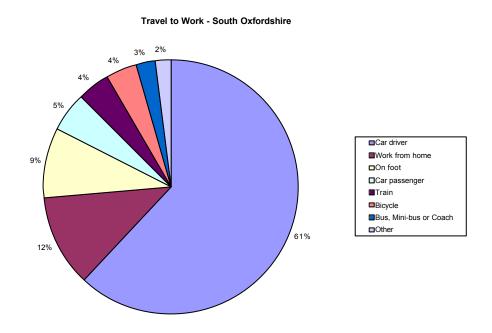
Chapter 9

South Oxfordshire

Background

With a population of approximately 130,000, South Oxfordshire is the third largest district in Oxfordshire. Roughly a third of the South Oxfordshire's population lives in its three main towns - Didcot, Thame, and Henley-on-Thames - with populations of 23,000, 11,000 and 10,000 respectively. The remainder lives in settlements of less than 10,000 people, making South Oxfordshire predominantly rural and home to some of the county's most attractive countryside. Around 28% of South Oxfordshire's workforce travel outside Oxfordshire to work - compared to a countywide average of 15%.

There were 67,000 people recorded in employment living in South Oxfordshire in the 2001 census. The working population usually travelled to work by the following main modes:



Development Challenges

South Oxfordshire is a predominately rural district with the small market towns of Henley, Thame and Wallingford, together with the larger town of

Didcot, acting as local service centres for people living in the surrounding area. The north of the district contains part of the Oxford Green Belt, and in the south, much of the district is designated as part of the North Wessex Downs or the Chilterns Area of Outstanding Natural Beauty.

In common with much of the South East, South Oxfordshire experiences considerable pressures for further development. The pressures are particularly severe in the parts of the district close to Oxford and Reading. The district's very attractive environment and easy access to other parts of the country, in particular London and Heathrow, make it a desirable place to live and work. Consequently, land and house prices are high and therefore South Oxfordshire faces plenty of development challenges over the coming years, especially with regard to the provision of affordable housing.

Housing growth assumptions

2006 - 2016

The Oxfordshire Structure Plan 2006 - 2016 proposes 5,650 additional dwellings in South Oxfordshire between 2006 and 2016. These dwellings are expected to be distributed approximately as follows:

- > Didcot (inc. parts of Didcot in Vale) 4,300 dwellings
- > Other (within Central Oxfordshire Sub-region) 1,350
- > Other (outside Central Oxfordshire Sub-region) 1,350.

2016 - 2026

The County Council has recommended to the South East England Regional Assembly that an additional 5700 dwellings be provided in South Oxfordshire between 2016 and 2026, but this figure is yet to be agreed by the Government.

South Oxfordshire Local Plan 2011

The South Oxfordshire Local Plan details the specific locations of where future housing and employment developments should be sited in the district.

The Local Plan recommends that of Didcot's proposed allocation, over half of the dwellings should be located at the Didcot West housing development - approximately 2,700. The remainder of Didcot's allocation and the rest of the district's will be built in smaller developments throughout South Oxfordshire.

With regard to employment sites in South Oxfordshire, the Local Plan states that proposals for employment-generating development which would conflict with the overall strategy of the Oxfordshire Structure Plan to restrain the overall level of development, with Didcot as the preferred location for new development, will not be permitted. In particular it must be demonstrated

that there is sufficient existing or planned housing land available to meet any demand generated by the proposals.

The key elements of the Local Plan for South Oxfordshire are to:

- > Improve public transport facilities
- > Existing or former rail facilities will be protected from development.
- > Improve the footpath and cycleway network
- > Current levels of car parking in towns and villages will be maintained
- > Additional parking will only be provided where there is special justification.

Major housing sites are identified at Didcot West to accommodate 2,700 dwellings in South Oxfordshire District by 2016. Didcot town centre is also undergoing a major redevelopment. To support this expansion and development, a range of transport improvements will be required in the Didcot area.

Community Strategy for South Oxfordshire

South Oxfordshire's Community Strategy sets out seven themes relating to 'Safe Towns and Villages', 'Healthy Communities', 'Education and Life Long Learning', 'Rural Transport', 'Quality Environment', 'Housing Provision', and 'Thriving Economy'. Rural transport is the theme most directly influenced by the Local Transport Plan, and the action plan lists four specific actions:

- South Oxfordshire District Council to work with the County Council to produce data on bus services in South Oxfordshire and set a future target for improvement;
- Complete phase two of the Didcot area integrated transport strategy;
- > Produce a best practice guide on community transport; and
- > Undertake additional research into additional support required to meet local people's transport needs.

Transport Network

The major towns of South Oxfordshire are relatively well connected but the network is substantially thinner in the more rural parts of the district - particularly where public transport is concerned. As the majority of the population live in small settlements, the major towns provide employment, shops and services for a relatively large, but sparsely populated area. The travel patterns that result from this mean that car ownership in South Oxfordshire is relatively high, with around 45% of households having two cars: the highest proportion of two-car households in Oxfordshire.

The remainder of this chapter sets out the identified high priority problems in South Oxfordshire. For most of these problems, solutions have been identified (based on the actions identified in chapter three and the related strategies in chapter 4) for implementation over the next five years. However, given that funding is finite, there are some problems for which detailed solutions have not been developed and programmed within the timescale of this Plan.

Tackling Congestion

Set in the context of the countywide priorities for tackling congestion, South Oxfordshire has relatively few serious congestion problems.

The County Council intends to focus its efforts over the next five years on the following congestion problems in the district. These priorities have been identified through the prioritisation system outlined in chapter five using the following evidence:

- > Traffic flow data
- > Approximate bus flows
- > Current congestion levels and future pressures from Transport Networks Review and local modelling.

A40 approach to Oxford from east

Problem

The A40 carries an average of around 35,000 vehicles a day and can be regularly congested from approximately 1km east of the Oxford ring road - particularly during the morning peak. This congestion also causes significant delay to a number of key bus services - including:

- Services linking Aylesbury, Thame and Wheatley to Oxford (3 buses per hour);
- Express coaches between Oxford, London and the London airports (over 10 buses per hour);
- > Park and Ride services from Thornhill to Headington and Oxford City Centre (6 to 8 buses per hour).

The congestion is caused predominantly by insufficient capacity at Headington roundabout where the A40 meets the Oxford Eastern By-pass, London Road and two minor local roads. The roundabout also suffers from a poor road safety record and an Air Quality Management Area is being considered at this location - see the Oxford chapter for more details about these problems.

Some of the congestion here is also caused by Oxford-bound congestion on London Road.

Proposed solutions

Scheme	Cost	Expected completion	Details and expected impact on problem
Headington Roundabout improvement	£2,460,000	2006/07	Major redesign of junction to improve flow, improve bus priority and reduce road casualties. The scheme should also improve air quality by reducing overall queuing.
Improvements to Thornhill Park and Ride	£2.284,000	2008/09	Improvements to passenger waiting facilities and possible increases in parking capacity. Thornhill is situated approximately 1 km east of Headington roundabout and improvements to the facility to increase its use will contribute to relieving pressure on Headington roundabout.
London Road Corridor improvements	£3,720,000	2009/10	Major improvement scheme to improve bus priority, reduce road casualties, enhance the street environment and improve air quality. This scheme is expected to tackle congestion on London Road and will therefore also help to reduce congestion on the A40 approach to Oxford - both directly and by making bus services into Oxford from places like Thame, Aylesbury and High Wycombe more attractive.

Approaches to Henley

A4130 approach to Henley from the north-west

Problem

This road carries an average of around 12,300 vehicles a day and is regularly congested on the north-west approach to Henley town centre during peak hours. Traffic levels are also raised due to the strategic location of the town's bridge over the River Thames which serves as a main link towards London for a large part of southern Oxfordshire. As the only direct route from Didcot, Wallingford and much of South Oxfordshire's rural areas - as well as the main route from Oxford to Henley - this congestion seriously affects access to Henley at times.

This congestion is caused predominantly by the insufficient road capacity of Henley's historic town centre and also causes significant delay to local bus services.

A4155 Reading Road, Henley

Problem

This main route into Henley from Reading and other nearby villages carries an average of 11,800 vehicles a day and is regularly congested from approximately 1 km south of Henley town centre during peak hours. This route also serves as a major connection to the bridge over the Thames at Henley.

This congestion is caused predominantly by the insufficient road capacity of Henley's historic town centre and also causes significant delay to a local bus services.

Proposed solutions for approaches to Henley

A traffic management scheme to deal with Henley town centre's identified air quality, road safety and street environment problems is due to be completed in 2007/8 which will also aim to improve traffic flow and reduce congestion in the town centre. Subject to the effects of this scheme being monitored and assessed, further measures may need to be developed in accordance with the town's longer term transport strategy.

Delivering Accessibility

Accessibility mapping has shown that much of Oxfordshire shares similar accessibility characteristics, particularly with regard rural bus accessibility, the notable exception in South Oxfordshire being those in the south of the district who look southwards towards Reading for many of their needs.

Access

Supermarkets

- Accessibility is generally good to supermarkets by car, within 15 minutes, depending upon the time of day in line with the rest of the county; and
- Roughly half the population of South Oxfordshire is with a 30 minute bus journey of a supermarket.

Major Centres

- > By car, about half the district is within 20 minutes of a major centre by car, with the remainder of the District being no more than 40 minutes car journey.
- Only about 10% of the district is within 60 minutes of one of the two major centres by bus, the remainder is either more than 60 minutes or is not served bus.

Town Centres:

- Over half of district is within 10 minutes of a town centre by car and the remainder within 25 minutes.
- > By bus roughly 30% of the district is within a 60 minute bus journey. The remainder is above 60 minutes or not served at all by bus.

Further Education

- Nearly 100% of the district has access to further education by car within 30 minutes.
- > About 60% of those living in the rural areas of South Oxfordshire have no bus access under 60 minutes of higher education.

Primary and Secondary Schools:

- > Nearly 100% of the district's population has access to primary schools within a 15 minute period by car.
- > Access is less good by the conventional bus network, with about 50% of the population being within a 40 minute bus journey.
- > Nearly 100% of the district's population has access to their nearest secondary school by car of under 20 minutes.
- About 60% of the district that have no access to secondary schools by conventional bus services, but these are filled in by the contracted school transport.

Employment

- > The analysis shows that about half of the population of South Oxfordshire are within a 5 minutes car journey of selected places of employment and 75% of ward places of employment.
- > Nearly the entire population is within a 20 minute car journey of both ward based and their selected employment sites.
- About half of the population has access to employment of under 60 minutes by bus.

Healthcare

- > All of the district is within 25 minutes of a hospital by car, whereas by bus only about 10% have access of under 60 minutes by public transport.
- > In general access to hospitals is poorer than to other facilities reflecting the concentration of provision in the Oxford and in Banbury, outside South Oxfordshire.
- > Deprived areas which have poor access to hospitals include those in Berinsfield, Chinnor and Didcot.
- > In addition there is also poor access from other settlements including Henley-on-Thames and Wallingford.
- Nearly everybody has access to GP surgery of less than 20 minutes by car.
- > About half of the population is within 60 minutes of a GP surgery by bus.
- > About 75% are within 10 minutes of a dentist with the remainder being within 25 minutes of a dentist by car.
- > By bus, roughly 50% of the district is within 60 minutes of a dentist.

Social Exclusion

South Oxfordshire is generally a relatively affluent district, though there are a number of areas in Didcot and Berinsfield that are highly deprived relative to the rest of the county. Some of the findings of a study commissioned by the County Council from Oxford Consultants for Social Inclusion relating to South Oxfordshire are given below:

Employment

> South Oxfordshire has a total "worklessness" rate of 3.4% with particular concentrations of worklessness in the more urbanised areas.

Education

- > Berinsfield is in the three wards in Oxfordshire with the lowest performance in the attainment of AC grades at GCSE, with less than one in six pupils achieving five or more A-C GCSE passes.
- > Didcot and Berinsfield have a relatively high proportion of adults with no qualifications.

Low Income

- > The District has a rate of people on a low income of 3.7%
- > The proportion of people aged over 60 living on a low income is 6.7%.

Healthcare

- > Large parts of the districts have very healthy populations.
- > Only two wards have proportions of the population defined as unhealthy, higher than the England average.
- > There are wards with among the highest proportion of people needing higher rates of care.

Accessibility Problems in South Oxfordshire

During the course of the LTP we will be developing schemes and initiatives to tackle those areas of poor accessibility and social exclusion that exists in South Oxfordshire. These will be in the form of Local Accessibility Assessments and will be tailored to the individual areas concerned. These local assessments will include a review of local evidence and data held by partners.

Access to Health from Berinsfield

Problem

It has been found that some of the residents in Berinsfield experience problems of access to healthcare, particularly to the hospitals in Oxford. In

some instances people find difficulty with having to change buses in the centre of Oxford. The situation has been improved with the healthcare improvements at Abingdon hospital and the recently introduced regular bus service that runs between Berinsfield and Abingdon passing the hospital.

Proposed solution

The work involved in looking at access to healthcare from Berinsfield is currently underway and will form an important part of the first Local Action Plan.

Access to Health, Employment and Training from Didcot

Problem

Because of Didcot's position in the south of the county, people living in the town find accessing healthcare, employment and training in Oxford, unless by the relatively expensive train, difficult and time consuming. Because of it position in the south of the county, Reading to the south of the county offers opportunities in all these areas for residents of Didcot. There are limited services to the major employment site of Milton Park and further north into Abingdon.

Proposed solution

The work involved in looking access to employment and training from Didcot will be investigated in the spring of 2008.

Access to Employment and Training from Berinsfield

Problem

Milton Park industrial and office park offers many of the sorts of jobs and training that residents of Berinsfield could take up, but are prevented from taking up because of poor levels of public transport access. There are some via Abingdon, which have recently improved, but despite this access is still difficult. Also, those jobs and training opportunities in Oxford are often difficult to access by public transport.

Proposed solution

The work involved in looking access to employment and training from Berinsfield will be investigated in the spring of 2010.

Safer Roads

Problems

There are a range of locations and routes in South Oxfordshire where accidents occur with a higher than average frequency. The County Council routinely investigates all such sites and routes to establish whether or not measures could be implemented to improve safety. It is not possible to identify all such locations in this Plan, so only locations with a particularly high frequency and severity of accidents have been highlighted below.

Proposed solutions

In addressing the site and route problems identified below (and other sites where value for money casualty reduction solutions can be developed), the Council will investigate carefully all possible causes of incidents, and use this information to develop appropriate solutions. The County Council has included an allocation of around £2.8 million in its LTP spending programme for such improvements.

Location	Туре	Accidents	Action
A4074/A423 at Heyford Hill roundabout	Site	54 Accidents (4 fatal or serious and 50 slight)	Monitoring/Further investigation
A418 at bends W of A329 roundabout, Great Haseley	Site	11 Accidents (5 fatal or serious and 6 slight)	Monitoring/Further investigation
A40 Aston Hill	Site	15 Accidents (3 fatal or serious and 12 slight)	Monitoring/Further investigation
B4009 A40 to Lewknor village turn	Rural route	22 Accidents (3 fatal or serious and 19 slight)	Monitoring/Further investigation
B4009 Britwell Salome to Benson	Rural route	18 Accidents (5 fatal or serious and 13 slight)	Monitoring/Further investigation

Better Air Quality

Air Quality in South Oxfordshire is generally very good. A detailed screening process (based on traffic volumes, speeds, types of traffic and the location of points of relevant exposure) carried out on the whole road network in the district revealed a small number of locations where air pollutant levels may have exceeded national air quality objectives. Detailed monitoring and modelling of air quality at these locations has concluded that there are only two concentrated areas in the district where national air quality objectives are exceeded - these are highlighted in the table below. The only air quality objective that is exceeded in South Oxfordshire is the national objective for the annual mean concentration of nitrogen dioxide, which states that levels should not exceed 40 microgrammes per cubic metre at points of relevant exposure.

Location	Monitored NO2 levels in 2005 - not necessarily representative of relevant exposure (ug/m3)	National air quality objectives exceeded at points of relevant exposure
Park St, Thame	33.7	None
Ludlow Lane, Thame	21.8	None
High Street, Wallingford	56.1	2005 objective for annual mean concentration of nitrogen dioxide
Brookmead Drive, Wallingford	18.9	None
Crowthrone Kennels, M40	34.3	None
Heath Farm Cottage, M40	29.8	None
9 Adwell Cottages, M40	45.5	None
The Broadway, Didcot	40.9	None
Lune Close, Didcot	28.2	None
Duke Street, Henley	66.8	2005 objective for annual mean concentration of nitrogen dioxide
Reading Road, Henley	26.5	2005 objective for annual mean concentration of nitrogen dioxide
Lovell Close, Henley	19.6	None
York Road, Henley	21.8	None
Milton Close, Henley	26.3	None
Market Place, Henley	35.4	2005 objective for annual mean concentration of nitrogen dioxide
Greys Road, Henley	52.6	2005 objective for annual mean concentration of nitrogen dioxide
Bell Street, Henley	40.4	2005 objective for annual mean concentration of nitrogen dioxide
High Street, Wheatley	36.3	None
Beech Road, Wheatley	25.0	None
Couching Street, Watlington	49.4	None

Where pollutant concentrations exceed national objective levels, local authorities are required to declare an Air Quality Management Area covering the affected streets. Authorities must then develop an Air Quality Action Plan which sets out how they reduce concentrations of the pollutants concerned to meet national air quality objectives.

Henley town centre

Problem

South Oxfordshire District Council's *Stage 4 Review and Assessment 2004* concludes that the national 2005 objective for the annual mean concentration of nitrogen dioxide is exceeded in Duke Street and parts of Market Place, Bell Street, Hart Street and Reading Road. These streets are included within the Henley Air Quality Management Area (AQMA). An AQMA focused on Duke Street was declared in 2002 and the AQMA was extended further into the streets above in 2004.

The air quality problems are mainly as a result of the large volume of vehicular traffic on the streets in question, which for significant parts of the day is either queuing or travelling in a stop start fashion. Added to this is the fact that a relatively high proportion of the traffic is made up by HGVs - 6.5%. The streets are narrow and flanked by buildings on both sides creating a canyon effect and preventing airborne pollution from being easily dispersed.

Proposed solutions

Scheme	Cost	Expected completion	Details
Henley town centre traffic management and environmental improvements	£1,589,000	2007/08	Extensive traffic management measures to improve the flow of traffic through the town centre to reduce congestion, improve air quality and enhance the street environment. Advanced traffic signal phasing (SCOOT) will form a major part of this scheme.

High Street in Wallingford

Problem

South Oxfordshire District Council's *Stage 4 Review and Assessment 2004* concludes that the national 2005 objective for the annual mean concentration of nitrogen dioxide is exceeded in the centre of Wallingford on High Street close to its junction with St Martin's Street. An Air Quality Management Area will be declared as a result of this problem covering the part of High Street close to the St Martin's Street junction.

Queueing from the town's main crossroads, together with queueing of vehicles waiting to cross the single lane bridge over the Thames combine to

cause the problem. Added to this is the fact that a relatively high proportion of the traffic is made up by HGVs - 6.8%.

Proposed solutions

High Street in Wallingford is expected to be declared an Air Quality Management Area in 2006, and an Air Quality Action Plan will be developed jointly by the County and District Councils, in the context of the County Council's wider transport strategies.

Proposed solution	Cost	Expected completion	Details
Wallingford town centre measures	£571,000	2009-2011	Measures to reduce exposure to pollutants. Details to be decided through joint action plan to be agreed with South Oxfordshire District Council.

Improving the Street Environment

By their nature, street environment problems and their causes vary enormously from one site to another.

In addressing the street environment problems identified below, the Council will review the quality of the streets concerned, their transport function, and their current and potential usage as a public space. The Council will use this assessment to develop appropriate solutions based on the actions outlined in Chapter 3.

The following areas have been identified as locations where the layout and use of the highway contributes to a poor street environment:

Broadway, Didcot

Problem

Broadway has traditionally been the main shopping area of Didcot, as well as being one of the town's main through routes. The construction of Hitchcock Way and the Orchard Centre and the closure of Station Road, mean that traffic patterns on Broadway and its role within the town's overall road network have been significantly altered. This offers the prospect of redesigning the road to improve the overall town centre environment and bind together the old and new shopping areas.

Proposed solution

South Oxfordshire District Council have identified and allocated funds for an environmental improvement of Broadway between the Station Road junction and the bus link into the new Orchard Centre. This will improve the condition and standard of footways, street furniture and parking.

Wallingford High Street

Problem

Although through traffic was reduced with the construction of the Wallingford Bypass in the 1990s, little has been done to reap the benefits of this. It remains an unattractive environment for pedestrians with footways that are narrow (and in places almost non-existent). Better traffic management for this section of road could reduce queueing, free roadspace for wider footways and further discourage through traffic from using this route.

Proposed solutions

Proposed solution	Cost	Expected completion	Details
Wallingford town centre measures	£571,000	2009-2011	Measures to improve the street environment will form part of the overall strategy for managing traffic and improving air quality in the town centre.

Watlington town centre

Problem

Watlington suffers from being on one of the main traffic routes toward the M40 from southern Oxfordshire. It has narrow roads on which traffic has to give way to oncoming traffic. Footways are unattractive and are of irregular width - in places very narrow. The street scene is dominated by signing and lining significantly detracting from the built environment. A small scale bypass is recommended as a long term aspiration in the Transport Networks Review but in the short term improvements that could be made to the traffic management arrangements and the use of sympathetic materials to reduce the dominance of the road.

Proposed solutions

No solution has been identified specifically for this problem in the current Plan. It is unlikely that significant improvements could be made unless through traffic is removed. A relief road for the village was identified in the Transport Networks Review for delivery in the 2016 - 2021 period.

Integrated Delivery

The County Council has put in place two main mechanisms - the Transport Networks Review and Integrated Transport Strategies - for ensuring measures developed in response to the problems above are considered as strategic elements of an integrated package wherever appropriate, rather than in isolation.

Intra-urban Networks: Integrated Transport Strategies (ITS)

ITSs have been developed for Oxford and many of Oxfordshire's larger towns. In South Oxfordshire, the Didcot Area and Henley-on-Thames have Integrated Transport Strategies. The role of the ITSs in the second Local Transport Plan period will be to help the Council deliver the five objectives of the Plan in an integrated, efficient and cost-effective way. To this end, the ITSs will have three key functions:

- > Ensuring transport problems in larger urban areas are addressed in an integrated way, recognising the complex inter-relationships that often exist between different parts of an urban transport network;
- > Providing an established structure for consultation with local communities, stakeholders and local government partners; and
- Providing a framework for integration between transport and land use planning. ITSs enable the County Council to anticipate and minimise the transport impacts of new development. To help do this, the Council will continue to secure funding for transport improvements needed as a result of development. Any such improvements will be implemented as part of the LTP spending programme.

Inter-urban Networks: Transport Networks Review (TNR)

The TNR study has helped to guide the County Council's longer-term transport objectives and strategy, as set out in Chapter 1. The study has also provided a strategic framework for the development of schemes which are likely to impact significantly on the operation of the County's strategic transport network. In developing solutions to the problems outlined above, the methods and conclusions of the TNR will be referred to as necessary to ensure any wider network considerations are taken fully into account.

A number of the problems identified in South Oxfordshire do not fall within Didcot or Henley, and measures to tackle these problems will be developed. Existing countywide strategies, such as the TNR, will help to address some of them. The TNR makes the following recommendations for improvements to the road network in South Oxfordshire:

- > A40 between junctions 6 and 8 of the M40: downgrade to B Road
- > B4015: downgrade to unclassified between A4074 and A329
- > B4027: downgrade to unclassified with weight limit between A40 and A34

The recent structural assessment of road over rail bridges has identified a number of sub-standard bridges unable to carry 40 tonnes. The two rail bridges on Foxhall road in Didcot will need to have permanent weight restrictions limiting access to the parkway car park are to vehicles less than 18 tonnes. At this time there are no proposals to strengthen the bridges.