# Chapter 10

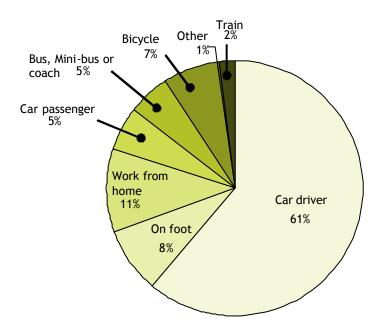
# Vale of White Horse

# Background

The Vale of White Horse has a population of 116,000. Abingdon has the largest population of approximately 31,000, Cumnor and Botley, suburbs of Oxford located within the Vale of White Horse administrative area, together have a population of approximately 10,000, Wantage, Grove and Faringdon have populations of 10,000, 8,000, and 6,000 respectively.

The Vale of the White Horse borders Swindon, a major urban centre to the south west and has good links to the national trunk road network. Consequently around 13% (slightly below the average for the county) of the Vale of White Horse's workforce travel outside Oxfordshire to work.

There were 60,000 people in employment living in the Vale recorded in the 2001 census; these people usually travel to work by the following modes:



# Development Challenges in the Vale of White Horse

The Vale of White Horse is an attractive place to live and work, and its location and transport links make it a good place for businesses to invest. Pressures from both housing and employment growth in the district are likely to pose significant challenges for transport in the next five years,

particularly in Wantage and Grove, where some of the most significant housing growth in the district is planned.

If Thames Water take forward plans, in the longer term, for a new reservoir between Abingdon and Wantage, the transport impacts of this will need to be assessed and any necessary improvements implemented.

# Housing growth assumptions

#### 2006 - 2016

The Oxfordshire Structure Plan 2006 - 2016 proposes 4700 additional dwellings in the Vale of White Horse between 2006 and 2016. These dwellings are expected to be distributed approximately as follows:

- > Wantage & Grove 2000 dwellings
- > Abingdon 900 dwellings
- > Other (within Central Oxfordshire Sub-region) 1300
- > Other (outside Central Oxfordshire Sub-region) 500.

#### 2016 - 2026

The County Council has recommended to the South East England Regional Assembly that an additional 4300 dwellings be provided in the Vale of White Horse between 2016 and 2026, but this figure is yet to be agreed by the Government.

#### Vale of White Horse Local Plan 2011

The Vale of White Horse Local Plan identifies specific locations for housing and employment development in the district, almost all of which are on previously developed land. For housing these sites include:

- > The former airfield west of Grove;
- Locations close to Abingdon town centre, for example the Vineyard, Saxton Road and the Thames View Industrial Estate;
- > The Timbmet site at Cumnor Hill, Botley; and
- > Swan Lane, Faringdon.

New or expanded employment sites will include:

- > Abingdon Business Park
- > Land south of Marcham Road, Abingdon
- > Cumnor Hill, Botley
- > Grove Technology Park
- > Milton Park.

The transport policies in the Local Plan reflect joint work on Integrated Land Use and Transport Strategies for Abingdon and Didcot as well as the emerging Wantage and Grove Area Strategic Transport Strategy.

The key elements of the Local Plan for the Vale of White Horse are:

- > Developments in the vicinity of the A34 at Milton Interchange will only be permitted if necessary improvements to the transport network are secured (this includes the developments at Milton Park, Harwell/Chilton Campus, Didcot West and Milton Hill);
- > To protect the existing footpath and cycle network;
- > Ensure that improvements to the network seek to avoid the loss of public car parking in the district's town centres;
- Proposals for improved public transport interchange facilities will be permitted;
- > Development which have significant transport implications will need to be accompanied by a transport assessment and travel plan; and
- > Proposals for additional service facilities for alongside the A34 and A420 will only be permitted at Milton Heights, Buckland and Park Road, Faringdon.

### Vale of White Horse Community Strategy

The Vale Community Strategy was developed by the Vale Strategic Partnership. The main issues relevant to this Plan are:

- > Transport the most frequently identified priorities for action in the consultation exercise were: bus services and linkages with community transport services; traffic congestion; improved and expanded cycle tracks; improved road maintenance; greater consultation to ensure a more systematic and co-ordinated transport system and parking provision.
- > Access to services some of the priorities identified under this strand were also relevant to transport including more local access points.

### Transport Network

The diversity of the Vale of White Horse's road network means that it functions on local, regional and national scales of importance. The district's main settlement - Abingdon - is in close proximity to the national trunk road network and the Vale of White Horse generally has relatively good access to the national motorway network, especially the M4.

The remainder of this chapter sets out the identified high priority problems in the Vale of White Horse. 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

Within the Vale of the White Horse congestion mainly occurs within, and on the approaches to, Abingdon, Wantage and Grove and on the approaches to Oxford within the district. However there is also localised congestion experienced on other important inter-urban routes which pass through the District and in particular on the A34, the A420, the A417, the A415 and the A338.

It is likely that housing and employment developments within the Central Oxfordshire area will exacerbate these identified current problems, making it important that any solutions developed allow for the increases in traffic associated with these developments as well as dealing with current traffic on the routes.

The County Council intends to focus its efforts over the Plan period on the following congestion problems in the Vale of White Horse. These priorities have been identified through the prioritisation system outlined in chapter five using the following evidence:

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

# A415 Marcham Road Abingdon

#### Problem

The Marcham Road is the main route into Abingdon from the A34 carrying a flow of 26,000 vehicles per day. During the peak hours, the road is regularly congested from the town centre as far as its junction with Fairacres Retail Park. The following bus services use this stretch of road:

- > Services to Oxford, Didcot and Witney, (7 buses per hour)
- > Services to Berinsfield and Wantage (2 buses per hour)

The congestion is strongly linked to the road's proximity to the A34 together with the fact that it serves as the main route into Abingdon town centre from the west. The Marcham Road narrows from a dual carriageway to single carriageway at its junction with Fairacres Retail Park and this bottleneck contributes significantly to the problem.

The queueing on Marcham Road previously regularly extended as far as the A34. The extent of this was tackled by the County Council when it built the first stage of the Marcham Road congestion scheme in 2003/04. This first

stage involved the dualling of Marcham Road from the junction of the A34 to the junction with the Fairacres Retail Park.

### **Proposed Solution**

Scheme	Cost	Expected Completion	Details and expected impact on problem
Stage 2 widening of Marcham Road from Fairacres Retail Park to Colwell Drive	£1,016,000	2009/10	The widening of the Marcham Road will reduce the length of the road that acts as a bottleneck and will reduce the length of the queueing and journey times into Abingdon town centre

### A423 Hinksey Hill to Heyford Hill

#### Problem

This section of the Oxford Ring Road connects the A34 with the Abingdon Road, Oxford and the A4074 and carries between 40,000 and 50,000 vehicles each day. It is often congested along its entire length in the peak hours which affects access into Oxford, particularly by bus. The services which use this stretch of road are as follows:

> Express services between Oxford and Abingdon (14 buses per hour)

The main cause of the congestion along this route is the sheer weight of traffic that uses the road as a link route between the A34 and the A40. This combines with the more local traffic accessing Oxford along the Abingdon Road, and other radial routes into Oxford from the south.

#### **Proposed Solution**

Scheme	Cost	Expected Completion	Details and expected impact on problem
Oxford Southern Approaches	£838,000	2011-16	Work undertaken during the lifetime of this plan will be in preparation for a scheme which will improve journey times for bus passengers entering Oxford.

#### A34 Oxford to Didcot

#### Problem

> Severe peak hour congestion can affect the A34 over most of the section between Oxford and Didcot. This section of the A34 regularly carries between 55,000 and 60,000 vehicles per day, including the high frequency bus services between Abingdon and Oxford.

For much of the day this road works at or close to its capacity and with a very heavy HGV flow it is highly susceptible to traffic incidents. There are

capacity problems at both the Marcham and Milton Interchanges (for access to Abingdon and Didcot respectively), which can affect flows on the trunk road at peak times.

#### **Proposed Solutions**

The County Council will continue to work in partnership with the Highways Agency to develop schemes to relieve congestion on the A34 corridor. Schemes which could be taken forward during this Plan period include bus priority on the approach to Hinksey Hill interchange or other traffic management measures. For the longer term, the potential for alternative schemes that would relieve the A34 could also be considered, alongside further measures to enhance public transport (for example, development of the Didcot to Oxford Premium Bus route and the East West Rail scheme) which may help to relieve congestion on this route.

# Delivering Accessibility

Accessibility mapping has shown that much of Oxfordshire shares broadly similar accessibility characteristics, particularly with regard to rural bus accessibility. The notable exceptions in the Vale of White Horse are:

- > Faringdon suffers from particularly poor access to healthcare; and
- > Many of those living in the south west of the district look towards Swindon for their needs.

#### Access

#### **Supermarkets**

- Most of the population is within 15 minutes of a supermarket by car with the remainder being no more than 25 minutes away from a supermarket, by car.
- > Depending upon the time of the day and in line with the rest of the county, roughly half the population 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 5% of the district is within 60 minutes of Oxford by bus, the remainder is either more than 60 minutes or is not served bus.

#### Town Centres

- > About 75% are within 15 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.

#### Further Education

- > Like the rest of the county, nearly 100% of the district has access to further education by car within 25 minutes.
- > About 50% of those living in the rural areas have no bus access under 60 minutes of higher education.

# Primary and Secondary Education

- > About 75% of the district's population has access to primary schools of under 10 minutes by car.
- > Access is less good by the conventional bus network, with about 50% 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 25 minutes.
- > About 75% of the District that have no access to secondary schools by conventional bus services, but these gaps are filled in by the contracted school transport.

#### **Employment**

- > About half of the population are within a 5 minutes car journey of both selected and ward places of employment.
- > About half of the population have access to employment of under 60 minutes by bus.

#### Healthcare

- All of the district is within 25 minutes and about half within 10 minutes of a hospital by car.
- > By bus, only about 25% have access of under 60 minutes.
- > In general access to hospitals is poorer than to other facilities reflecting the concentration of provision in the Oxford and in Banbury. Faringdon in particular suffers from poor access.
- > Nearly everybody lives within 20 minutes of a GP surgery by car.
- > About half of the population is within 60 minutes of a GP surgery by
- > About 75% of the population lives within 10 minutes of a dentist with the remainder being within 25 minutes of a dentist by car.
- > By bus, roughly 30% of the district lives within 60 minutes of a dentist by bus.

A series of accessibility workshops have been held looking into the different types of accessibility: access to healthcare, access to work, access to education and access to food and shopping. From these there were several specific issues identified, for the Vale of White Horse:

- > The X15 service, connecting Abingdon to Witney via a number of villages, was seen as showing how partnership working can produce very positive results.
- Accessibility by public transport was seen as being very poor to Wantage and Grove.
- > It was felt that Harwell is very difficult to access by non car modes and that such developments should not be encouraged in the future.

> Car sharing has a role to play and Milton Park has a good example of such a scheme in operation. This is web based and helps matches up people to share lifts.

Abingdon enjoys a high frequency bus service to Oxford and there is also a high quality service between Wantage and Oxford. There is a limited train service to the two rail stations in the Vale. It has been a long standing aspiration of the County Council to see the re-opening of a rail station at Grove.

#### Social Exclusion

While generally the Vale of the White Horse is an affluent area there are pockets of deprivation. The findings of a study commissioned by the County Council from Oxford Consultants for Social Inclusion concluded, in relation to the Vale of White Horse, that:

#### Health

- > Large parts of the District have a very healthy population.
- > However the wards of Wantage, Abingdon and Faringdon show people needing higher rates of care.

#### Low Income

- > The Vale is one of the three districts of the county that have rates below the county average, 4.0% compared to 4.9% respectively.
- > The Vale is one of the ten wards in the County with the highest proportion of people living on a low income is in the district.
- > The Vale has a proportion of people under 20 living on a low income that is below the England, regional and county averages.
- > The Vale has one of the twenty Oxfordshire wards with the highest proportion of people aged 60 living on a low income.

#### Education

- > The Vale has two of the twenty wards where pupil exam performance is the lowest in the county.
- > The Vale has two of only six wards in Oxfordshire with post-16 staying on rates below 50%.
- > The Vale has only one ward where the number of adults with no qualifications is more than one in three well above the England and south-east averages.

### Work

- > The total worklessness rate is 3.4%.
- > The areas with relatively high claim rates tend to be located in the more urbanised areas.
- > The rate of people workless through unemployment (0.6%) is below the England, regional and county averages.
- > The rate of worklessness as a proportion through sickness is 2.8%, lower than the county, regional and England averages.

#### Proposed Solutions

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 the Vale. 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 Faringdon

It has been found that Access to Health is particularly bad from Faringdon and generally across the Vale is poorer than to other facilities reflecting the concentration of provision of healthcare in Oxford and Banbury. This is a particular problem as Faringdon, along with Abingdon and Wantage have above average rates of people in need of care.

It is planned that the work to look at access to health in the Vale is planned to begin in the spring of 2010.

# Safer Roads

#### **Problems**

There are a range of locations and routes in the Vale of White Horse 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
A415 gyratory (High Street, Stert Street, Stratton Way) Abingdon	Urban Route	43 Accidents (8 fatal or serious and 35 slight)	Abingdon Town Centre Improvements (see below)

A420 Botley interchange roundabout	Site	31 accidents (4 fatal or serious and 27 slight)	Roundabout approach scheme (see below)
B4494, South of Wantage to County Boundary	Rural Route	12 accidents (4 fatal or serious and 8 slight)	Monitoring/Further investigation
B4507, Ashbury to Childrey	Rural route	11 accidents (3 fatal or serious and 8 slight)	Monitoring/Further investigation
A417, Faringdon Bypass to B4508	Rural route	12 accidents (5 fatal or serious and 7 slight)	Monitoring/Further investigation

# A420 Botley interchange roundabout

# **Proposed Solution**

Scheme	Cost	Expected Completion	Details and expected impact on problem
A420 Botley Roundabout Approaches	£55,000	2006/07	The majority of the accidents are of the rear shunt type - this scheme will involve such things as anti skid surfacing, and new lining and signing to combat the problem

# A415 gyratory system (High Street, Stert Street, Stratton Way), Abingdon

# **Proposed Solution**

Scheme	Cost	Expected Completion	Details and expected impact on problem
Abingdon Town Centre Improvements	£2.734 million	2009/10	This scheme involves major changes to the road network in the very centre of the town - making Stratton Way two way and altering the layout of Stert Street and High Street. In addition to improving road safety, this scheme also aims to address street environment and air quality problems. It will be possible to carefully monitor the impact of the scheme on road safety

# **Better Air Quality**

Air Quality in the Vale of White Horse 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 is only one concentrated area in the district where national air quality objectives are exceeded - the streets in this area are highlighted in the table below. The only air quality objective that is exceeded in the Vale of White Horse 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	Modelled NO <sub>2</sub> levels in 2005 - not necessarily representative of relevant exposure (mg/m³)	National air quality objectives exceeded at points of relevant exposure
West Way, Botley	40.5	None
Poplar Road, Botley	30.0	None
Hutchcomb Road, Botley	20.4	None
Queens Close, Botley	22.5	None
Stert Street, Abingdon	58.7	2005 objective for annual mean concentration of nitrogen dioxide
Ock Street, Abingdon	37.3	2005 objective for annual mean concentration of nitrogen dioxide
Stratton Way, Abingdon	38.7	None
High Street, Abingdon	62.3	2005 objective for annual mean concentration of nitrogen dioxide
Vineyard, Abingdon	42.7	2005 objective for annual mean concentration of nitrogen dioxide
Bridge Street, Abingdon	30.7	2005 objective for annual mean concentration of nitrogen dioxide
West St Helen St, Abingdon	28.6	None

Abbey Close, Abingdon	31.1	None
Langley Road, Abingdon	26.4	None
Turner Road, Abingdon	20.8	None
Town Hall Faringdon	29.5	None
Gloucester Street, Faringdon	34.6	None
Bennett Road, Faringdon	20.4	None
Folly View Road, Faringdon	18.0	None
Market Square, Wantage	33.0	None
Grove Street, Wantage	24.5	None
Priory Orchard, Wantage	15.6	None
Hampden Road, Wantage	14.2	None

Figures from Vale of White Horse District Council

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.

# Abingdon Town Centre

#### Problem

The Vale of White Horse District Council's consultants produced a Detailed Assessment Report for Abingdon in January 2006. This has been submitted to DEFRA for approval, after which the District Council will need to consider declaring an Air Quality Management Area. The Report concluded that the District Council should consider establishing an Air Quality Management Area around the following locations; High Street. Stert Street, Ock Street (eastern end), The Vineyard, Bridge Street (north end) and Stratton Way (north end).

#### **Proposed Solution**

The County Council will be working with the District Council on the development of an Air Quality Action Plan once the Air Quality Management Area has been declared. The Abingdon town centre scheme outlined below has been proposed for some time and will form a major part of the Action Plan.

Scheme	Cost	Expected Completion	Details and expected impact on problem
Abingdon Town Centre Improvements	£2,734,000	2009/10	This scheme involves major changes to the road network in the very centre of the town - making Stratton Way two way and altering the layout of Stert Street and High Street. In addition to improving road safety and the street environment, this scheme seeks to address the air quality problem. While it is not possible to say without further monitoring and modelling whether the scheme will remove the exceedence completely, progress should certainly be made towards meeting the objective as a result of the improvements

# 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 being where transport contributes to an overall problem in quality of public spaces:

Market Place, Wantage

#### Problem

Market Place still forms the heart of the retail centre of Wantage although its current layout hampers pedestrian flow across the square and is dominated by traffic and parking. The layout of the town's road network presents few opportunities for significant reductions in traffic levels in Market Place but improvements in the general layout could potentially provide a better environment for shoppers while improving the economic potential of the area.

#### **Proposed Solutions**

Wantage Town Council are currently investigating possible solutions to the this solution.

# Stert Street/High Street, Abingdon

#### Problem

Stert Street and High Street are two of the main shopping streets within Abingdon but also form part of the town centre gyratory system. This affects both their effectiveness as shopping areas, particularly for Stert Street and their attractiveness as part of the overall town centre. The route also passes through the Market Place close to the historic Guildhall and Old County Hall.

#### **Proposed Solution**

Scheme	Cost	Expected Completion	Details and expected impact on problem
Abingdon Town Centre Improvements	£2,734,000	2009/10	This scheme involves major changes to the road network in the very centre of the town - making Stratton Way two way and altering the layout of Stert Street and High Street. This will allow significant improvements to be made to the street environment.

# Integrated Delivery

The County Council recognises the importance of tackling transport problems of all kinds in a strategic and integrated way to ensure the full impacts of proposed schemes and initiatives are fully understood. The 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 many of Oxfordshire's larger towns and for Oxford. Within the Vale of White Horse, only Abingdon has an approved Integrated Transport Strategy. 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.

A transport strategy is also being developed for the Wantage & Grove area, principally to assess the transport challenges likely to result from the Structure Plan and the South East Plan development proposals in this area.

### Inter-urban Networks: Transport Networks Review (TNR)

The TNR study was completed in October 2004, and 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.

# Marcham Bypass

Major scheme funding for the Marcham Bypass has not so far been approved through the Local Transport Plan process. The bypass, if constructed, will remove 90% of through traffic from the narrow and winding road through the village and so significantly reduce community severance and, as well as gaining environmental benefits through the removal of traffic, it will allow other improvements to be made in the village. It offers large benefits to road users as well as to local residents. A description of the additional benefits that this scheme would have in delivering the Local Transport Plan objectives is given in Chapter 13.

#### Remainder of the District

The Transport Networks Review recommended that measures be taken on a number of roads in the Vale of the White Horse to protect them from excessive traffic, particularly where traffic is using them to bypass congestion locations on the major road network, these were:

In the short-term (2006-11):

- > A4095 (Faringdon to A40) downgrade to B road
- > B4508 downgrade to unclassified

In the medium term (2011-16):

> A415 - Abingdon to Witney improvements

In the longer term (2016-21 and beyond):

Abingdon southern relief road (subject to further study) and A34 access

Also identified was the potential need, for a development-related Wantage North East Bypass, which along with other measures being considered further as part of the Wantage/Grove transport study..

# A415 - Newbridge

New Bridge is one of the oldest bridges in the county dating from the 12th century and with no modification it is still carrying 21st century traffic on the A415 across the River Thames. It has been assessed as substandard and recent inspections show that it is deteriorating fast. The bridge is classed as an ancient monument, this combined with the narrow road and poor vertical alignment means that the bridge cannot be strengthened and a replacement bridge on a new alignment is proposed. Construction is proposed for 2009/10. The recent structural assessment of road over rail bridges has identified a number of substandard bridges unable to carry 40 tonnes. Access to Milton Park from the A34 is also limited to vehicles less than 7.5 tonnes because of the restriction imposed at Potash Bridge. This bridge is programmed to be replaced in the next five years.