



2. Car Supporting Statement

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2. Car Supporting Statement

1. Setting the Scene

- 1.1 In 1991 about 400,000 cars were registered to households in the JLTP area, by 2001 this had grown to just short of 500,000, a 25% increase in just ten years. In consequence, almost 80% of households had access to a car in 2001. This level of car ownership is nearly 5% higher than the England and Wales average.
- 1.2 The Greater Bristol Strategic Transport Study found that 63% of people travel to work by car and that cars are used for 74% of shopping trips and 72% of leisure trips. Car use is a major feature in the JLTP and has an impact on, and is influenced by, a whole range of strategies and initiatives.

2. Vision

- Recognise the important role of the car in providing essential mobility for many people.
- Manage car use as part of an integrated package of complementary measures.
- Reduce car-dependency by promoting viable alternatives.
- Reduce the environmental, financial and health costs of private motoring.
- Car strategy and the Shared Priorities

3. Car Strategy and the Shared Priorities

Congestion

The increased demand for limited road space from car users is the major cause of congestion, made worse by incidents on the motorway and strategic road network.

Road Safety

Car drivers and passengers constitute some 60% of casualties. Inappropriate speed and careless driving are major causes of accidents

Accessibility

The increased use of cars to travel to services and facilities can reduce the viability of public transport and lead to service reductions, thereby further disadvantaging people who do not have access to a car. Car traffic can produce barriers in communities by reducing safe local access on foot and by cycle.

Air Quality

In Bristol cars and taxis together generate 39% of NO_x emissions and 54% of NO₂. Car traffic is a major source of CO₂ emissions. Vehicle emissions are increased by poor driver behaviour (e.g. speeding).

Other Quality of Life issues

Signage and other street furniture aimed at car drivers can detract from the quality of public spaces. Car-related crime remains a problem. Reliance on cars can work against public health objectives. Pressure for car access can impact negatively on landscape and biodiversity.

4. Issues

- 4.1 The private car is the dominant mode of transport in the JLTP area and car use affects everyone directly or indirectly. Issues focus on:
 - Driver behaviour and attitude.
 - Highway network and other infrastructure.
 - Environmental, financial and health cost of private motoring.

Driver behaviour and attitude

- 4.2 The behaviour and attitude of car drivers can have a strong influence on the efficiency and safety of the transport system. Car ownership rates in the JLTP area are high, but more important is the actual use people make of their cars and the extent to which they consider making journeys by other forms of travel or by

sharing cars. There is some evidence car use is slightly lower than might be expected given the level of car ownership. Although car ownership is 4.9% above national average, travel to work by car is only 2.2% higher than national average. The JLTP aims to increase travel awareness and widen travel choice, thereby reducing reliance on cars. Car use, especially for short peak period journeys, contributes towards traffic congestion and poor air quality and conflicts with healthier living objectives. A 10% reduction in car traffic at peak periods could be achieved if commuters left their car at home for one day a fortnight.

- 4.3 Driver behaviour is a key factor in road accidents, of which there were 508 involving people being killed or seriously injured in 2003/4. Inappropriate speed and careless driving are major causes of accidents, not only to car occupants, but also pedestrians, cyclists and other road users. Road safety problems are concentrated in urban areas where there is a greater density of vehicular turning movements and higher risk of road user conflict. In rural areas excessive speeds can be a particular problem.



Highway network and other infrastructure

- 4.4 The design, capacity and condition of the highway network are all critical influences on the motorist. The network in the JLTP area has been modified over the years to cater for increasing car travel demands, including the provision of additional capacity such as the A4174 Avon Ring Road and the A370 Weston-super-Mare Principal Distributor Road.
- 4.5 GBSTS modelling predicted that under a Do Minimum scenario the number of annual vehicle trips is predicted to increase from 154,000 in 2003 to 207,000 in 2031. The average speed is predicted to decrease from 44.2 km/h to 28.5 km/h. Over this period the number of annual peak journeys on roads which are below capacity would decrease from 91% to 69%. This would put the network under severe strain. These figures show quite clearly the scale of the potential problem and the need for measures to reduce congestion.
- 4.6 Guidance from the Department for Transport now emphasises the need to make best use of existing assets and manage the demands on the highway system in recognition of the limited funding available for new road schemes and the significant environmental impact they can have.
- 4.7 We have introduced a range of network management measures and further measures will be needed to meet the requirement of the Traffic Management Act 2004 to secure the movement of traffic. Demand management has so far been pursued through parking controls and, in some locations, charging.
- 4.8 A strategic issue is whether demand management should go further and include the introduction of other charging schemes such as congestion charging. Land use planning issues revolve around the design of new development and the provision made for the car, both in terms of movement and on-site parking.

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Environmental, financial and health cost of private motoring

- 4.9 The environmental cost of private motoring includes not only the impact of CO₂ emissions and poor air quality, but also the physical effect of cars on the public realm, communities, landscape and biodiversity. GBSTS predicted a 33% increase in CO₂ emissions by 2031 if no transport measures are put in place. Local pollutants would be expected to be reduced despite increase in the volume of traffic.
- 4.10 The health costs of private motoring include the monetary values put on casualties, those associated with poor air quality and the public health costs arising from lack of physical activity. The financial cost of private motoring focuses on the funding of highway and parking schemes, on asset management and on enforcement of highway legislation.

5. Delivery Programme in the Plan Period 2001/02 to 2005/06

- 5.1 In the period of the last LTPs the Authorities implemented the following measures to manage the impact of cars and reduce problems on the roads:
- Introducing local safety and other traffic management schemes to reduce accidents.
 - Carrying out comprehensive asset management programmes including carriageway maintenance, bridge works, structural schemes and street lighting.
 - Further developing Urban Traffic Management and Control schemes in Bristol and Bath and upgrading traffic signals in the wider area.
 - Entering into joint working agreement for the maintenance of traffic signals.
 - Replacing and maintaining signs and a range of other street furniture.
- Introducing traffic management schemes, implementing local safety schemes and continuing child pedestrian and cycling training.
 - Expanding the number of off-road cycle paths, taking cyclists away from car drivers.
 - Working with schools, employers, shopping centre and leisure venue operators on travel plans and other initiatives to widen travel choices and reduce reliance on cars.
 - Continuing child pedestrian and cycling training.
 - Providing an alternative to car use through implementation of a range of schemes to improve conditions for bus and rail passengers, pedestrians and cyclists.
 - Developing car sharing schemes and introducing two High Occupancy Vehicle lanes.
 - Introducing car clubs in Bristol and Bath.
 - Opening a new park and ride site on the A4 at Portway and enhancing existing park and ride sites and services.
 - Replacing the former 'scratch card' on-street parking system in Bath with pay and display meters, introducing 'pay on foot parking' in central Bristol car parks and variable message signs to provide information on the availability of spaces.
 - Working with the police and community safety partners on the 'Secure Car Parks' scheme and other measures to combat vehicle crime and improve personal safety.
 - Bringing in decriminalised parking enforcement in Bristol and Bath and North East Somerset.
 - Providing dedicated on-street parking for residents in Bath;
 - Widening the choice of 'blue badge' parking spaces.

6. Good Practice

Urban Traffic Management and Control

Urban Traffic Control was introduced in Bristol in 1992 and has played a significant role in managing the city's traffic. During the first LTP period this was enhanced to form an Urban Traffic Management and Control (UTMC) system to provide for the dynamic management of traffic rather than reactive control. UTMC has also been extended to Bath. Significant LTP investment has been put into the UTMC systems to link further traffic signals, install SCOOT and MOVA at key junctions, provide more variable message signs and upgrade CCTV systems. The aim is to move toward the development of an Intelligent Transport System (ITS) for the JLTP area (see ITS Strategy).

On Street Parking

An ambitious programme of residents' parking schemes was implemented in Bath during the first LTP period. Initially some 10,000 households were asked their views with eventually over 3,000 being covered by seven zones. The acceptance of such an extensive programme of parking control was achieved through complete engagement of, consultation with, and involvement of the local community. After a review of the success of these zones, 3 were further expanded and an 8th added (plus a 9th covering the residential area around Bath University).

7. Strategy

7.1 The car strategy is intertwined with all the other JLTP strategies directed towards the shared priorities and maintaining and enhancing the quality of life. The strategy will aim to:

- Provide attractive alternatives so that people can reduce their dependence on the private car.

- Influence travel behaviour.
- Manage demand.
- Mitigate impact of car use.
- Ensure infrastructure is well maintained and appropriate facilities are provided.

Providing attractive alternatives to the private car

7.2 Car ownership has increased substantially since 1991 and further growth is forecast. With no intervention, this is expected to increase congestion. The JLTP seeks to provide attractive alternative ways of travel, so that car drivers do not have to rely solely on their cars, for example:

- Investment in the bus network, potentially accelerated by successful major scheme bids for the Greater Bristol Bus Network and Bath Package.
- Promoting existing and new park and ride sites and innovative public transport schemes (e.g. guided bus).
- Providing convenient, safe and attractive walking and cycling networks, especially for short journeys; Working with partners to improve rail stations and services.

Influencing travel behaviour

7.3 The provision of alternatives to the car will be supported by a range of 'soft' measures that seek to make motorists more aware of the adverse impacts of car use and provide them with information about ways of reducing reliance on car travel, for example:

- School travel plans and safer routes to school schemes.
- Workplace travel plans, commuter clubs and car sharing initiatives.
- Promotion of access to shopping, leisure and tourist destinations by public transport, cycling and walking.
- Working with communities on the development of personalised travel marketing.
- Encouraging car clubs and car sharing.

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Managing demand

7.4 Managing the demand for road space is crucial, given the limited capacity available and the potential competition not only from other car drivers but also from freight operators, buses, taxis and other road users. The strategy is to:

- Make best use of the road network through a range of traffic management measures and in line with the Traffic Management Act 2004.
- Keep car park and on-street parking charges under review (with the emphasis on short stay provision) and enhance car parking information (e.g. variable message signs).
- Extend decriminalised parking enforcement to the whole JLTP area.
- Expand residents' parking schemes.
- Investigate the potential for congestion charging/ workplace parking levies.
- Work with land use planners and developers to optimise the location and design of new developments, including encouraging mixed use developments with both residential and employment uses in close proximity.

Mitigate impact of car use

7.5 Car use leads to road safety and air quality problems. The Road Safety and Air Quality statements give details of measures aimed at tackling these problems, which are summarised below.

7.6 The JLTP road safety strategy affects all road network users. It includes:

- Continuing and expanding safety education and training for children.
- Providing high quality school crossing patrols.
- Implementing engineering measures to address accident problems.
- Installing new or improved lighting.
- Working towards a speed management approach for the JLTP area, prioritising sites on the basis of accident records



and excessive speeds and informed by the outcome of the road hierarchy review.

- Working with the police on accident prevention and enforcement.

7.7 The JLTP strategy for tackling congestion is also aimed at improving air quality and action is focused on the Air Quality Management Areas (AQMA) in Bristol and Bath will have an impact on car drivers. The 2004 Air Quality Action Plan for Bristol envisages the city centre being made a 'low emission zone' where entry for old/ high polluting vehicles could be restricted. The range of measures proposed in the Bath Package major scheme are aimed, among other things, at reducing the impact of car (and lorry) traffic on the Bath AQMA and on the city centre 'Clear Zone'.

Ensure infrastructure is well maintained and appropriate facilities are provided

7.8 Efficient maintenance of the highway, bridges, structures, street lighting and street furniture is vital to ensure that the road network functions efficiently. A Transport Asset Management Plan [TAMP] is being formulated for the JLTP area which will be a key factor in achieving cost-effective maintenance. We intend to

work together in drawing up annual highway maintenance programmes and examining the potential for joint procurement and delivery of schemes. The Traffic Management Act 2004 puts greater emphasis on minimising the delays due to highway works.

- 7.9 Car drivers benefit from well-designed traffic signs, traffic signals and other highway features. New highway schemes will be designed to ensure that driving is as safe and simple as possible. Some drivers require special facilities such as disabled parking bays. The Councils will continue to provide high-quality disabled parking facilities.

8. Targets

The following JLTP targets are relevant to the car driver:

BV223, 224a, 224b and 187: condition of roads and footways.

BV99x, y, z: road accident casualties.

LTP2 changes in area-wide road traffic mileage.

LTP4 mode share of journeys to school.

LTP6 changes in peak period flows to urban centres.

LTP7 congestion;

LTP8 and Local 4 air quality.