

## **SODC LES Study Technical Working Note 1: Recommendation to take forward to feasibility stage**

### **Introduction**

This note concludes the work on stage 1 of the project in terms of the scoping review. It pulls together the information gathered in the scoping stage and provides recommendation for measures to take forward into the main feasibility work of the project. The scoping stage of the project covered:

- establishing and consultation with the SODC LES steering group;
- a review of existing policies and programmes;
- and establishing baseline emissions source apportionment.

The steering group consultation and policy review was used to identify key issues for the authority in taking forward a Low Emission Strategy, the main areas of actions and the policy framework in which actions could take place. The source apportionment work helped provide detailed context on the emissions problems within the SODC's air quality management areas and what vehicle types were causing the main problems. The members of the steering group are listed in Annex 1 and a summary of the source apportionment work is provided in Annex 2.

### **General principles of Low Emission Strategy for South Oxfordshire**

The Low Emission Strategy (LES) is identified as a key action within the Council's formal Air Quality Action Plan (AQAP). It will complement the AQAP by providing an overarching approach to transport emissions reduction for the District and an evidence base on the emissions impact of this approach.

In setting out the LES a number of key principles were established by the steering group:

- The LES should be seeking to reduce both air pollution and climate related emissions from transport in an integrated way.
- It will need to consider the wider context of South Oxfordshire and potentially actions with a wider set of partners. In particular it needs to recognise:
  - Policies and programmes that are developed jointly with the Vale of White Horse District Council who are its partner authority;
  - Activities that are best carried out at a county level working through the Oxfordshire air quality group.
- The LES should support the economic development aspirations of the Council, in particular
  - Helping understand how improved environmental quality supports economic growth;
  - Exploring links with the Local Enterprise Partnership and wider business benefits from low emission activities.

## Key themes within the Low Emission Strategy

Working with the steering group 6 key themes for the LES emerged that we recommend should form the core structure of the LES and be taken through to the feasibility stage. These themes are set out and described below.

### Low emission planning

The use of development planning policy is a key lever that the council can use in terms of driving a long term vision of reducing emissions from transport. It needs to be tackled from two perspectives:

- *A strategic approach to development allocation* – understanding more clearly how development will impact on emissions and air quality in the district. We suggested this is assessed by looking at the proposed strategic allocations in the context of a district wide emissions model. This model will pull together data from the NAEI, consider potential trip generation using the LES Toolkit, assess total emissions generation and consider potential impact on the AQMAs. This can then be used to consider adjustments to the current allocation policy.
- *Developer guidance* – which is already being set out in the AQAP and provides a framework for a more detailed response to specific development applications. This will be considered an element of the LES but will not be considered further in this feasibility work as it is already in place.

### Low emission procurement and licencing

This theme will set out the potential approach the council can take in using its procurement and licencing powers to improve vehicle emissions. The feasibility work will pull together existing best practice and consider applicability within the SODC context. It will also take account of the Social Value Act and the Low Carbon Vehicle Procurement Directive. It will focus on

- Setting standards for transport services
- Consideration of transport emissions impact of wider services
- Supporting local low emission business – e.g. low emission taxis, low emission deliveries, etc.
- Emission standards for taxis

### Electric vehicle strategy

The potential for electric vehicles to provide a contribution to reducing emissions was identified, along with the desire to explore this in more detail. We therefore propose that the LES should set out an electric vehicle strategy for the District, with the feasibility work considering:

- *Electric vehicles in the Councils own fleet and transport activities* – this would look at options for electric charging infrastructure at its two main sites, support for employees to use electric vehicles and links with the County Council's electric pool cars who will be sharing SODC's Abingdon site.
- *A recharging infrastructure strategy* considering appropriate recharging technology and how this can be deployed through:
  - Council car parks

- Partnership approach working with others – businesses, supply companies,
  - Planning guidance
- Assessing the potential for reduced parking charges for EV's;
- Working with local suppliers and through promotion events to support the uptake of EV's

The feasibility work will develop further details of these ideas and consider a potential EV target.

#### Bus emissions strategy

Working with bus operators, ideally at the County level, will provide a key element of emissions reduction for the District and support further emissions reduction from mode shift. Bus emissions are a particular element of the air pollution issues in Wallingford and hence this will be a particular focus for this strategy. The key elements of a strategy that we would propose to explore are:

- Setting a Euro 4 standard for all buses operating in an AQMA, ideally agreed at the County level.
- Eco-driving for all bus operators, again agreed at the County level.
- A bus only river crossing in Wallingford alongside the Euro 4 emission standard.

The work in this area will need to take account of the latest data on bus emissions performance, especially the remote sensing work being done by Oxford City Council at the moment.

#### Freight emissions strategy

Freight emissions are an important element of the emissions in all of the AQMAs, if not the dominant source of emissions. Therefore in assessing measures to take forward as part of a low emission freight strategy we proposed exploring the following options:

- *Freight LEZs for Wallingford, Henley and Watlington* to explore the potential benefits of such an approach, even if at present the resources to implement such schemes would be limited.
- *A freight clearway in Watlington* – which would remove parked vehicles that are causing blockages and congestion.
- *Enforcement of the 7.5t limit* – the perception is that this is not being adhered to in key areas and better enforcement, perhaps through ANPR, would help.
- *Low emission loading bays* – which could provide an alternative to freight LEZ's
- *An Ecostars programme linked to driver training* – to help improve efficiency and reduce fuel costs and emissions.

In addition, although not to be explored in this work, the LES should support:

- Freight consolidation – which is being explored by Oxford City Council, who will look to link with local district councils;
- Interactive freight maps/app – to be pursued through the County Council.

#### Promoting low emission behaviours

Emissions from cars, especially diesel cars, are a key aspect of the air quality problems in all of the AQMAs and the dominant issue in Henley. Therefore it will be important to explore and promote

within the LES a range of measures to reduce emissions from cars. In this context we propose that the LES feasibility work pull together the latest evidence and best practice on:

- Anti-idling campaigns and their effectiveness on reducing emissions;
- Transport, air quality and health behaviour change campaigns, in particular considering links with health bodies and community groups.
- Promoting low emission vehicles and driving styles, potentially linked to the campaigns above.

This work will also need to consider the wider context of travel behaviour work being done by the County. Within this theme we will consider appropriate behavioural change targets.

## **Taking forward the feasibility work**

Discussions with SODC have suggested to us that it would be of benefit to focus a bit more of the effort in the feasibility work on developing the measures and overall strategy in terms of how the measures are actually going to work and be implemented, building on experience from elsewhere, and a little less on direct quantification. This would provide a wider evidence base and support deeper understanding of how the LES could work. As such we recommend structuring the feasibility work as set out below.

### **Measure and strategy development**

This task would focus on collecting more information and evidence about the measures in the LES, exploring further the local context and wider experience. This activity would be carried out through further engagement with key people in the District and County Council and desk-based research.

In terms of key meetings the following are suggested:

- County Transport team
  - Details of County Electric pool cars
  - The bus quality partnership and prospects for a Euro4 standard for all AQMA's
  - LEZ concepts for Henley and Wallingford – county views
  - The Watlington freight clearway concept
  - Bus only river crossing in Wallingford
  - Status of county travel campaigns and work with local groups
- Planning
  - Discussion of details of housing allocation and other elements of the LDP
- Procurement, licensing and fleet
  - Further discussion on standards in procurement contracts
  - Consideration of taxi standards in licensing
  - Fleet vehicle mileage data
  - Grey fleet/staff travel mileage data and costs
- Parking team
  - Consideration of EV charging points in district car parks
  - Variable parking charges related to EV's

The desk based review work would focus on pulling together cost, implementation and examples of practice elsewhere for each of the LES themes set out above.

## Modelling and data

The modelling work will focus on emissions and air quality modelling at two level:

- District wide – to gain an estimate of the potential total emissions benefit
- AQMA based – building on the AQMA source apportionment work to look at impacts with regards the AQMAs.

From initial discussions with the County it seems unlikely that there will be any resource for them to do traffic management assessments or traffic modelling work to feed into the study (originally tasks T2,3,4 in the WP2). Therefore we will need to make any traffic based assumptions drawing on the desk based review work.

Our current views on modelling measures are set out below, but these may be adjusted following the measure development work:

### *District wide emissions assessment*

- Strategic planning assessment
- EV target
- Bus euro 4 target
- Freight eco-driving
- Mode shift target from low emission behaviours

### *Wallingford package*

- Bus and HGV Euro 4 LEZ
- Bus only river crossing
- District wide measures
  - EV target
  - Mode shift target

### *Henley package*

- Bus and HGV Euro 4 LEZ
- Anti-idling assessment
- District measures
  - EV target
  - Mode shift target

### *Watlington package*

- Bus and HGV Euro 4 LEZ
- Freight Clear way
- Enforce 7.5 t limit

In preparation for this modelling we will also review our source apportionment work to ensure that we have correctly considered the bus fleet in Wallingford and the current 7.5t limit.

The cost benefit and health impact assessment will focus on providing damage cost data in relation to the emissions savings and indicative cost data from the desk based review work.

## Schedule

An updated schedule for the work is shown below:

	2013										2014								
Task	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
WP1 Scoping review																			
T1 Inception meeting		X																	
T2 Set up steering group						X													
T3a Policy review																			
T3b Data review																			
T3 build base model																			
T4 Recommendations																			
WP2 Feasibility																			
T1 Measure development																			
T1.1 Stakeholder meetings																			
T1.2 Desk research																			
T5 Emission and air quality modelling																			
T5.1 District emissions model																			
T5.2 AQMA modelling																			
T6/7 Cost benefit analysis																			
T8 Final assessment report																			
WP3 LES Implementation plan																			
T1 Steering group workshop												X							
T2 Briefing paper on implementation												↑							
T3 Draft implementation plan																			
T4 Consultation workshop																X			
T5 Final plan																		X	
WP4 LES Engagement plan																			
T1 Steering group workshop												X							
T2 Funding sources																			
T3 Community benefits																			

**Annex 1 Steering group members**

Paul Holland – Shared Environmental Protection manager (SODC)

Claire Spendley – EHO (SODC)

Caroline Wood - Economic & Development Department (SODC)

Geoff Bushell - Procurement (SODC)

Heather Saunders - Climate change (SODC)

Lucy Murfett - Planning Policy (SODC)

Mark Gregory - Transport (OCC)

Paula Fox - Planning Development (SODC)

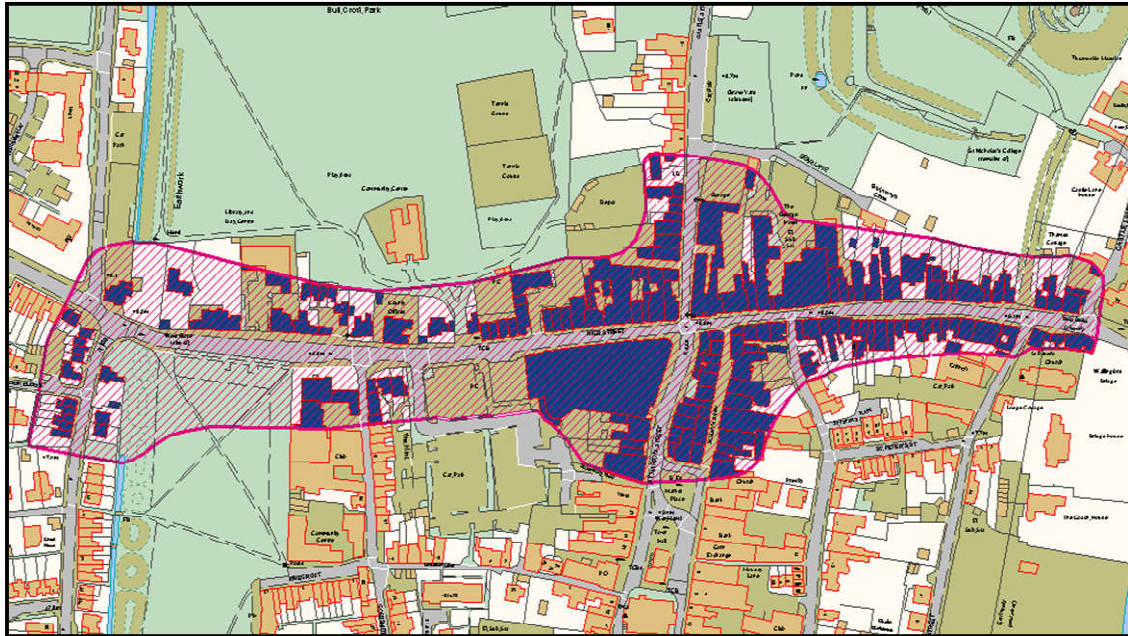
Guy Hitchcock/Beth Conlan – Ricardo-AEA



## Annex 2 Summary of source apportionment work

### The Wallingford AQMA

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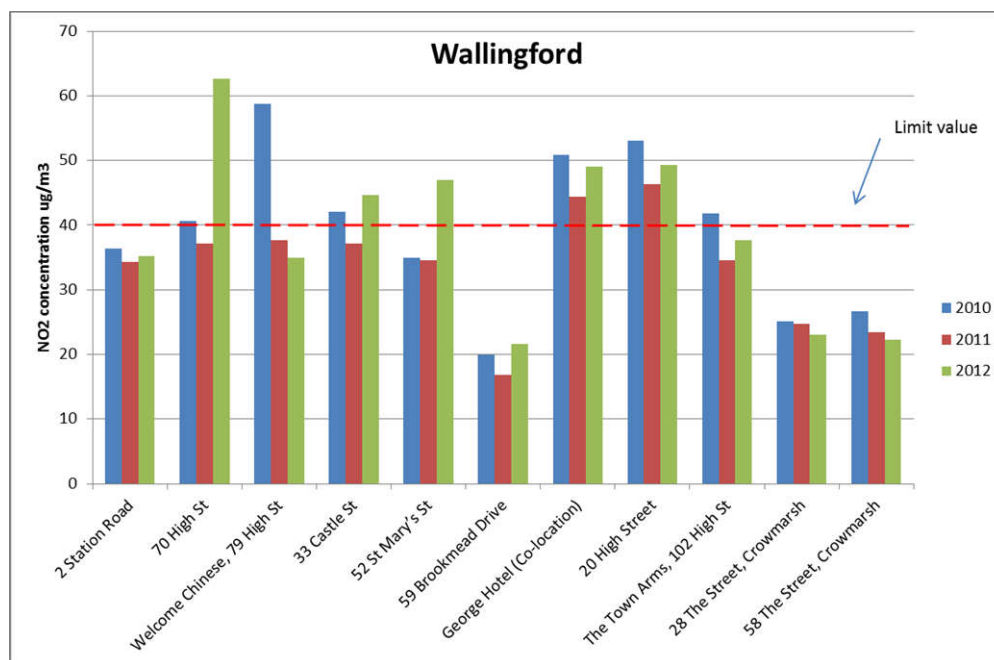
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### NO<sub>2</sub> Levels in Wallingford

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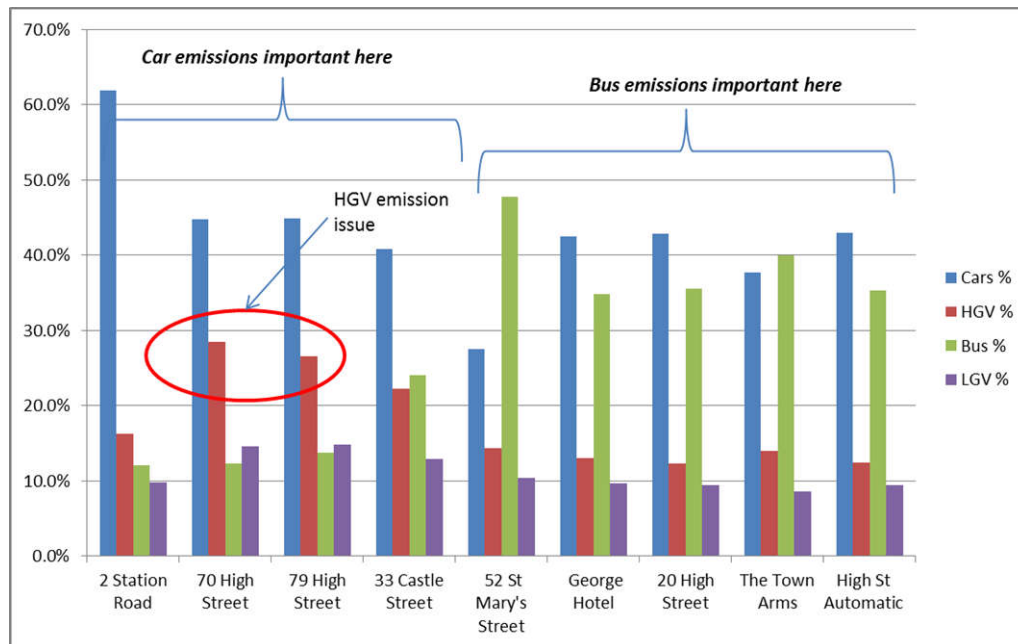
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Transport NO<sub>x</sub> sources in Wallingford

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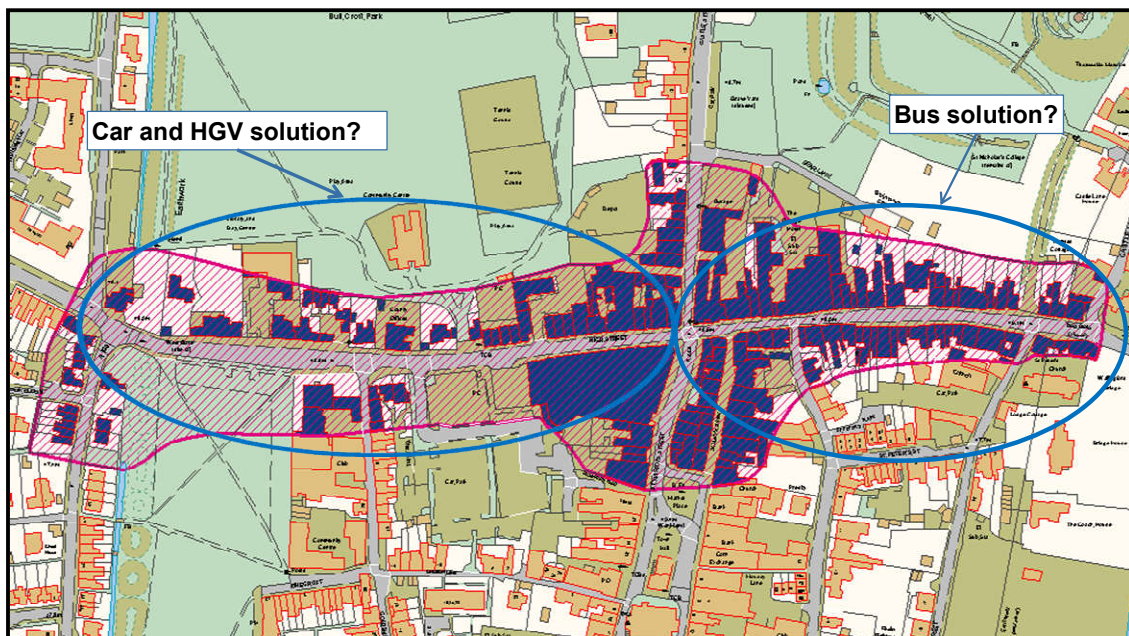
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## The Wallingford AQMA and emissions sources

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### Key traffic and transport issues in Wallingford

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- Narrow historic streets with tall buildings and congested traffic
- Traffic pinch points such as Wallingford bridge cause traffic queues throughout the day
- Still significant through traffic despite the bypass
- Narrow footpaths have inhibited walking
- Limited cycle routes in town centre area

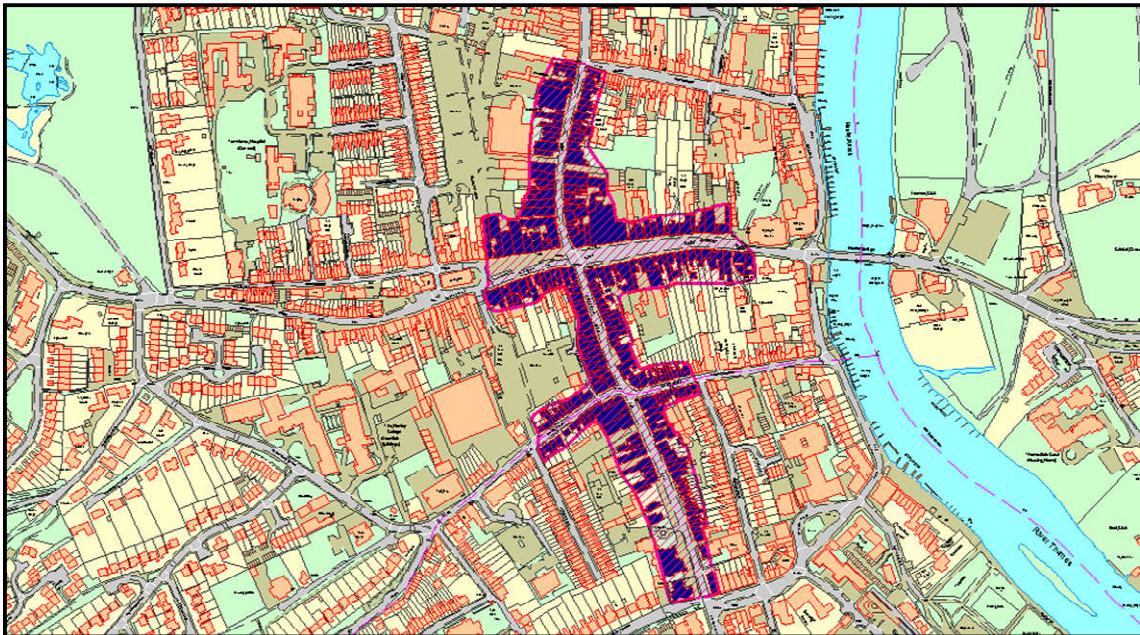
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### Henley AQMA

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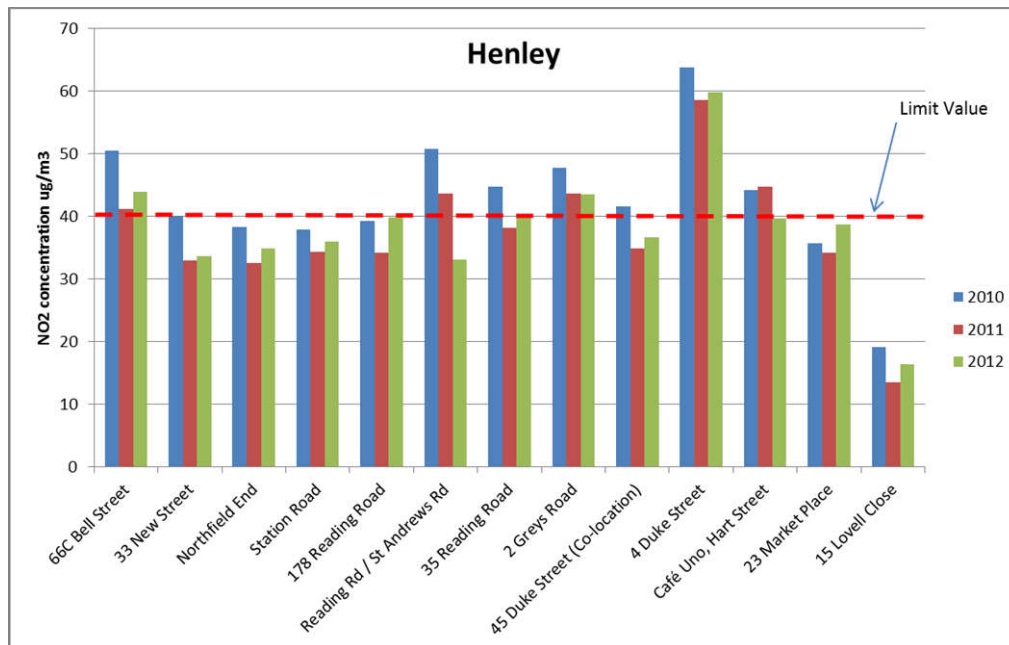
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NO<sub>2</sub> Levels in Henley

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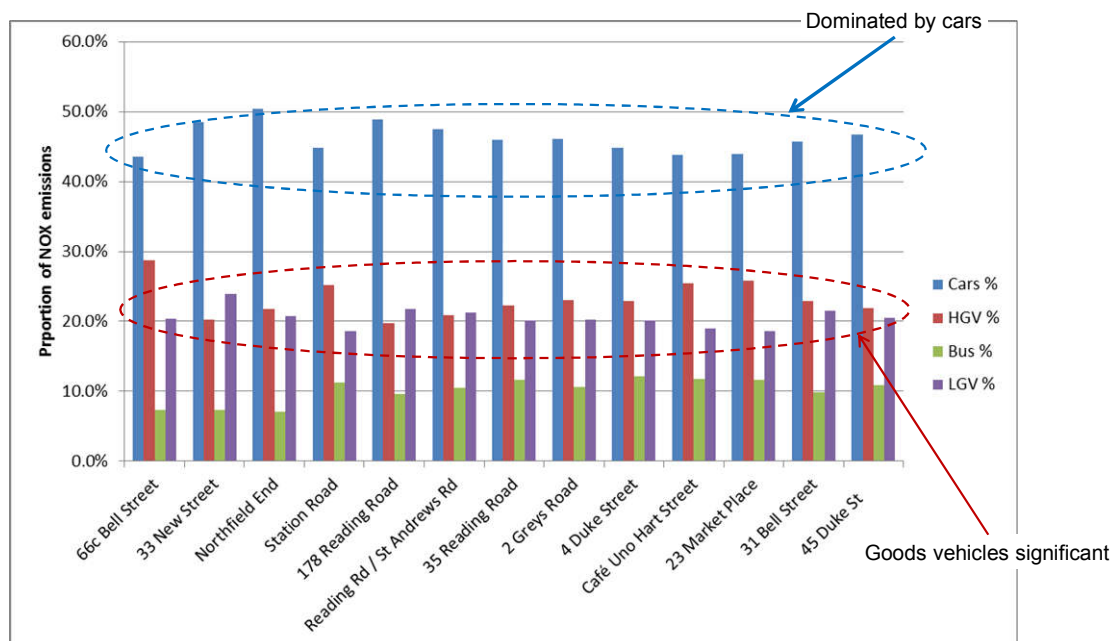
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Transport NO<sub>x</sub> emission sources in Henley

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### Key transport and traffic issues in Henley

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- Service centre for local villages and destination for tourism
- Narrow historic streets, with high levels of traffic and congestion
- High levels of car use in town with 2/3 of residents driving to work
- Access to employment opportunities is limited by public transport walking and cycling
- Significant levels of through traffic with main local crossing point for the Thames

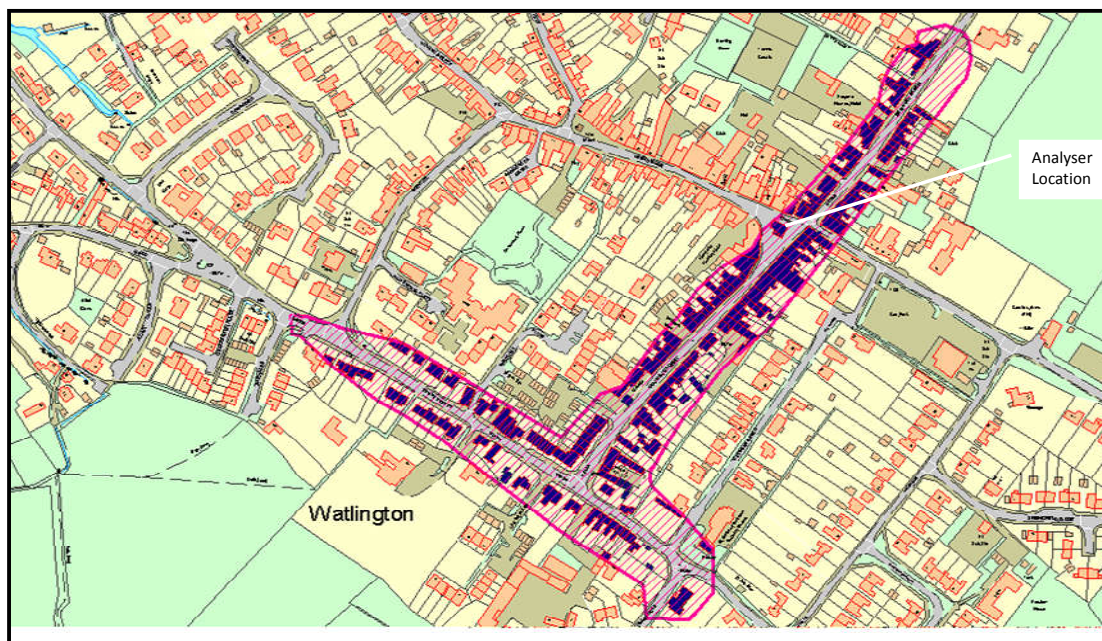
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### Watlington AQMA

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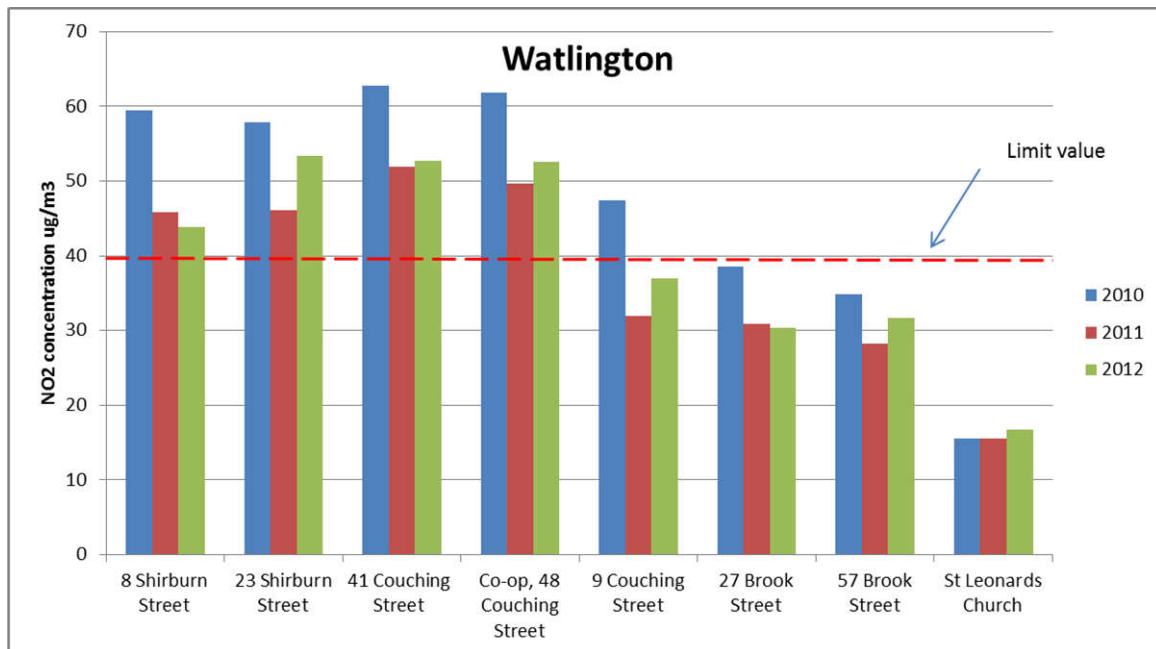
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NO<sub>2</sub> levels on Watlington

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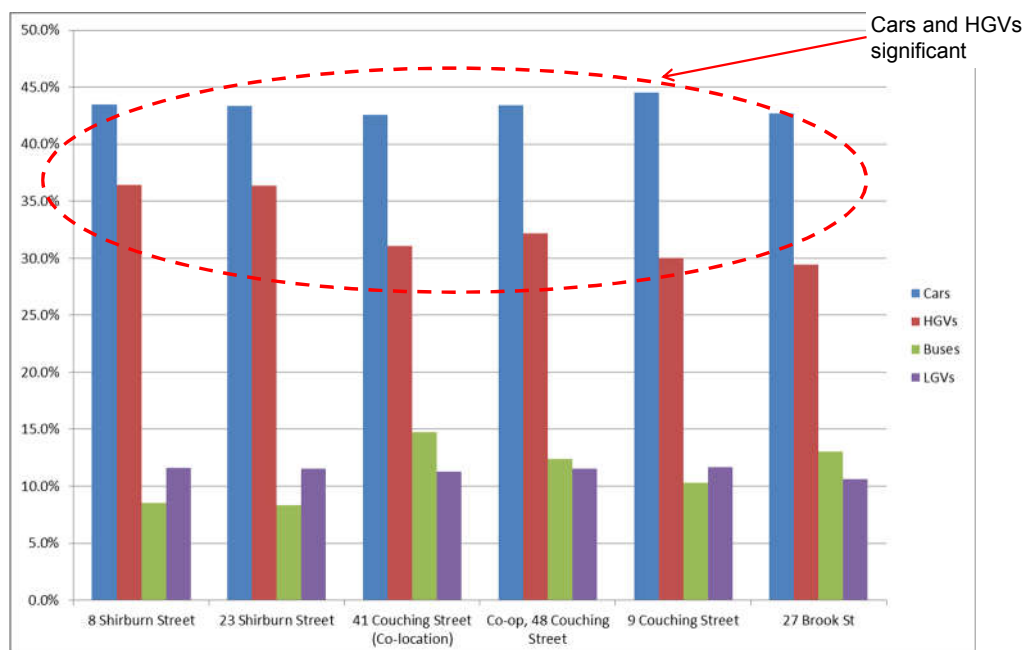
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Transport NO<sub>x</sub> emission sources in Watlington

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### Key traffic and transport issues for Watlington

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- Through route to M40 motorway
- Small narrow roads with 'canyon' effect
- Parked cars cause further narrowing, delays and congestion
- HGV's are a significant element of the problem