involves work outside of the current highway boundary. Detailed design has been undertaken by the Highways Agency.
Affordability (1= not affordable, 5 = affordable)	**2**	Due to the current estimated cost of the scheme, at £10million, the HA is not currently progressing the scheme in the current climate of funding constraints.
Likely value for money?	**High 2-4**	Estimated BCR of 3.7 - improving capacity at this congested location therefore results in a high value for money.

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Depends on planning process and funding availability.
Public acceptability	**4. Medium-high**	Potential objections from people opposing highway schemes. Support from people who want traffic problems on the A31 addressed. Assessed that there is net support.
Practical feasibility	**3. Medium**	Detailed design has been undertaken by the Highways Agency.

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (4)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (2)

Additional network goals:	*Goal&colour*	Affordability (4)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Has a major beneficial impact on one of the DfT goals - supporting economic competitiveness and growth.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	The A31 is a key regional route.
Is the option innovative and/or encourage better use?	**Well-established**	Highway schemes are a well established form of intervention.
Overall strategic fit?	**5. High**	Although the scheme is on the border of the study area for the SEDMMTS, the improvement of the A31 to the west of Ringwood would represent a significant increase in capacity on the main trunk road through the study area. The HA has developed a scheme for the widening of the section of the A31 between the junctions with the A338, in the westbound direction. The three lane scheme would involve widening bridges over the River Avon and the Bickerley Mill Stream, and blocking off access from West Street onto the A31.

7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**5. High**	Modelled in the strategic model as part of SEDMMTS.
Previous Studies	**Unknown**	- A35/A31/A30 (Southampton to Exeter), Report on the Final Route Management Strategy (2002).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a consensus that there are traffic problems on the A31 that need to be addressed.
Key Uncertainties/risks (external factors)	Depends on level of support from the Highways Agency and available funding. Detailed design has been undertaken by the Highways Agency.	
Flexibility (1 = static, 5 = dynamic)	**Don't know**	

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Would reduce journey times along the A31 (see Baseline Report for current average speed plots).
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	Would improve journey time reliability on the A31.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Scheme costs under £20m and within a Functional Urban Area.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	HA has highlighted that congestion issues on A31 need to be addressed before some potential developments can be progressed.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	Additional lane may be of benefit in the event of an accident, allowing vehicles to pass.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	The impact on carbon emissions is difficult to assess as the scheme should allow traffic to move at a more optimal speed.
Goal: Better Safety, Security and Health		
Air Quality	Neutral	Encourages the use of cars, therefore likely to have a negative impact on air quality; however, the scheme will reduce congestion.
Improve health through physical activity	No Impact	As a strategic scheme it is assumed that this proposal would have no impact on walking and cycling.
Reduce the risk of death or injury	Moderate Beneficial	The proposal would be designed to high quality design standards, potentially reducing the risk of accidents. However, this may be offset by increased traffic volumes .
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	This scheme would not reduce crime or fear of crime.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Disproportionate benefit for those who own a car (compared with those without access to a car).
Accessibility (in terms of bus journey times/areas served)	No Impact	Few bus services in South East Dorset use this section of the A31. Potential to be used by express bus services when traffic conditions are improved on the A31.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Slight Beneficial	Would improve experience of travel for drivers.
Urban environment	No Impact	No impact on the urban environment.

Assessment Sheet	**Option Name/No.**	3c) Canford Bottom junction (A31) - redesign of junction

1.) Summary of option		
Description	Improvements to the Canford Bottom junction - redesign of junction with hamburger arrangement. This six arm roundabout on the A31 Trunk Road at Canford Bottom is the source of considerable congestion particularly at peak times and throughout the summer holiday period.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality. - Enhance the safety of users of the transport system.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**0-5**	£5.68m (current scheme cost).
Revenue Costs (£m)? (per annum)	**None**	No associated revenue costs apart from highways maintenance.
Where is funding coming from?	Highways Agency.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	
Affordability (1= not affordable, 5 = affordable)	**5. Affordable**	The Highways Agency aim to deliver this scheme before the 2012 Olympics (Major Scheme Funding not required).
Likely value for money?	**Very High >4**	In the HA's appraisal of the scheme, it recorded a strong BCR of greater than 15 and, following an initial environmental impact assessment, no significant risks / issues were identified.
3.) Deliverability		
Implementation timetable from inception to delivery	**1-2 years**	The Highways Agency aim to deliver this scheme before the 2012 Olympics
Public acceptability	**4. Medium-high**	Potential objections from people opposing highway schemes. Support from people who want traffic problems on the A31 addressed. Assessed that there is net support as this would unlock a pinch point on the strategic road network.
Practical feasibility	**4. Medium-high**	Scheme will be mainly within the highway boundary.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (4)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (3)
Additional network goals:	*Goal&colour*	Affordability (5)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Addresses one of the DfT goals - supporting economic competitiveness and growth.
6.) Strategic/Network fit		

Objectives your proposal will achieve	**Strategic Transport**	The A31 is a key regional route.
Is the option innovative and/or encourage better use?	**Well-established**	Highway schemes are a well established type of intervention.
Overall strategic fit?	**5. High**	The Highways Agency has considered a series of immediate remedies for the junction, with particular emphasis on those measures that could be introduced in advance of the Olympic Games sailing event at Weymouth in summer 2012, with the A31 representing a section of the recognised formal Olympic Route to the event. The HA identified the preferred solution as the conversion of the existing six arm junction into a hamburger format with the A31 traffic running through the junction and other movements using the circulatory section. The HA study established that the hamburger arrangement would reduce congestion and journey times on the A31 corridor.

7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**5. High**	Scheme has been modelled in the strategic model and also using local models. Canford Bottom junction has been subject to a number of studies (e.g. A31 Merley to Ameysford study). A study was undertaken in 2008 which considered a number of low cost options for Canford Bottom junction.
Previous Studies	**Yes**	- The design and the assessment of the hamburger option has included the consideration of a variety of sub-options including the closure of local network arms, full / partial signalisation, and a single or dual carriageway width for the through-road. In addition, the possibility of temporary arrangements including a temporary fly-over using a 'Bailey Bridge' type structure was assessed in the identification of alternative designs. - A31 Merley to Ameysford Study (Mott MacDonald, 2008). - A31 Canford Bottom Roundabout Low Cost Options for Modification of Roundabout (Atkins, 2008). - A35/A31/A30 (Southampton to Exeter), Report on the Final Route Management Strategy (2002).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a consensus that there are significant traffic problems on the A31 that need to be addressed.
Key Uncertainties/risks (external factors)	Scheme is approved for funding. Main works will start in September 2011 and be complete in April 2012.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Scheme will be constructed prior to 2012 Olympics - fixed timescales.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Would reduce journey times along the A31 at this location (see Baseline Report for current average speed plots).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Would improve journey time reliability on the A31 in the immediate vicinity of the Canford Bottom junction - but problems would still persist at locations such as Merley and Ameysford.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Neutral	Scheme costs less than £20m and is in a Functional Urban Area.
Delivery of housing (facilitate or prevent new housing)	Major Beneficial	HA has raised issue that congestion issues on A31 need to be addressed before some developments can be progressed.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact on resilience.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	Additional travel anticipated (by providing more capacity and alleviating congestion problems), which is expected to increase CO2 levels.
Goal: Better Safety, Security and Health		
Air Quality	Slight Adverse	Additional travel anticipated (by providing more capacity and alleviating congestion problems), which is expected to worsen air quality.
Improve health through physical activity	No Impact	As a strategic scheme it is assumed that this proposal would have no impact on walking and cycling.
Reduce the risk of death or injury	Moderate Beneficial	The proposal would be designed to high quality standards, potentially reducing the risk of accidents. However, this may be offset by increased traffic volumes.

Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	This scheme would not reduce crime or fear of crime.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Disproportionate benefit for those who own a car (compared with those without).
Accessibility (in terms of bus journey times/areas served)	No Impact	Few bus services in South East Dorset use the A31. Potential to be used by express bus services as traffic conditions would be improved on the A31.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Major Beneficial	Would improve experience of travel for drivers.
Urban environment	No Impact	No impact on the urban environment (semi-rural setting).

Assessment Sheet	**Option Name/No.**	3d) A31 dualling between Ameysford and Merley and grade separated junctions

1.) Summary of option		
Description and objective	Dualling the A31 between Ameysford and Merley was originally part of a proposal with the Canford Bottom to Mannings Heath Link Road. The A31 Ameysford to Merley study was undertaken in 2008, which followed the A31 to Poole study. The A31 between Ameysford roundabout and Merley roundabout is a 6.6 km single carriageway all purpose trunk road managed by the Highways Agency. To the east of Ameysford roundabout, the A31 is at dual carriageway standard. Between Ameysford and Merley there is a single intermediate junction at Canford Bottom; this has been the subject of a separate assessment, described above, concerning potential interim improvements involving the construction of a 'Hamburger' style junction.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	Cost estimated as part of SEDMMTS study to be £143.3m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost apart from maintenance.
Where is funding coming from?	Highways Agency.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	High risk taking into account DfT review of spending priorities. Within constraints identified between Ameysford and Canford Bottom it appears that a band of land to the north of the A31 is available to accommodate the widening. Widening to one side rather than about the centre line would reduce costs, make traffic management much simpler and reduce delays to motorists. Other constraints to the design and implementation of improvements to the A31 are the range of environmental designations and land uses in the immediate vicinity of any widening of the road or junction improvements.
Affordability (1= not affordable, 5 = affordable)	**3**	A31 Ameysford Roundabout to Merley Roundabout was in the Regional Funding Allocation (£87.60m to 2026). However, the RFA has since been abolished.
Likely value for money?	**High 2-4**	
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	It is assumed that the scheme would be built by 2026 at the earliest.
Public acceptability	**4. Medium-high**	There is public consensus that some action is required to address traffic problems on the A31.

Practical feasibility	**3. Medium**	Land is available between Ameysford and Canford Bottom, to the north of the existing carriageway, to accommodate the widening. Widening to one side rather than about the centre line with a bit on both sides would reduce costs, make traffic management much simpler and reduce delays to motorists. One overbridge would need to be rebuilt to retain farm access. Canford Bottom to Merley could be widened on either side for the most part but threr are a few locations where this is not the case: (i) the southern side near Canford Bottom away from the residential area would be preferred. (ii) the southern side where the road crosses the River Stour away from the sewage treatment works. (iii) both sides to minimise land take under the Oakley Hill B3073 overbridge. The bridge may need lengthening/rebuilding.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (7)
	Goal&colour	Tackle climate change (2)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (2)
Additional network goals:	*Goal&colour*	Affordability (4)
	Goal&colour	Implementability (5)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Addresses one of the DfT goals - supporting economic competitiveness and growth.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Would improve traffic conditions on the strategic road network.
Is the option innovative and/or encourage better use?	**Well-established**	Road widening schemes are a well established type of intervention.
Overall strategic fit?	**4. Medium-high**	The A31 trunk road in the study area carries strategic traffic between London and the South East to South East Dorset conurbation, the rest of Dorset and south Devon, as well as local traffic to/from developments along the route. The principal points of congestion are at Canford Bottom and Merley. At Canford Bottom, with six arms to the roundabout, the combined inbound flows into the junction exceed the capacity at peak periods, thus creating queues on one or more of the roads entering the junction. At Merley, major movements between A349 and A31 create conflicts due to turning movements – A349 northbound to A31 eastbound, A31 westbound and A31 eastbound to A349 southbound.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**5. High**	Modelled using the strategic model as part of SEDMMTS. There have been several studies relating to the A31 (E.g. A31 Ameysford to Merley in 2008).
Previous Studies	**Unknown**	- A31 to Poole Corridor Scoping Study Final Report (February 2007). - A35/A31/A30 (Southampton to Exeter), Report on the Final Route Management Strategy (2002). - A31 Ameysford to Merley (2008).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	Strong consensus for the outcome of the assessment.
Key Uncertainties/risks (external factors)		
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Would reduce journey times along the A31 (see Baseline Report for current average speed plots).
Improve Reliability (impact on day to day variablility and number of incidents)	Major Beneficial	Would improve journey time reliability on the A31.

Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Major Beneficial	The HA have identified several trunk road locations adjacent to strategically significant urban areas where considerable capacity problems already exist and they consider these problems must be addressed to allow the employment and residential development proposals to be carried forward. One of these locations indicated is the length of A31 bordering the northern edge of Poole and Bournemouth; the A31 to Poole scoping report points to the need to dual this length of A31.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	Would improve resilience by adding capacity (e.g. in the event of accidents).

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	The impact on carbon emissions is difficult to assess as the scheme should allow traffic to move at a more optimal speed - the impact depends on the speed of the vehicles.

Goal: Better Safety, Security and Health		
Air Quality	Slight Adverse	Encourages the use of cars, therefore possibly negative impact on air quality; however, schemes will reduce congestion.
Improve health through physical activity	No Impact	Assumed no impact as this is a strategic route.
Reduce the risk of death or injury	Slight Adverse	Highway measures could increase risk (KSI per km travelled) due to more vehicle-kms.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except perhaps that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	This scheme does not include any public transport measures which would benefit those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Neutral	Currently few bus services use the A31 - although this could change if traffic issues were addressed.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	This scheme does not include any public transport measures which would benefit those on low incomes.
Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	The HA have identified several trunk road locations adjacent to strategically significant urban areas where considerable capacity problems already exist and they consider these problems must be addressed to allow proposals for employment and residential developments to be carried forward. One of these locations is along the length of A31 bordering the northern edge of Poole and Bournemouth; the A31 to Poole scoping report points to the need to dual this length of A31.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Biodiversity	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	The widened road is assumed to be built to a high design standard and therefore improve the driving experience.
Urban environment	No Impact	No impact on the urban environment.

Assessment Sheet	**Option Name/No.**	3e) A338 northern link road to airport (part of airport access)

1.) Summary of option		
Description and objective	This 1.2km single carriageway scheme would provide improved access to Bournemouth Airport from the A338. The new link road would have a new junction on the A338, would allow traffic to avoid the B3073 through Hurn. This new link road would not connect to Matchams Lane and will allow for the existing access there to be closed.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	The proposed link road scheme was estimated to cost £11.6m (2003) (Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004). Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias, the scheme is estimated to cost £26m. However, it is considered that this cost is an underestimate taking into account the new junction on the A338, and is therefore included in the £50-£100m category. Including the required third lane on the A338 the cost is over £100m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	Major scheme funding would be required.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	
Affordability (1= not affordable, 5 = affordable)	**2**	General support for the scheme from government would be possible, since the Government's White Paper 'The Future of Air Travel' highlighted the need for improved surface access to the airport and the scheme was specifically mentioned in the pre-White Paper consultation (Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004)
Likely value for money?	**Poor <1**	Poor BCR (less than 1) based on a review of major schemes undertaken for the Structure Plan. PVB of Link Road = £7.117m, PVC = £11.6m (2003). BCR = 0.6 (excluding accident benefits).
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	The Airport Transport and Infrastructure Study (2008) states that previous studies have indicated that full redevelopment of the eastern and western sections of Aviation Business Park is likely to require the construction of a new link road to the A338 Bournemouth Spur. The study did not take account of the construction of the A338 Link as DCC had agreed this is not a viable option as it is unlikely to be brought forward within the development horizons considered in the report (2030).
Public acceptability	**3. Medium**	

Practical feasibility	**4. Medium-high**	The deliverability of the link road is critically dependent on the effects on nature conservation sites (source: RSS Transport Background Paper South East Dorset – November 2006).
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (3)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. However, a new link road from the airport to the A338 would be of regional importance to support growth at the airport and the employment sites in the longer term. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups but would not provide benefits to those without access to private car..	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.

7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**Yes**	A31 to Poole Study (Option 10). Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review (2004).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	Proposal was tested as part of the A31 to Poole study, and is included in the Airport Masterplan.
Key Uncertainties/risks (external factors)	The A31 study reported that, in order to accommodate traffic west of a new link road, it recommended that on-line improvements be made to the B3073.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Linked to timescales for expansion of the airport.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Proposal was modelled as part of the initial strategy testing (Highway Strategy) and the A338 northern link Road to airport as part of Strategy V (Historic Highway schemes). A new link road from the airport to the A338 would be of regional importance to support growth at the airport and the employment sites in the longer term. The A31 to Poole scoping study confirmed this, but also suggested that the road could be extended through to the B3073 and Parley Cross in order to achieve wider benefits. This would provide improved access to the airport from a wider part of the conurbation but would not provide significant relief for the A3060 (source: RSS Transport Background Paper South East Dorset – November 2006). Improved journey times and reduced vehicle operating costs deliver financial savings to users. Estimated time savings per vehicle of 1.4 minutes during peak periods and 0.8 minutes during interpeak periods (at 2011) (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Scheme enables growth of airport traffic without reducing journey reliability (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	No Impact	Proposal is not expected to facilitate new housing, but would facilitate industrial development at the airport.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	The link road would provide an additional alternative route to the airport, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Adverse	An assessment of the Link Road alone estimates that there would be a reduction in congestion improves vehicle efficiency, thereby reducing of CO2. Do nothing = 1,884 tonnes CO2/yr. With scheme = 1,711 tonnes CO2/yr (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). However, in conjunction with the widening, it is expected that travel would be encouraged, increasing carbon emissions.

Goal: Better Safety, Security and Health		
Air Quality	Slight Adverse	An assessment of the Link Road alone estimates the number of households within a 200m threshold of traffic pollutants would reduce from 10 to 0 (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). However, in conjunction with the widening, it is expected that travel would be encouraged, increasing emissions.
Improve health through physical activity	Neutral	May encourage people who currently walk or cycle to drive. An assessment of the Link Road alone estimates that the traffic reduction on existing route affects insufficient people to cause significant increases in walking/cycling. Reduced severance due to an estimated 50% reduction in traffic (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Reduce the risk of death or injury	Slight Beneficial	An assessment of the Link Road alone estimates that accidents would be reduced by less traffic on B3073. Estimated 76 personal injury accidents saved in 30yr assessment period. Accidents PVB £ 1.762m (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). Spacing of proposed junctions on the A338 must meet strict safety criteria.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	No Impact	No impact on bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups, although those without access to private car would not have access to benefits of the scheme.
Regeneration (impact on a targeted regeneration area, and any other areas)	Major Beneficial	No impact on a targeted regeneration area. Based on the current transport growth trends the above improvements will enable Bournemouth Airport to achieve its planned growth to 4mppa in 2030. The northern sector will develop independently in line with the emerging master plan for its development. It is predicted that during the period 2015-30 this development may reach a point whereby a new solution is required. A new road into the east of the northern sector, from the A338, has been identified as a possible solution, see Figure 5.3 [in the Airport Masterplan]. The route of this road, which could link through to Parley Lane, is safeguarded in the Christchurch Local Plan. Once in place, this link will reduce traffic on the section of Parley Lane south of Chapel Gate, benefitting traffic accessing the operational airport (Source - Airport Masterplan).
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Neutral	The scheme would reduce road traffic noise. Estimate of household highly bothered by traffic noise reduced by 100% from 5 to 0 (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Biodiversity	Major Adverse	The route would have a significant impact on land designated as SSSI and SNCI, including protected species. However, the impact on the Moors River SSSI could be minimised by utilising an existing river crossing point. A31 to Poole Study - the proposed scheme crosses Moors River System SSSI and, depending upon alignment, St Leonard & St Ives SSSI and Hurn Forest SNCI. Discussions with English Nature at the time of the study suggested that they would agree to a scheme here, subject to compensation measures (e.g. improvement of the floodplain in the vicinity). Heathland not included within European designation, but meets criteria and supports relevant interests. Also crosses Filly Brook Plantation SNCI heathland. Likely impact on protected species including Sand Lizard and Smooth Snake. Possible impact on roosting and foraging bats (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	No Impact	None identified (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). Any new highways infrastructure may impact the historic environment.
Landscape Character and Open Space	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic. Improvement for users accessing the airport.
Urban environment	No Impact	No impact on the urban environment.

Assessment Sheet	**Option Name/No.**	3f) A338 widening from Ashley Heath junction with A31 to Cooper Dean

1.) Summary of option		
Description and objective	Widening of the A338 between A31 (Ashley Heath) and Cooper Dean.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	Widening of the A338 between the A31 and Cooper Dean is estimated to cost at least £130m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	Major scheme funding would be required.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	High cost risk - large section of widening. Bridge rebuilding would be required.
Affordability (1= not affordable, 5 = affordable)	**2**	Major scheme funding would be required - it would be difficult to secure this level of funding.
Likely value for money?	**Low 1-1.5**	Low BCR of 1.45 - would generate some journey time savings but not sufficient to cover significant scheme costs.
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Long timescales assumed as this is a major highway scheme.
Public acceptability	**3. Medium**	Widening scheme could be popular with drivers, but there would also be opposition due to environmental impacts.
Practical feasibility	**3. Medium**	Widening from 2 to 3 lanes along the A338 with lane drops/lane gains at both junctions and only north facing merge/diverge slips at the new Riverside junction. The bridge over the river at Blackwater would need to be widened/rebuilt unless the central reserve and hard shoulders can be narrowed sufficiently to provide room for the third lane in each direction. The footbridge just north of Cooper Dean will be removed as this is the location for the proposed Riverside junction linked with P&R site. It would appear that the widening could be accommodated in the existing highway boundary but may need to use the central reserve as well as verges.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (3)
5.) Scale of Impact		

To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.

6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes. Scheme is only required with the new Northern Link to the Airport Park, but both have been ruled out as too expensive and unacceptable.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**No**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	As a higway scheme there are mixed views.
Key Uncertainties/risks (external factors)	It is assumed that there is high risk associated with a widening scheme, particularly as no technical work has been undertaken and it is a large section to be widened.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Linked to timescales for expansion of the airport.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Would reduce journey times along the A338.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Would reduce variability in journey times.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	No Impact	Proposal is not expected to facilitate new housing, but would facilitate development at the airport.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	The link road would provide an additional alternative route to the airport, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	It is expected that travel would be encouraged, increasing carbon emissions. The impact on carbon emissions is difficult to assess as the scheme should allow traffic to move at a more optimal speed - the impact depends on the speed of the vehicles.

Goal: Better Safety, Security and Health		
Air Quality	Slight Adverse	Encourages the use of cars, therefore possibly negative impact on air quality; however, schemes will reduce congestion.
Improve health through physical activity	Neutral	May encourage people who currently walk or cycle to drive.
Reduce the risk of death or injury	Slight Beneficial	Spacing of proposed junctions on the A338 must meet strict safety criteria.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Would perhaps help improve bus reliability for services through Christchurch town centre. Few bus services operate on the A338.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	Woukd improve access on a key strategic route and therefore encourage regeneration.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	No Impact	None identified (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). Any new highways infrastructure may impact the historic environment.
Landscape Character and Open Space	Moderate Adverse	No information available, assumed to have a negative impact on the landscape.
Land Resources	Moderate Adverse	No information available, assumed to have a negative impact on land resources.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Slight Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic. Improvement for users accessing the airport.
Urban environment	No Impact	No impact on the urban environment.

Assessment Sheet	**Option Name/No.**	**3g) A338 widening between Blackwater and Cooper Dean junctions**

1.) Summary of option		
Description and objective	Widening the A338 Bournemouth Spur between Blackwater and Cooper Dean junctions. The scheme involves widening from 2 to 3 lanes along this length of the A338 with lane drops/lane gains at both junctions and only north-facing merge/diverge slips at the new Riverside junction. The bridge over the river at Blackwater will need to be widened/rebuilt unless the central reserve and hard shoulders can be narrowed sufficiently to provide room for the third lane in each direction. The footbridge just north of the Cooper Dean junction will be removed if the new Riverside junction is to be constructed since the footbridge is located on the site of the new junction. It is believed that the widening could be accommodated in the existing highway boundary although it may be necessary for the widening to encroach into the central reserve as well as the verges.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal	Reduce carbon emissions	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	

2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	Cost estimated as part of SEDMMTS study.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost apart from maintenance.
Where is funding coming from?	Major scheme funding	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	It is assessed that there is high risk associated with a widening scheme, particularly as no technical work has been undertaken and it is a small section to be widened.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	It is assumed that this scheme would require major scheme funding or significant developer funding.
Likely value for money?	**High 2-4**	BCR of 2.85 reflecting congestion occurring currently along the A338.

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long timescales due to the need to secure major scheme funding.
Public acceptability	**2. Low-medium**	Widening scheme could be popular with drivers, but there may be opposition due to environmental impacts.
Practical feasibility	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (3)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (5)

5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Only benefits one of the DfT goals - but would improve traffic conditions on an important part of the South East Dorset road network.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	The A338 is a strategic route, and widening would improve the proposed link to the A31.
Is the option innovative and/or encourage better use?	**Well-established**	Widening roads is a well established type of intervention.
Overall strategic fit?	**1. Low**	Low strategic fit unless benefits were locked in with demand management, otherwise proposal would encourage more car travel.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Scheme has been modelled using the strategic model.
Previous Studies	**Unknown**	It is a subset of scheme described in the previous section.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	As a higway scheme there are mixed views.
Key Uncertainties/risks (external factors)		
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Proposal would help improve journey times along the A338.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Proposal would help improve journey time reliability along the A338.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Slight Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	No Impact	Proposal is unlikely to directly facilitate new housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	An additional lane would contribute slightly towards resilience (for example in the event of an accident).

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.

Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.
Improve health through physical activity	No Impact	May encourage people who currently walk or cycle to drive. However, proposal may encourage traffic to use this strategic route rather than one of the local routes.
Reduce the risk of death or injury	Slight Adverse	Highway measures would increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Would help improve bus reliability for services through Christchurch town centre. Few bus services operate on the A338.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipate an increase in noise due to generated traffic.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Higher standard road would improve the experience of travel.
Urban environment	No Impact	Assumed to have no impact on the urban environment.

Assessment Sheet	**Option Name/No.**	3h) A338 Wessex Way widening to 3 lanes between St Paul's Roundabout and Horseshoe Common Roundabout (Richmond Hill)

1.) Summary of option		
Description and objective	A338 Wessex Way widening to 3 lanes between St Paul's Roundabout and Horseshoe Common Roundabout (Richmond Hill).	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**Don't know**	Costs unknown. Likely to be expensive in relation to the length of road to be widened due to the structural works that would be required.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this cost.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	Due to structural work required and possible environmental mitigation.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Scheme cost unknown but assumed to be unaffordable.
Likely value for money?	**High 2-4**	Estimated BCR of 3.6
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Based on timescales associated with securing major scheme funding.
Public acceptability	**2. Low-medium**	There may be objections due to widening affecting Dean Park.
Practical feasibility	**2. Low-medium**	Eastbound there are already three lanes on the approach to the St Pauls Roundabout. However, westbound it is likely that widening would be south of the B3064 Lansdowne Road bridge due to the bridge parapets. To the western end, significant structural works would be required as the woodland on either side is at a lower level. It is assumed that limited modification would be required at Horseshoe Roundabout which already has merge/diverge lanes that could potentially become new lanes on the widened section. Modifications would be required at St Pauls Roundabout.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (2)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (3)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (2)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Road widening schemes are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**3. Medium**	Medium fit - existing Local Plan scheme.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Scheme modelled using the strategic model.
Previous Studies	**No**	No previous studies have been identified.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	As a highway scheme there are mixed views.
Key Uncertainties/risks (external factors)	Securing funding.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Widening of the A338 was modelled as part of the initial strategy testing (Highway Strategy).
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Proposal may help improve journey time reliability along the A338 by providing extra capacity.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Don't Know	Scheme costs required.
Delivery of housing (facilitate or prevent new housing)	No Impact	This scheme alone is unlikely to facilitate the delivery of housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No significant impact

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.

Goal: Better Safety, Security and Health		
Air Quality	Slight Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.
Improve health through physical activity	Slight Adverse	May encourage people who currently walk or cycle to drive. However, proposal may encourage traffic to use this strategic route rather than one of the local routes.
Reduce the risk of death or injury	Slight Adverse	Assume selected highway measures would increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	No Impact	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	No Impact	Only one bus service uses this section of Wessex Way which runs once a day in each direction.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipate an increase in noise due to generated traffic.
Biodiversity	Slight Adverse	There are likely to be environmental issues with Dean Park to the north and woodland either side of the A338.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Higher standard road would improve the experience of travel.
Urban environment	Slight Adverse	Anticipated adverse impact on the urban environment, but no detailed assessment.

Assessment Sheet	**Option Name/No.**	**3i) Castle Lane Relief Road**

1.) Summary of option	
Description and objective	This 5.1 km single carriageway scheme would provide a new east-west road link, north of, and parallel with the A3060 Castle Lane West. The proposed CLLR runs from a grade-separated junction with the A338 to the existing Northbourne Roundabout (A341/A347/A3060) with junctions at Yeomans Road and Muscliffe Lane. The CLRR would be designed as a single carriageway road for the pirpose of the appraisal. The following junctions are assumed, from east to west, along the CLRR: 1) Grade-separated junction with A338, with no exit to proposed Riverside Avenue Park & Ride; 2) Roundabout junction with Yeomans Road. Three arms: CLRR east and west, and Southern arm of Yeomans Road. 3) Roundabout junction with Muscliffe Lane – four arms;and 4) Northbourne roundabout with four arms.
Key DfT Goal	Support economic competitiveness and growth
Secondary Goal	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**100-250**	The proposed scheme is estimated to cost £33.8m (2003) (source: Bournemouth, Dorset and Poole Replacement Structure Plan Deposit Plan July 2004). Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias), and real cost increases until construction (assumed 2026) it is assumed to cost £112m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance). 60 year operating cost is estimated to be £51m.
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this cost.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	There would be a need to use compulsory purchase powers as houses have been built on parts of the proposed alignment. This would increase the scheme costs and involve a public inquiry. There is a risk that the scheme is progressed and planning permission is not achieved due to the environmental issues. A long time period has elapsed since any detailed technical work has been carried out on this proposal.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Assumed to be unaffordable - councils would need to raise local contribution to form part of a funding package - at 10% (under old MSBC guidance) this would be £11.2m, but it is anticipated that higher levels of local contribution will be required by the DfT in the future.
Likely value for money?	**Low 1-1.5**	Appraised against 2026 Recommended Strategy BCR is 0.99 (4.04 when appraised against the Do Minimum).

3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Long delivery timescales assumed as this is a new road. It is assumed that if funding was secured and the CLRR was built, that it would be open by 2026.
Public acceptability	**1. Low**	Houses have since been built on parts of the original proposed alignment. Compulsory Purchase would be expensive and likely to face public opposition.
Practical feasibility	**2. Low-medium**	Houses have since been built on parts of the original proposed alignment. CLRR proposal includes two crossings of the River Stour and sections of the route are in the flood plain.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (1)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (4)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Only addresses one of the DfT goals. Provides relief to the Castle Lane West/Whitelegg Way corridor. It should be noted that the CLRR was previously intended to reduce the traffic pressure caused by the North Bournemouth urban extension which is no longer in the Core Strategy. The modelled impact in relation to the Recommended Strategy is small; whilst the impact against the Do Minimum is larger it has no effect on mode shift due to the lack of public transport improvements.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	Neutral impact on low income/vulnerable groups.	
Overall strategic fit?	**1. Low**	As a highway proposal with no public transport element this has a low strategic fit. When tested with the Do Minimum the scheme achieves a high BCR (4.04), however when modelled with the Recommended Strategy, which has been designed to address the SEDTS objectives, the CLRR's BCR is only 0.99.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**5. High**	CLRR has been modelled in the strategic model.
Previous Studies	**Yes**	Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review (2004)'.
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	There is consensus that a scheme is needed to address the problems on Castle Lane, but not about the type of intervention.
Key Uncertainties/risks (external factors)	Securing funding. Achieving planning permission.	
Flexibility (1 = static, 5 = dynamic)	**2**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Reassignment of traffic provides relief to Castle Lane West and the A347 Whitelegg Road when modelled with both the Do Minimum and Recommended Strategy. Total journey distance increases but travel time and delay decrease slightly. Reduces total travel time from 21,000 pcu-hrs in the Recommended Strategy, to 20,800 pcu-hrs with inclusion of the CLRR. There is also a reduction when modelled with the Do Minimum (25,100 pcu-hrs to 24,750 pcu-hrs). £198m of travel time benefits when appraised against the Do Minimum; £45m against the Recommended Strategy.
Improve Reliability (impact on day to day variability and number of incidents)	No Impact	Slight reduction in average delay per vehicle, from 1.43 mins/pcu in the Recommended Strategy, to 1.38 mins/pcu with inclusion of the CLRR. Overall this difference is negligible.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	According to the 'Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004', the scheme could open up areas for new development. However, the South East Dorset strategy report (November 2005) stated that the Castle Lane Relief Road is a transport prerequisite for the North Bournemouth urban extension, which is no longer being promoted by BBC since the RSS has been abolished.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Major Beneficial	The CLRR would provide additional an alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	A reduction in congestion improves vehicle efficiency, thereby reducing of C02. Emissions. Do nothing = 14,200 tonnes C02/yr. With scheme = 11,350 tonnes C02/yr, a reduction of 2,800 tonnes C02/yr (-20%) (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).

Goal: Better Safety, Security and Health		
Air Quality	Moderate Beneficial	According to the 'Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004', the scheme would produce substantial air quality savings. Properties adjacent to existing alignment would experience a reduction in traffic related pollutants. Estimate of the number of households within a 200m threshold reduced from 1930 to 1220, a 37% reduction. (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Improve health through physical activity	Neutral	New highway link may encourage people who currently walk or cycle to drive. However, there is also more opportunity for walking and cycling on Castle Lane West and Whitelegg Way as a result of reduced severance through lower traffic flows, e.g. when modelled with the Recommended Strategy, on Castle Lane West between Yeomans Road and East Way in the AM Peak, the modelled two traffic flow reduces from 2,050 to 1,500 PCUs - a reduction of 26%.
Reduce the risk of death or injury	Moderate Beneficial	According to the 'Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004', the scheme would produce substantial accident savings. Estimated 400 personal injury accidents saved in 30 yr assessment period. PVB £16.0m
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport. The most significant benefits under this sub-objective accrue from improvements to personal security on public transport. However, less traffic on the bypassed Whitelegg Way and Castle Lane West should encourage walking which provides increased natural surveillance.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	CLRR generates a reasonable level of journey time savings for both highway and bus users.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Beneficial	Properties adjacent to existing alignment would experience a perceptible reduction in noise. Estimate of household highly bothered by noise reduced by 35% from 225 to 150. With scheme, 80 fewer households highly bothered by noise (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Biodiversity	Moderate Adverse	Impact on green belt. Impact on specific designations unknown.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Moderate Adverse	No national or internationally designated sites affected. Slight impact on Stour Valley Country Way (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Land Resources	Slight Adverse	Grade 2 agricultural land on edge of Bournemouth, but of marginal agricultural utility (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Flood Risk	Moderate Adverse	Sections of the proposed route are in the flood plain. Scheme crosses the River Stour twice.
Experience of travel	Slight Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic, reducing total travel time. Slight reduction in average delay per vehicle (see Reliability assessment); however, this is negligible in terms of improving the experience of travel overall.
Urban environment	No Impact	Improves urban setting by removing through traffic. Provides relief to Castle Lane West and A347 Whitelegg Way.

Assessment Sheet	**Option Name/No.**	**3j) Christchurch Bypass**

1.) Summary of option		
Description and objective	Relief road for Christchurch. Various alignments have been considered in the past. This appraisal considers the Outer Bypass option.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**50-100**	The proposed scheme was estimated to cost £25m in 1999. Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias), the scheme is estimated to cost at least £95m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this type and cost. Currently no DfT process available for funding major schemes.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	The scheme is likely to be expensive due to the cost of environmental mitigation. There is the risk that further time and money could be spent on progressing this scheme, which has been in existence for the last 24 years but has not been delivered due to the environmental impacts. Plans for a relief road for Christchurch first emerged as part of the South East Dorset and South West Hampshire Land Use Transportation Study in the late sixties. The first South East Dorset Structure Plan published in 1980 proposed a Christchurch Inner Relief Road. Further options were developed, including the Outer Relief Road which is the basis of this appraisal. The likely need for a public inquiry adds further uncertainty and risk to costs and timescale.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Likely to be unaffordable - councils would need to raise significant local contribution to form part of a funding package - with experience for major schemes currently going through the programme entry process this is likely to amount to £20m of local contributions.
Likely value for money?	**High 2-4**	Scheme achieves good BCR of 3.6
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Long timescales assumed due to the high funding levels required, the likelihood that a public inquiry would be required, and the need to overcome environmental issues if this alignment is to be delivered. Scheme was not included in the Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan (July 2004) - the decision not to include it in Structure Plans and Local Plans because of the unlikely prospect of attracting funding and actually building the scheme (Christchurch Bypass Report to Director of Environmental Services, March 1999).
Public acceptability	**1. Low**	Low acceptability due to adverse environmental impacts.

Practical feasibility	**1. Low**	Low feasibility due to environmental impacts.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (1)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (3)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and little impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that, without features in the schemes to lock in the benefits, they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No particular impact (beneficial or adverse) on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**Yes**	Oscar Faber study (1995).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus about the traffic benfits of the proposed bypass, however the significant environmental constraints have been clearly identifies and well-established.
Key Uncertainties/risks (external factors)	The main risks relate to the environmental constraints (e.g. the impact on international environmental designations). Also the low likelihood of securing	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Proposal was modelled as part of the strategy testing. Journey time savings could be partially offset by increased journey distance.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Not quantified but likely to be slight beneficial impact.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.

Delivery of housing (facilitate or prevent new housing)	No Impact	Assists indirectly with development at Bournemouth Airport site (but bypass not seen as being a necessary condition for Airport development). However, development along the scheme unlikely to be stimulated due to ecology policy constraints. No direct assistance to development areas.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	The bypass would provide an additional alternative route, which could potentially be used in the event of disruptions (e.g. accidents and incidents). Proposal would provide some traffic relief to Christchurch.

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	An increase in overall carbon emission due to generated traffic and additional journey lengths, although localised

Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	An increase in overall emissions due to generated traffic and additional journey lengths, although localised improvements in Christchurch town centre.
Improve health through physical activity	Slight Adverse	May encourage people who currently walk or cycle to drive. Reduction in severance due to reduction in traffic levels in Christchurch. Will not promote healthy lifestyles and will not reduce car dependency.
Reduce the risk of death or injury	Slight Beneficial	Removal of traffic to higher standard road likely to provide accident reductions, although there would be an increase in overall vehicle-kms. Diversion of through traffic from Christchurch toen centre would reduce accidents. No specific improvement to current accident black spots.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no significant benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Through the reduction in congestion, the scheme would help improve bus reliability for services through Christchurch town centre.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No particular impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	Increase in noise because new link represents new noise source especially for properties near the new alignment. Additional journey lengths expand area of impact, .
Biodiversity	Major Adverse	Affects Town Common SSSI, SAC, Ramsar, SPA, and Avon Valley SSSI, SPA (adjacent to railway which is part of the Town Common SSSI). Likely to affect protected species in the flood plain. Direct effects threaten protected species for which mitigation is unlikely. Outer alignment option would be more damaging to rare habitats than the alternative Inner route (Christchurch Bypass Report to Director of Environmental Services, March 1999).
Geodiversity	Slight Adverse	Estimated adverse impact although detailed assessment not undertaken.
Historic Environment	Slight Adverse	Estimated adverse impact although detailed assessment not undertaken.
Landscape Character and Open Space	Major Adverse	Significant visual intrusion to residents and visitors within the river valley. Structure would be visible from wide area.
Land Resources	Slight Adverse	Grade 4 and 5 land affected.
Flood Risk	Moderate Adverse	Within flood plain and hence increased flood risk.
Experience of travel	Moderate Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic.
Urban environment	No Impact	Scheme does not included specific measures within the urban environment

Assessment Sheet	Option Name/No.	3k) Kinson Relief Road

1.) Summary of option	
Description and objective	This 1.8 km scheme would bypass the retail and commercial centre of Kinson which straddles the A341 Wimborne Road. The scheme was originally envisaged as a dual carriageway, but was assessed for the Structure Plan Deposit Plan July 2004 as a single carriageway scheme to reduce the impacts. The KRR has 'on line' improvements from an enlarged Bear Cross Roundabout before leaving the existing carriageway alignment just west of Summers Avenue with junctions with Kinson Road and Leybourne Avenue. The corridor then returns to the existing highway alignment east of Graycot Close with a signalised priority junction with The Broadway before 'on line' improvements link to the roundabout at New Road. From east to west: • Northbourne Roundabout: unchanged from present layout; • Signalised three arm junction with The Broadway. Arms are Scheme West, Scheme East and The Broadway; • Leybourne Ave – scheme becomes three arm signalised junction. Arms are Kinson Relief Road (western arm), Kinson Relief Road (eastern arm) and Leybourne Avenue. • Junction with Kinson Road: new four arm signalised junction; • West of Summers Avenue: new roundabout junction; and • Bear Cross roundabout: this would be enlarged with the number and length of entry lanes remaining the same in all approaches. Potential to widen and extend the Wimborne Road approach.
Key DfT Goal	Support economic competitiveness and growth
Secondary Goal	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	The full CLRR scheme is estimated to cost £8.8m (2003) (source: Bournemouth, Dorset and Poole Replacement Structure Plan Deposit Plan July 2004). Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias), and real cost increases until construction (assumed 2026) it is assumed to cost £29m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance). 60 year operating cost is estimated to be £13m.
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this cost.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	A long time period has elapsed since any detailed technical design work has been carried out on this proposal.
Affordability (1= not affordable, 5 = affordable)	**2**	Assessed to have limited unaffordability - council would need to raise local contribution to form part of an MSBC funding package - at 10% (under old MSBC guidance) this would be £2.9m, but it is anticipated that higher levels of local contribution will be required by the DfT in the future.
Likely value for money?	**Poor <1**	Appraised against 2026 Recommended Strategy BCR is 0.01 (0.02 when appraised against the Do Minimum).

3.) Deliverability

Implementation timetable from inception to delivery	**10+ years**	Long delivery timescales assumed as this is a new road. It is assumed that if funding was secured and the KRR was built, that it would be open by 2026.
Public acceptability	**1. Low**	Low public acceptability expected due to severe environmental impacts.
Practical feasibility	**1. Low**	Low feasibility due to severe environmental impacts.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (0)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (1)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (4)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (1)

5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	The KRR would only have a minor impact on one of the DfT goals. The modelled impact in relation to the Recommended Strategy is small; whilst the impact against the Do Minimum is larger it has no effect on mode shift and would result in an increase in car trips.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Network-Specific**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	As a highway proposal with no public transport element this has a low strategic fit. However, its strategic fit is boosted by improved public transport journey times with the KRR.
Quality of the supporting evidence	**4. Medium-high**	KRR has been modelled in the strategic model.
Previous Studies	**Yes**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	Mixed views due to environmental issues.
Key Uncertainties/risks (external factors)	Environmental impacts. Securing funding. Achieving planning permission.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	No Impact	The KRR only reduces network delay marginally, since it only provides a short alternative route to A341 Wimborne Road between Summers Avenue and Graycot Close.
Improve Reliability (impact on day to day variability and number of incidents)	No Impact	Slight reduction in average delay per vehicle, from 1.43 mins/pcu in the Recommended Strategy, to 1.41 mins/pcu with inclusion of the KRR. Overall this difference is negligible.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Neutral	As a relatively small highway link, the KRR will have a very limited effect on the delivery of housing.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	This link road would provide an additional alternative route, which could potentially be used in the event of disruptions (e.g. accidents); however, the KRR is a relatively minor new link.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Slight Beneficial	According to the Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004 an overall reduction in CO2 production is achieved.

Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	The scheme creates a net increase in the number of households where air quality is made worse (source: Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004)
Improve health through physical activity	Slight Beneficial	More opportunity for walking and cycling in Kinson as a result of reduced severance through lower traffic flows. E.g., when modelled with the Recommended Strategy, Wimborne Road between The Broadway and Kitscroft Road in the AM Peak, the modelled two traffic flow reduces from 1,450 to 550 PCUs - a reduction of 63%.
Reduce the risk of death or injury	Slight Beneficial	According to the 'Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004', the scheme would produce substantial accident savings. Estimated 50 personal injury accidents saved in 30 yr assessment period. PVB £2.0m.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or the fear of crime - except that people feel safer in their cars than walking, cycling or using public transport. Less traffic in Kinson along Wimborne Road between Summers Avenue and East Howe Lane should encourage walking, and thus increase natural surveillance.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; for those without access to a car, limited benefits from bus journey time savings.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Relief of existing corridors served by public transport.
Social and distributional impacts (on low income and vulnerable groups)	Slight Beneficial	Will benefit people on low incomes without access to a car by improving the walking and cycling environment in Kinson.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	The scheme creates a net increase in the number of households highly affected by noise (source: Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004).
Biodiversity	Major Adverse	The scheme potentially has serious impacts on land designated as SSSI, SAC and SPA (source: Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004)
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.

Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Slight Beneficial	As a relatively small highway link, the KRR will have a very limited effect on the experience of travel.
Urban environment	Slight Beneficial	Removal of traffic will improve the urban environment in the retail and commercial centre of Kinson.

Assessment Sheet	Option Name/No.	3l) Blackwater Junction improvement

1.) Summary of option		
Description and objective	The Blackwater grade-separated junction between the A338 Wessex Way and B3073 Christchurch Road/Hurn Road represents a significant congestion point, particularly for traffic travelling circumferentially between Christchurch, Bournemouth Airport and East Dorset. A detailed study of the junction has been undertaken by Buro Happold in 2009 which identified a series of options for the re-design of the junction. From the review of the Buro Happold schemes, and taking into account the identified constraints, two different options were developed – one formed by an expansion of the existing signalised junction and the other containing a pair of dumb-bell roundabouts. Both options allow the retention of the residential	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**50-100**	Estimated to cost in the region of £70million. This would include junction modifications that would enable the improvements between Blackwater junction and the Airport
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost apart from maintenance.
Where is funding coming from?	Major scheme funding, developer contribution.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**3. Medium**	This depends on the final junction option (see Feasibility below), one of which would include a new bridge.
Affordability (1= not affordable, 5 = affordable)	**3**	Only affordable if developer funding is secured.
Likely value for money?	**High 2-4**	Estimated BCR of 2.2
3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Long timescales due to the need to secure major scheme funding. Scheme is also linked to development at the airport, which also has long timescales.
Public acceptability	**4. Medium-high**	No public acceptability issues identified. Assumed it would be supported as it would improve congestion at this location. Blackwater Junction was listed a congestion hotspot at Wider Reference Group workshop. Both options retain the residential properties adjacent to the junction and their accesses to the highway network.
Practical feasibility	**3. Medium**	Scheme is linked to improvements between Blackwater and the Airport. A wide range of junction options have been considered as part of previous work. Signals option requires a new bridge adjacent to the existing one over the A338 and land take between Hurn Road and the river which may be difficult. Roundabout option means the old Hurn Road bridge could either be removed or possibly turned into a PT/cycle link.

4.) Performance against DfT goals (more details over leaf)		
DfT goals: **(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)**	*Goal&colour*	Support economic competitiveness and growth (6)
	Goal&colour	Tackle climate change (3)
	Goal&colour	Better safety, security and health (4)
	Goal&colour	Promote equality of opportunity (3)
	Goal&colour	Improve quality of life and natural environment (3)
Additional network goals:	*Goal&colour*	Affordability (3)
	Goal&colour	Implementability (5)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Addresses one of the DfT goals only. Negative impact on some of the other goals.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Proposal would address a congestion hotspot on the strategic road network.
Is the option innovative and/or encourage better use?	**Well-established**	Highway schemes are a well established type of intervention.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**4. Medium-high**	The Blackwater junction currently represents a significant congestion point at a key strategic location, particularly for traffic travelling circumferentially between Christchurch, Bournemouth Airport and East Dorset.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Scheme has been modelled using the strategic model.
Previous Studies	**Yes**	A338 Cooper Dean to B3073 Junction Improvements - Blackwater Interchange Feasibility Study (March 2009).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is a consensus that improvements are required at the Blackwater junction which is a congestion hotspot.
Key Uncertainties/risks (external factors)	Securing funding - scheme is estimated to cost £70million.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Improvements at the Blackwater junction would help improve journey times along the A338, a key strategic route into Bournemouth, and on the B3073.
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Improvements at the Blackwater junction would help improve journey time reliability along the A338 and the B3073.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Proposal is linked to development at Riverside and at the Airport.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	No Impact	No impact on resilience.
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Neutral	Improvement in carbon consumption due to reduced congestion at this location.

Goal: Better Safety, Security and Health		
Air Quality	Neutral	There would be an improvement due to reduced congestion at the Blackwater junction.
Improve health through physical activity	No Impact	Proposal will not encourage more walking or cycling.
Reduce the risk of death or injury	Neutral	Scheme design would help to improve safety at this location.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	May benefit local bus services; however; only a few services use the A338. Would benefit the bus service between Bournemouth Airport and Bournemouth town
Social and distributional impacts (on low income and vulnerable groups)	No Impact	Scheme benefits car drivers; no benefits for those without access to a car, apart from those who use the limited number of bus services on the A338.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment. Requires a new bridge adjacent to the existing one over the A338 and land take between Hurn Road and the river which may be difficult – probable retaining wall or extended bridge with piers in the bank. Environment Agency would need to be consulted.
Experience of travel	Moderate Beneficial	Reduced congestion at the Blackwater Junction would help improve the experience of travel for drivers.
Urban environment	No Impact	

Assessment Sheet	**Option Name/No.**	**3m) Parley Lane/Christchurch Road (B3073) improvements.**

1.) Summary of option	
Description	Improvements to the B3073 between Blackwater and Chapel Gate. The aim of the scheme is to improve access to Bournemouth Airport. At present, the capacity of the Parley Cross junction is very nearly at saturation levels in peak hours according to the Airport Masterplan. B3073 improvements tested in the Christchurch and Southern East Dorset Transport Study (2008) included junction improvements to Parley Cross, Hurn roundabout, and Blackwater junction with A338. From Chapel Gate east beyond the airport access – on line improvements if necessary. Currently a reasonable standard single carriageway with a footway on the airport side. Widen to dual carraigeway standard. Airport access improvements already proposed, including new signalised junction at airport entrance. East of the airport, access proposals take the route off line to avoid the bottleneck of the existing bridge and roundabout at Hurn. New alignment through fields to miss woodland, cross the minor road and then cross the river at right angles well away from the weir. Rejoins Christchurch Road with a new roundabout between Hurn and Blackwater. The carriageway between this junction and Blackwater is to be dualled.
Key DfT Goal	Support economic competitiveness and growth
Secondary Goal	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**50-100**	Cost of improvements from Blackwater Junction (not including Blackwater Junction improvement) estimated at £67m.
Revenue Costs (£m)? (per annum)	**None**	No revenue cost apart from highways maintenance.
Where is funding coming from?	Major scheme funding, developer contributions.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	Key risk is that no design work has been undertaken and therefore there may be issues that have not yet been identified which could have cost implications.
Affordability (1= not affordable, 5 = affordable)	**4**	Assuming it will be some developer contributions.
Likely value for money?	**High 2-4**	Estimated BCR of 3.9.

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Required for airport expansion and growth, and expanding employment at the airport. Before 2021.
Public acceptability	**3. Medium**	Public acceptability is likely to be mixed as this is a highway based scheme.
Practical feasibility	**4. Medium-high**	Some sections off the existing alignment

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (4)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (3)
	Goal&colour	Implementability (6)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**2**	Performs well against the economic competitiveness and growth goal, but poor scores against the other goals.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Would improve access to Bournemouth Airport.
Is the option innovative and/or encourage better use?	**Well-established**	Highway measures are a well established form of intervention.
Overall strategic fit?	**5. High**	The Airport is seen as the focus for expanded public transport activity, including the creation of a public transport hub combining park and ride operations with increased levels of local bus and regional/national coach services serving the site. Improved orbital access to the airport from the major radial routes into the conurbation will facilitate the increased public transport provision.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled in the strategic model.
Previous Studies	**Unknown**	Christchurch and Southern East Dorset Transport Study (2008).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**5. Majority**	There is consensus that improvements are needed for access to the airport if it is to be expanded. However there is no consensus over the schemes to achieve this.
Key Uncertainties/risks (external factors)	Key risk is that no design work has been undertaken and therefore there may be issues that have not yet been identified which could have cost implications.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Will improve journey times, and improve connectivity between the airport and the regional road network (i.e. A338/A31).
Improve Reliability (impact on day to day variablility and number of incidents)	Moderate Beneficial	Improvements should reduce day to day variablility and the number of incidents.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Will not serve new housing, but would improve access between housing and employment at the airport.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	Additional lane may be of benefit in the event of an accident, allowing vehicles to pass.
Goal: Reduce transport's emissions of carbon dioxide		

Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	Will encourage more car-based travel and hence carbon consumption. Also will encourage more use of the airport (more carbon from air travel).

Goal: Better Safety, Security and Health		
Air Quality	Neutral	Encourages the use of cars, therefore likely to have negative impact on air quality; however, schemes will reduce congestion.
Improve health through physical activity	Moderate Adverse	Physical activity could reduce with strategy that encourages car use. Will not promote healthy lifestyles and will not reduce car dependency.
Reduce the risk of death or injury	Moderate Adverse	Highway measures generating additional traffic would tend to increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Disproportionate benefit for those who own a car (compared with those without).
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Could help improve bus journey times for accessing the airport by bus.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	Slight Beneficial	Will not benefit a regeneration scheme; however, further growth to the airport and the associated business park is dependent on improvements to access in the area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Proposed highway improvements should improve the driving experience by being designed to high standards.
Urban environment	No Impact	No impact on the urban environment.

Assessment Sheet	Option Name/No.	3n) New East-West road link between Parley and Mannings Heath

1.) Summary of option			
Description and objective	The proposed East-West road link would join the existing network at the western extent as a northern arm of Mannings Heath roundabout. It would then pass the golf course, cross heathland, through a small copse of trees, and across open fields to a proposed roundabout on the A341 Magna Road. Then it would continue east to another new roundabout on the A348, north along the existing A348, to the bend just before the river, where another roundabout provides the junction for the link road, A348 and access to the civic amenities site. The route would then follows the river north-east, turning east along the field boundary, crossing the river with a new bridge to meet the A347 with another roundabout. From here would continue east avoiding properties and pylons, and across Church Lane. There are two route options from Church Lane to Parley Lane.		
Key DfT Goal	Support economic competitiveness and growth		
Secondary Goal			
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.		
2.) Cost and likely value for money			
Capital Cost (£m)?	**100-250**	Scheme is estimated to cost in the region of £140m including allowances for risk and optimism bias.	
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).	
Where is funding coming from?	Major scheme funding would be required.		
Any income generated to local authority (£m)? (per annum)	**No**	None	
i.Overall cost risk? ii.Other costs?	**1.High**	Allowances for risk/optimism bias have been included.	
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Major scheme funding would be required and it may be difficult to secure this level of funding.	
Likely value for money?	**High 2-4**	Estimated BCR of 3.7.	
3.) Deliverability			
Implementation timetable from inception to delivery	**10+ years**	Long delivery timescales anticipated as this is a new road and a Public Inquiry would be required due to the environmental issues.	
Public acceptability	**1. Low**	Whilst there is recognition amongst the public that some highway improvements are required, this particular scheme has major environmental issues (such as crossing Canford Heath) which would cause objections.	
Practical feasibility	**1. Low**	Proposal would require new river crossings which would need approval from the Environment Agency. Proposal has been developed to avoid CPO of properties. Issue with crossing Canford Heath results in a low feasibility score. Terminating the route at Magna Road would improve the score.	

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (1)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals, and a range of negative impacts on the other goals.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This would provide a new major strategic link in South East Dorset's road network.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention.
Social and distributional impacts? (on low income or vulnerable groups)	Scheme would favour those with access to private car, although public transport services could be diverted onto the new alignment	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**Yes**	A31 to Poole Corridor Scoping Study Final Report (February 2007).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	The highway link to the west of the Airport is one of the most favoured measures in the consultation.
Key Uncertainties/risks (external factors)	Environmental issues, e.g. Canford Heath environmental designations.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Whilst highway schemes may encourage car use, it is assumed that the encouragement of extra traffic would not use all the spare capacity, and improve journey times, particularly for HGVs, Other interventions would be required to lock in the benefits of additional capacity (e.g. demand management).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Could reduce journey time variability.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	This strategic scheme is intended to help accommodate the level of development planned for South East Dorset to 2026.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Major Adverse	Increase in emissions due to generated traffic and additional journey lengths.

Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.
Improve health through physical activity	Slight Adverse	May encourage people who currently walk or cycle to drive. Will not promote healthy lifestyles and will not reduce car dependency.
Reduce the risk of death or injury	Slight Adverse	Highway measures would increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car. Does not promote social cohesion.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Helps improve bus journey times on parallel routes - bus services could also be rerouted to make use of the new link.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	Scheme benefits car drivers; no benefits for those without access to a car.
Regeneration (impact on a targeted regeneration area, and any other areas)	Don't Know	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	Anticipate an increase in noise due to generated traffic.
Biodiversity	Major Adverse	Canford Heath environmental designations. Alternative proposal to end the link at Magna Road, rather than Mannings Heath.
Geodiversity	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Major Adverse	Canford Heath environmental designations. Alternative proposal to end the link at Magna Road, rather than Mannings Heath.
Land Resources	Moderate Adverse	Proposed route would impact on land resources as it crosses farm land.
Flood Risk	Moderate Adverse	Proposal may impact on flood risk since it involves several river crossings.
Experience of travel	Moderate Beneficial	Higher standard road would improve the experience of travel.
Urban environment	No Impact	No direct impact on the urban environment, although it may benefit from removing through traffic from residential streets.

Assessment Sheet	Option Name/No.	3o) New East-West road link between Parley and Magna Road

1.) Summary of option	
Description and objective	The proposed East-West road link would join the existing network at a proposed roundabout on the A341 Magna Road. Then it would continue east to another new roundabout on the A348, then north along the existing A348, to the bend just before the river, where another roundabout provides the junction for the link road, A348 and access to the civic amenities site. The route would then follows the river north-east, turning east along the field boundary, crossing the river with a new bridge to meet the A347 with another roundabout. From here would continue east avoiding properties and pylons, and across Church Lane. There are two route options from Church Lane to Parley Lane. To facilitate the growth in activity at the wider airport site together with the increase in airport-related travel, the on-line improvement of the B3073 to the south of the airport perimeter would be extended from Chapel Gate Roundabout on a new alignment across existing agricultural land to connect with the A347 New Road to the north of the existing Ensbury Bridge over the River Stour, with an intermediate priority junction with Church Lane.
Key DfT Goal	Support economic competitiveness and growth
Secondary Goal	
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**50-100**	Scheme is estimated to cost in the region of £99m including allowances for risk and optimism bias.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	Major scheme funding would be required.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	Allowances for risk/optimism bias have been included.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Major scheme funding would be required and it may be difficult to secure this level of funding.
Likely value for money?	**High 2-4**	Estimated BCR of 3.8

3.) Deliverability		
Implementation timetable from inception to delivery	**10+ years**	Long delivery timescales assumed as this is a new road, with the likely need for a public inquiry..
Public acceptability	**2. Low-medium**	Whilst there is recognition amongst the public that some highway improvements are required, there is opposition to building of new roads.
Practical feasibility	**3. Medium**	Proposal would require new river crossings which would need approval from the Environment Agency. Higher score compared with option to Mannings Heath.

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (2)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (2)

5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**4**	Only addresses one of the DfT goals, and a range of negative impacts on the other goals. The route between Chapel Gate and Magna Road therefore represents a major east-west connection, linking a number of existing radial routes at A347 New Road and A348 Ringwood and providing new alternative routes which would relieve junctions which were identified earlier as representing on-going capacity problems at Parley Cross, Longham, Ferndown and Bear Cross.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This would provide a new major strategic link in South East Dorset's road network.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention.
Social and distributional impacts? (on low income or vulnerable groups)	Scheme would favour those with access to private car, although public transport services could be diverted onto the new alignment	
Overall strategic fit?	**4. Medium-high**	The existing Aviation Business Park contains a number of businesses with both airport services and non-airport related activities. The site to the north-west of the existing runway is projected to increase considerably in size in the future with an additional 15 hectares of development by 2026. As a result the existing roundabout would need to be redesigned, probably ultimately with peak period signalisation, in order to accommodate the anticipated growth.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**Yes**	A31 to Poole Corridor Scoping Study Final Report (February 2007).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	The highway link to the west of the Airport is one of the most favoured measures in the consultation.
Key Uncertainties/risks (external factors)	Environmental issues (proximity to environmental designations).	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Whilst highway schemes may encourage car use, it is anticipated that the generation of extra traffic would not use all the spare capacity, and improve journey times, particularly for HGVs. Other interventions would be required to lock in the benefits of additional capacity (e.g. demand management).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Would reduce journey time variability.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	This strategic scheme is intended to help accommodate the level of development planned for South East Dorset to 2026.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	Increase in emissions due to generated traffic and additional journey lengths.

Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	Increase in emissions due to generated traffic and additional journey lengths.
Improve health through physical activity	Slight Adverse	May encourage people who currently walk or cycle to drive. Will not promote healthy lifestyles and will not reduce car dependency.
Reduce the risk of death or injury	Slight Adverse	Highway measures would increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car. Does not promote social cohesion.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Helps improve bus journey times on parallel routes - bus services could also be rerouted to make use of the new link.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	Scheme benefits car drivers; no benefits for those without access to a car.
Regeneration (impact on a targeted regeneration area, and any other areas)	Don't Know	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	Anticipate an increase in noise due to generated traffic.
Biodiversity	Moderate Adverse	Option avoids Canford Heath environmental designations. Alternative proposal to end the link at Mannings Heath.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment. Ending the link at Magna Road, rather than Mannings Heath avoids Canford Heath environmental designations.
Land Resources	Moderate Adverse	Proposed route would impact on land resources as it crosses farm land.
Flood Risk	Moderate Adverse	Proposal may impact on flood risk since it involves several river crossings.
Experience of travel	Moderate Beneficial	Higher standard road would improve the experience of travel.
Urban environment	No Impact	No direct impact on the urban environment, although it may benefit from removing through traffic from residential streets.

Assessment Sheet	**Option Name/No.**	**3p) New link road between Canford Bottom and Magna Road**

1.) Summary of option		
Description and objective	New link road between the A31 and Poole between Canford Bottom on the A31, and Magna Road. The north-south route would start at its southern end at the new roundabout to the north of Bearwood, on the section of the east-west route between the A348 Ringwood Road and A341 Magna Road. From the new roundabout, the route would run north on agricultural land with a new crossing of the River Stour before joining the B3073 Ham Lane to the west of High Mead Lane at a roundabout junction. The route would then continue north-west along Ham Lane, with some local improvements, to the Canford Bottom junction on the improved A31, described earlier. During 2007 consultants working on behalf of Bournemouth, Poole and Dorset authorities and the Highway Agency completed the A31 to Poole scoping study which considered the issues of both improved access to the conurbation and Bournemouth airport within the broad A348 corridor between the A31 and Poole Town Centre (including the Port of Poole).	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	

2.) Cost and likely value for money		
Capital Cost (£m)?	**25-50**	Cost estimated as part of SEDMMTS study, £36m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost apart from maintenance.
Where is funding coming from?	Major scheme funding	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	Mitigation measures could be very expensive.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Assumed to be unaffordable due to the high cost and the scheme is not in the DfT's major scheme process.
Likely value for money?	**High 2-4**	Estimated BCR of 2.85

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	There have been many proposals for road building in this corridor over the last 40 years.
Public acceptability	**4. Medium-high**	There remain some aspirations for major road building, particularly amongst the economic community.
Practical feasibility	**2. Low-medium**	Canford Bottom to Mannings Heath was one of the original proposals for a new link road between the A31 and Poole. Due to environmental contraints this proposal involves terminating the route at Magna Road rather than Mannings Heath.

4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (1)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (2)
Additional network goals:	*Goal&colour*	Affordability (2)
	Goal&colour	Implementability (2)

5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**3**	Positive impact on one of the goals. Would provide an alternative link between the A31 and Poole (including the Port of Poole). However, there are a range of negative impacts on the other goals. This section of the new east-west route would provide further relief to the series of congested junctions at Parley Cross, Longham, Bear Cross, Ferndown and Queen Anne Drive by removing more strategic traffic from the local network.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	Would improve traffic conditions on the strategic road network.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention.
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled using the strategic model.
Previous Studies	**Unknown**	- A31 to Poole Corridor Scoping Study Final Report (February 2007).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	Public Inquiry would be required - proposal crosses Canford Heath.
Key Uncertainties/risks (external factors)	Environmental issues	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process, need for a Public Inquiry, and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Major Beneficial	Whilst highway schemes may encourage car use, it is anticipated that the geberation of extra traffic would not use all the spare capacity, and improve journey times, particularly for HGVs, Other interventions would be required to lock in the benefits of additional capacity (e.g. demand management). Would improve connectivity to the Port of Poole.
Improve Reliability (impact on day to day variability and number of incidents)	Major Beneficial	Would reduce journey time variability significantly.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Slight Beneficial	Highway schemes would provide additional road capacity. Some housing proposals may be dependent on highway schemes to provide access to the sites.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Major Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).

Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Major Adverse	Likely to encourage more car travel and CO2 emissions.

Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	It is anticipated that the scheme would have a negative impact overall on air quality due to expected additional travel.
Improve health through physical activity	No Impact	Assumed no impact as this is a strategic route.
Reduce the risk of death or injury	Slight Adverse	Assume selected highway measures would increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	This scheme does not include any public transport measures which would benefit those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Would provide relief to existing corridors used by bus services.
Social and distributional impacts (on low income and vulnerable groups)	Slight Adverse	Mainly benefits those with access to private car.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	The HA has identified several trunk road locations adjacent to strategically significant urban areas where considerable capacity problems already exist and they consider these problems must be addressed to allow the employment and residential development proposals to be carried forward. One of these locations indicated is the length of A31 bordering the northern edge of Poole and Bournemouth; the A31 to Poole scoping report points to the need to dual this length of A31.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	New road through a rural area.
Biodiversity	Moderate Adverse	Option avoids Canford Heath environmental designations. Alternative proposal to end the link at Mannings Heath.
Geodiversity	Moderate Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	The new road and junctions are assumed to be built to a high design standard and therefore improve the driving experience.
Urban environment	Slight Adverse	Anticipated adverse impact at the southern end of the scheme, no detailed assessment.

Assessment Sheet	Option Name/No.	3q) Sandford and Holton Heath Bypass

1.) Summary of option	
Description and objective	An A351 Sandford Bypass is one of a number of road schemes that have been considered in the Purbeck Transportation Study. The twin objectives for a bypass are: - Eliminating traffic delays; and - Ameliorating environmental disbenefits in settlements. The proposal passes to the east of Sandford on a north-south alignment between the A351 Holton Heath roundabout in the north and the A351 in the vicinity of Sandford Bridge in the south.
Key DfT Goal	Support economic competitiveness and growth
Secondary Goal	Reduce carbon emissions
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	The lowest cost option was estimated to cost £10.3m in the Purbeck Transportation Study (2003 prices). Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias, the scheme is estimated to cost £23m. Alternative options in excess of £100m (e.g. tunnelling) would help to mitigate against environmental issues.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this cost.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	High cost risk due to environmental impacts - likely that a higher cost option would be required to mitigate against environmental impacts if the scheme is to be delivered. Analysis in the Purbeck Transportation Study revealed that tunnel options for an A351 Sandford Bypass have a high cost, and that the best chance of delivering a scheme would be to pursue an at-grade option by attempting to overcome its environmental and archaeological constraints.
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Assumed to be unaffordable - councils would need to raise local contribution to form part of an MSBC funding package - at 10% (under old MSBC guidance) this would be £2.3m, but it is anticipated that higher levels of local contribution will be required by the DfT in the future.
Likely value for money?	**High 2-4**	BCR of 3 for the lowest cost option, based on Purbeck Transportation Study (2004) (PVC - £10.3m; PVB (accidents) - £3.9m; PVB (Business Users & Providers and Consumer Users) - £27.4m). Estimated time savings per vehicle of 3.8 minutes during peak periods and 2.2 minutes during interpeak periods (at 2011) .

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long delivery timescales assumed as this is a new road and a Public Inquiry would be required.
Public acceptability	**1. Low**	Opposition likely due to environmental impacts.
Practical feasibility	**2. Low-medium**	An at-grade option would need to overcome environmental and archaeological constraints. The key to overcoming the environmental constraints is to pass the tests of the Habitats Regulations prescribed by Government. These tests state that there must be "no alternative" to a proposed scheme, and that it must be in the "over-riding public interest". The Purbeck Transportation Study established that the likelihood of successfully delivering a Sandford bypass was poor.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (5)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (2)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**2. Low-medium**	Purbeck Transportation Study is now relatively old (published in 2004 - 7 years old).
Previous Studies	**Yes**	Purbeck Transportation Study
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	Mixed views about the required solution.
Key Uncertainties/risks (external factors)	Environmental impacts. Securing funding.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process, funding availability, and the likelihood of Public Inquiry.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Purbeck Transportation Study - Improved journey times for through traffic. Estimated time savings per vehicle of 3.8 minutes during peak periods and 2.2 minutes during interpeak periods (at 2011).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Purbeck Transportation Study - Likely to improve reliability for private and public transport on both existing and proposed routes.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	Highway schemes would provide additional road capacity. Some housing proposals may be dependent on highway schemes to provide access to the sites.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	Purbeck Transportation Study - a reduction in congestion improves vehicle efficiency, thereby reducing of CO2. Emissions. Assessment carried out using DMRB spreadsheet. Do min = 5,500 tonnes C02 / annum Scheme = 4,950 tonnes CO2 / annum
Goal: Better Safety, Security and Health		
Air Quality	Moderate Beneficial	Relief from general and tourist traffic. Purbeck Transportation Study estimated air quality at approx. 600 properties improved and 150 properties worsened. Air quality improved for a net of 450 households.
Improve health through physical activity	Neutral	May encourage people who currently walk or cycle to drive - bypass likely to encourage greater walking and cycling in Sandford, thereby increasing transport options for residents. But overall, will not promote healthy lifestyles and will not reduce car dependency.
Reduce the risk of death or injury	Slight Beneficial	Purbeck Transportation Study - Likely to remove traffic from residential areas, benefiting two schools; removing HGV mineral traffic travelling from Purbeck Removal of through traffic envisaged to reduce accidents. Estimated 100 personal injury accidents saved in 30 yr assessment period. PVB £3.9m
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	No Impact	Scheme benefits car drivers; no benefits for those without access to a car. The scheme is unlikely to materially affect public transport accessibility, but should result in an improvement to bus reliability.
Accessibility (in terms of bus journey times/areas served)	No Impact	The scheme is unlikely to materially affect public transport accessibility.

Social and distributional impacts (on low income and vulnerable groups)	Slight Beneficial	Bypass likely to encourage greater walking and cycling in Sandford, thereby increasing transport options for residents - benefitting those on low income.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area.
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Beneficial	Purbeck Transportation Study estimated household highly bothered by noise reduced by 91% from 55 to 5. With scheme, 50 fewer households highly bothered by noise.
Biodiversity	Major Adverse	Purbeck Transportation Study - National and European designated wildlife habitat affected/severed including Holton & Sandford Heath SSSI, Wareham Meadows SSSI, (included within Dorset Heath SAC, Dorset Heathlands SPA & Ramsar, Poole Harbour Ramsar); DRA Holton Heath & Sanford SNCIs; direct and indirect effects on interests. Protected species impacts potentially on Sand Lizard, Greater Horseshoe Bat, Smooth Snake & Cetti's Warbler. 6ha habitat loss compensation available. Minor increased fire risk from greater accessibility. The PTS report states that the key to overcoming the environmental constraints is to pass the tests of the Habitats Regulations prescribed by Government. These tests state that there must be "no alternative" to a proposed scheme, and that it must be in the "over-riding public interest".
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Major Adverse	Note that the Appraisal Summary Table in the PTS assessed the impact as neutral, not including the impacts referred to elsewhere in the report. The alignment has archaeological constraints at its northern end. The proposed alignment would affect several Scheduled Ancient Monuments (SAMs) as it crosses the old admiralty site at Holton Heath. A sub-option in the Purbeck Transportation Study is to avoid the SAMs by passing to the south through the Holton Heath Trading Estate. The affect of the alignment on the setting of the SAM would still need careful consideration and assessment. Whilst this seems a suitable solution, it should be noted that the costs of the scheme would increase significantly. In taking land from the Holton Heath Trading Estate, the alignment would bring about the need to afford compensation to affected businesses and establishments. It is likely that this would run into several million pounds.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	No Impact	No water environment impacts identified.
Experience of travel	Moderate Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic.
Urban environment	Slight Beneficial	Improved conditions for walking and cycling in Sandford.

Assessment Sheet	**Option Name/No.**	**3r) Three Legged Cross Link Road**

1.) Summary of option		
Description and objective	The Three Legged Cross Link Road was included in the East Dorset Local Plan (adopted January 2002), and effectively removes the staggered junction at the Three Legged Cross. At the northern end, it would form a new bottom arm of the Three Legged Cross junction, and would continue directly south with a new roundabout also providing access to the existing depot. The proposed link would be single carriageway. The new alignment would be the signposted through route, rather than the existing West Moors Road.	
Key DfT Goal	Contribute to Better Safety, Security and Health	
Secondary Goal		
Scenario or scheme objectives	- Improve journey time reliability.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**Don't know**	Capital costs estimated at £15m
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	No funding identified. Major scheme funding would be required.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	Scheme costs estimated at £21m. It is understood that this scheme would be delivered in conjunction with the West Moors Bypass.
Likely value for money?	**High 2-4**	Estimated BCR of 1.9
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long delivery timescales assumed as this is a new road.
Public acceptability	**2. Low-medium**	
Practical feasibility	**3. Medium**	No feasibility issues identified at this stage.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (5)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (4)
	Goal&colour	Better safety, security and health (6)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (3)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (5)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.

Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled as part of the Highway Scenario using the strategic model.
Previous Studies	**Yes**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**Don't know**	Further information about the scheme's history is required.
Key Uncertainties/risks (external factors)	Environmental impacts. Securing funding.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Slight Beneficial	Proposal was modelled as part of the initial strategy testing (Highway Strategy) and Strategy V (Historic Highway schemes). As a relatively minor link, its contribution towards reducing journey times was low. It should help improve the operation of the Three Legged Cross junction.
Improve Reliability (impact on day to day variability and number of incidents)	Slight Beneficial	Anticipated to reduce the number of incidents by improving safety at the Three Legged Cross junction.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	No Impact	Not expected to facilitate the delivery of housing in the area.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Slight Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Neutral	As a minor road realignment this scheme is not anticipated to have a significant impact on carbon emissions.
Goal: Better Safety, Security and Health		
Air Quality	Slight Adverse	Proposed scheme could encourage use of the B3072 as opposed to alternative routes, which could affect air quality in West Moors.
Improve health through physical activity	No Impact	This scheme is effectively a realignment of the B3072 (although access to West Moors Road would remain). It is unlikely that this scheme in isolation would significantly encourage car use, or deter walking or cycling. It is assumed that appropriate crossing facilities would be incorporated at the modified Three Legged Cross junction.

Reduce the risk of death or injury	Slight Beneficial	It is assumed that improvements to the B3072 would also be undertaken as part of this scheme, which should improve safety at Three Legged Cross which is currently a staggered junction. With the construction of the West Moors Bypass and Three Legged Cross Link Road, the section of the B3072 West Moors Road / Three Cross Road linking the two schemes would require improvement in order to prevent the inclusion of a length of lower standard road between the two new highways which would present a hazard to highway safety and restrict capacity. This will require widening the existing road to 7.3 metres and the provision of a new roundabout at the entrance to the MoD Petroleum Depot. The roundabout will provide a break in the alignment of the road, reduce vehicle speeds and provide a safer means of access into the depot. A cycleway will be included in the scheme to provide continuity with the cycle route provided in the other two adjoining schemes (East Dorset Local Plan, 2002).
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Neutral	Scheme would benefits car drivers. Associated cycle improvement could benefit those without a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Could reduce bus delays in this location; however, overall impact is anticipated to be minimal in the context of overall bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Slight Adverse	Proposed scheme could encourage use of the B3072 as opposed to alternative routes, which would increase traffic noise levels in West Moors.
Biodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Proposed route would cut across Sturt's Farm and Haddon's Farm to the west of West Moors Road.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic.
Urban environment	No Impact	Proposed route is in a rural setting to the north of West Moors.

Assessment Sheet	**Option Name/No.**	**3s) West Moors Bypass**

1.) Summary of option		
Description and objective	This 2.5 km single carriageway scheme would pass to the west of West Moors and the B3072, delivering relief from through traffic and providing a direct link to the A31. The preferred route in the East Dorset Local Plan (adopted in 2002) would link the B3072 immediately to the north of West Moors near its junction with Newmans Lane to the A31 Trunk Road at Ameysford. A shared use footway / cycleway would be provided on the eastern side.	
Key DfT Goal	Support economic competitiveness and growth	
Secondary Goal		
Scenario or scheme objectives	- Support existing and forecast sustainable economic activity and regeneration. - Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.	
2.) Cost and likely value for money		
Capital Cost (£m)?	**10-25**	The scheme is estimated to cost £10.7m (at 2003 prices) (source: Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004). Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias, the scheme is estimated to cost £24m.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this cost.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	It is understood this scheme was to be developer funded (from the Verwood Interim Developer Contributions scheme). There is currently £1.9m left from the Interim scheme, which has been superseded by the South East Dorset Transport Contributions Scheme. As a major scheme, councils would also need to raise local contribution to form part of an MSBC funding package - at 10% (under old MSBC guidance) this would be £2.4m, but it is anticipated that higher levels of local contribution will be required by the DfT in the future.
Likely value for money?	**Medium 1.5-2**	PVB £20.7m. PVC = £10.7m. BCR = 1.9.
3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long delivery timescales as this is a new road.
Public acceptability	**2. Low-medium**	Concerns over generated traffic, particularly increased commuting into Bournemouth and Poole, could substantially reduce the likelihood of this scheme securing Government support (Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004).

Practical feasibility	**2. Low-medium**	The Highway Authority carried out a preliminary assessment of the main alternatives for the Bypass. Routes to the west and east of West Moors were considered. Of the many potential options that were investigated most were discarded either because they did not effectively remove through traffic from West Moors, because of their serious effects on the natural or built environment or because of their high cost (East Dorset Local Plan, 2002).
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (6)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (6)
	Goal&colour	Better safety, security and health (4)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (2)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled as part of the Highway Scenario using the strategic model.
Previous Studies	**Yes**	
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	Some local suppoirt but not a strategic scheme
Key Uncertainties/risks (external factors)	Environmental impacts. Securing funding.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment

	RAG status	Any further information/evidence to back up RAG
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Proposal was modelled as part of the initial strategy testing (Highway Strategy) and Strategy V (Historic Highway schemes). Accident, air quality noise, and time saving improvements are significant (Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004). Improved journey times and reduced vehicle operating costs deliver financial savings to users. Existing congestion affecting all traffic, particularly at peak tourist times. Supports development needs. Estimated time savings per vehicle of 3.5 minutes in peak periods and 2.8 minutes in interpeak period. PVB £20.7m (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Likely to improve reliability for public and private transport on both existing and proposed routes (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	Highway schemes would provide additional road capacity. Some housing proposals may be dependent on highway schemes to provide access to the sites. Industrial and residential development in line with Local Plan are enhanced by the proposal (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Beneficial	A reduction in congestion improves vehicle efficiency, thereby reducing of C02 Emissions. Do nothing = 2,950 tonnes CO2/yr. With scheme = 2,700 tonnes C02/yr. 250 tonnes CO2/yr reduced (-8%). (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Goal: Better Safety, Security and Health		
Air Quality	Moderate Beneficial	Air quality saving improvements are significant (Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004). Reduction in traffic on Station Road affecting 350 residential properties within 100m of Station Road. Estimate of the number of households within a 200m threshold reduced from 650 to 100 (a reduction of 84%). Air quality improved for a net of 550 properties (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).

Improve health through physical activity	Slight Adverse	May encourage people who currently walk or cycle to drive. Bypass likely to encourage greater walking and cycling in West Moors, thereby increasing transport options for residents. Reduced severance due to an estimated 74% reduction in traffic. (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). In the centre of West Moors, conditions would improve dramatically. There will be much less traffic through the central shopping and residential areas with an accompanying reduction in noise, pollution and severance and an overall increase in safety, resulting in a much more pleasant living and shopping environment (East Dorset Local Plan, 2002). The physical fitness WebTAG sub-objective relates largely to improved fitness as a result of "reducing reliance on private cars and making it easier to cycle or walk more". A reduction of trips on the existing alignment will improve conditions for these modes, but the impact is likely to be small (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Reduce the risk of death or injury	Moderate Beneficial	Accident improvements are significant (Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004). The junctions at West Moors Road/Newman Road, Station Road/Pinehurst Road and Station Road/Park Way are highlighted as accident black spots. Estimated 86 personal injury accidents saved in 30 year assessment period. PVB £3.5m (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). Traffic wishing to bypass West Moors would be provided with a smoother road alignment and better visibility, fewer and much improved road junctions, less conflict with local traffic and pedestrians and thus fewer delays (East Dorset Local Plan, adopted 2002). The staggered junction of the B3072 West Moors Road, the C2 Ringwood - Horton Road and the B3072 Verwood Road at Three Legged Cross the junction has a very poor injury accident record. Traffic turning into or out of Verwood Road in particular conflicts with traffic entering and leaving the garage, public house and shop and with people crossing the road on foot (East Dorset Local Plan, 2002).
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport. The most significant benefits under this sub-objective accrue from improvements to personal security on public transport (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).

Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Could reduce bus delays in this location, however overall impact is anticipated to be minimal in the context of overall bus journey times.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Beneficial	Considerable reduction in traffic on Station Road with 340 residential properties within 100m. Estimate of household highly bothered by noise reduced by 98% from 86 to 2. With scheme, 84 fewer households highly bothered by noise (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Biodiversity	Major Adverse	The scheme directly impacts on SNCIs with possible impact on protected species. Indirect impacts could extend to land designated as SSSI, SAC, SPA and RAMSAR (source: Bournemouth, Dorset and Poole Structure Plan Replacement Structure Plan Deposit Plan July 2004). Potential indirect impact on Holt and West Moors Heath SSSI, included within Dorset Heaths SAC, Dorset Heathlands SPA and Ramsar, mainly through disturbance to Nightjar feeding territory and breeding birds. Direct impact on SNCIs; loss of meadows and small area woodland. Potential impact on protected species including bats and bat foraging areas and on common reptiles. Surveys required to quantify potential impacts. Unknown scope and effectiveness of potential mitigation measures. Hedgerow habitats removed (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	None identified (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). Any new highways infrastructure may impact the historic environment, therefore anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Ancient woodland coppice at Hatchards Cope SNCI.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	No significant effects identified (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004). Anticipated adverse impact but no detailed assessment.

Experience of travel	Moderate Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic. Benefits will accrue to users of existing and proposed routes due to reduced congestion and consistent speeds bringing about physically smoother journeys with less accompanying stress. Improved conditions for walking and cycling on bypassed road (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).
Urban environment	Slight Beneficial	Reduction in traffic likely to improve townscape (Review of Major Highway Schemes for Bournemouth, Dorset and Poole Structure Plan Review 2004).

Assessment Sheet	Option Name/No.	3t) Wallisdown Branksome Relief Road

1.) Summary of option	
Description and objective	Wallisdown and Branksome Relief Road consists of a link from a new arm on the Boundary Roundabout (A347/A3049) running south west to the A35/A338, with an east-west link parallel with the A3049 running south east from a new arm at the Alderney Roundabout (A3049/B3068/A348).
Key DfT Goal	Support economic competitiveness and growth
Secondary Goal	
Scenario or scheme objectives	- Improve journey time reliability. - Enhance connectivity and help to overcome regional peripherality.

2.) Cost and likely value for money		
Capital Cost (£m)?	**250-500**	The scheme (based on 'Strategy Five in the East-West Transportation Study) was estimated to cost £95m in the East-West Transportation Study Report (1991) . Taking into account inflation and cost uplifts (e.g. preparation, supervision, optimism bias, the scheme is estimated to cost £400m. These costs include widening and junction improvements on the A35 to cater for traffic demands in the peak hours.
Revenue Costs (£m)? (per annum)	**None**	No associated revenue cost (except for maintenance).
Where is funding coming from?	No funding identified. Major scheme funding would be required for a scheme of this cost.	
Any income generated to local authority (£m)? (per annum)	**No**	None
i.Overall cost risk? ii.Other costs?	**1.High**	The scheme is likely to be high cost (£400m) due to the cost of environmental mitigation. Significant further resources could be spent on progressing this scheme, which has been in existence for the last 25 years but has not been delivered due to its environmental impacts and the capital cost of the scheme. The East-West Transportation Study (1991) stated that 100 to 130 properties would need to be demolished and land taken from up to 600 properties. Planning application for the scheme was submitted in 1985, and a Public Inquiry was held in 1986. In 1988 the SoS for Environment and Transport could not come to a decision on whether Wallisdown Relief Road should proceed. He agreed to reconsider following provision of more information and submission of planning application of the Branksome Relief Road. To obtain further information, DCC commissioned the East-West Corridor Transportation Study in 1991. The proposal was abandoned in June 1994 stating that the environmental impacts were too severe and other options have been considered since then. The schemes were deleted in the Bournemouth, Dorset and Poole Structure Plan (2000).
Affordability (1= not affordable, 5 = affordable)	**1. Not affordable**	It is very unlikely that funding of this level could be secured over the period to 2026 for one scheme alone.
Likely value for money?	**Medium 1.5-2**	The East-West Transportation Study (1991) states that it would provide a good return on investment with a BCR of about two.

3.) Deliverability		
Implementation timetable from inception to delivery	**5-10 years**	Long delivery timescales assumed as this is a new road - this scheme has already been in existence for 25 years.
Public acceptability	**1. Low**	Low public acceptability due to severe environmental impacts. Housing has since been built on part of the alignment (compulsory purchase would be required).
Practical feasibility	**1. Low**	Low feasibility due to severe environmental impacts.
4.) Performance against DfT goals (more details over leaf)		
DfT goals:	*Goal&colour*	Support economic competitiveness and growth (7)
(1= Major Adverse, 4= Neutral, 7= Major Beneficial, 0 = No Impact)	*Goal&colour*	Tackle climate change (2)
	Goal&colour	Better safety, security and health (3)
	Goal&colour	Promote equality of opportunity (0)
	Goal&colour	Improve quality of life and natural environment (1)
Additional network goals:	*Goal&colour*	Affordability (1)
	Goal&colour	Implementability (1)
5.) Scale of Impact		
To what extent does the option tackle identified transport challenges? (1 = minor impact on one of the goals, 5 = radical impact on several of the goals)	**1. Small impact**	Only addresses one of the DfT goals. Highway schemes alone are assumed not to significantly impact on the transport challenges; public transport improvements are required to give people an alternative to the car - highway schemes are more likely to encourage further car use.
6.) Strategic/Network fit		
Objectives your proposal will achieve	**Strategic Transport**	This scheme is likely to have a range of negative impacts on achievement of the DfT goals, and no impact on equality of opportunity. Scores poorly against the South East Dorset specific objectives of affordability and Implementability.
Is the option innovative and/or encourage better use?	**Well-established**	Link roads are a well established type of intervention - but it is known that without schemes to lock in the benefits they can encourage further car use.
Social and distributional impacts? (on low income or vulnerable groups)	No impact on low income or vulnerable groups.	
Overall strategic fit?	**2. Low-medium**	Low fit - there is some conflict with other policies/options or modes.
7.) Quality of Evidence & key uncertainties/risks		
Quality of the supporting evidence	**4. Medium-high**	Modelled as part of the Highway Scenario using the strategic model.
Previous Studies	**Yes**	East-West Transportation Study (1991).
Degree of consensus over outcomes? (1= little, 5 = majority) - evidence rather than support	**3**	The scheme has been to public inquiry (1986). In 1988, the SoS for Environment and Transport could not come to decision whether Wallisdown Relief Road should proceed. To obtain further info, County Council commissioned the East-West Corridor Transportation Study 1991. The proposal was abandoned in June 1994 stating that the environmental impacts were too severe and other options have been considered since.
Key Uncertainties/risks (external factors)	Securing funding. Environmental risks.	
Flexibility (1 = static, 5 = dynamic)	**1. Static**	Timing is constrained by planning process and funding availability.

Performance Against DfT Goals - RAG Assessment		
	RAG status	**Any further information/evidence to back up RAG**
Goal: Support Economic Competitiveness and Growth		
Improve Connectivity (impact on journey times and cost of travel)	Moderate Beneficial	Proposal was modelled as part of the initial strategy testing (Highway Strategy) and Strategy V (Historic Highway schemes). Whilst highway schemes may encourage car use, it is anticipated that the generation of extra traffic would not use all the spare capacity, and hence journey times would be improved, particularly for HGVs and bus services on parallel routes. Other interventions would be required to lock in the benefits of additional capacity (e.g. demand management).
Improve Reliability (impact on day to day variability and number of incidents)	Moderate Beneficial	Would reduce journey time variability.
Wider Impacts (cost greater than £20m, and fall partly or wholly within a Functional Urban Region)	Moderate Beneficial	Cost greater than £20M and is located in a Functional Urban Region.
Delivery of housing (facilitate or prevent new housing)	Moderate Beneficial	Highway schemes would provide additional road capacity. Some housing proposals may be dependent on highway schemes to provide access to the sites.
Resilience (against acts of terrorism, severe weather events or to the effects of climate change)	Moderate Beneficial	This link road would provide additional alternative routes, which could potentially be used in the event of disruptions (e.g. accidents).
Goal: Reduce transport's emissions of carbon dioxide		
Reduce Carbon Emissions (carbon intensity, volume of travel).	Moderate Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.
Goal: Better Safety, Security and Health		
Air Quality	Moderate Adverse	Anticipate an increase in emissions due to generated traffic and additional journey lengths.
Improve health through physical activity	Slight Adverse	May encourage people who currently walk or cycle to drive. Will not promote healthy lifestyles and will not reduce car dependency.
Reduce the risk of death or injury	Slight Adverse	Highway measures would increase risk (KSI per km travelled) due to more travel.
Reduce vulnerability to terrorism (does it meet the current security regulations or guidance).	N/A	Not significant.
Reduce crime (impact on crime and fear of crime).	No Impact	Scheme does not include any measures that would reduce crime or fear of crime - except that people feel safer in their cars than walking, cycling or using public transport.
Goal: Greater Equality of Opportunity		
Social Inclusion (accessibility, availability, affordability and acceptability)	Slight Adverse	Scheme benefits car drivers; no benefits for those without access to a car.
Accessibility (in terms of bus journey times/areas served)	Slight Beneficial	Would enable improvement to bus services on parallel routes.
Social and distributional impacts (on low income and vulnerable groups)	No Impact	No impact on low income or vulnerable groups.
Regeneration (impact on a targeted regeneration area, and any other areas)	No Impact	No impact on a targeted regeneration area
Sub-regional imbalance (impact on weak regions)	N/A	Not applicable as South East Dorset is not a "Weak Region".

Goal: Improve Quality of Life and Promote Healthy Natural Environment		
Traffic Related Noise	Moderate Adverse	Anticipate an increase in noise due to generated traffic.
Biodiversity	Major Adverse	The Wallisdown bypass scheme was highly controversial because the Bourne valley is a nature reserve and a SSSI.
Geodiversity	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Historic Environment	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Landscape Character and Open Space	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Land Resources	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Flood Risk	Slight Adverse	Anticipated adverse impact but no detailed assessment.
Experience of travel	Moderate Beneficial	Higher standard new road would improve the experience of travel, particularly for through traffic.
Urban environment	Slight Adverse	Proposed route is in an urban setting.

Appendix G – Implementation Programme