

Windsor Town Forum – 19 February 2015

RBWM - Air Quality Management

Air quality across the Borough is generally good. However, there are localised hotspot areas of pollution where the annual mean concentration for nitrogen dioxide (NO₂) exceeds the national Air Quality Objective (AQO) of 40 µg/m³. These areas have been declared as Air Quality Management Areas (AQMAs) and the Council has developed an Air Quality Action Plan (AQAP) to work towards improving air quality. Road transport is the main source of NO₂ affecting the AQMAs. Measures within the AQAP to alleviate heavy traffic flows and congestion form an integral part of the Council's Local Transport Plan (LTP) and link to Highways capital programme with the Council's efforts to improve air quality. The plan implements a suite of 'soft' measures and smarter choices; influencing better travel choices, encourage public transport use, and cycling that can all contribute to reduce road traffic emissions. The Council has a duty to work towards achieving the AQO, however direct and cost effective interventions in certain areas may not be available.

The Council's approach to air quality management can also link well with the Borough's public health strategy, by focussing on themes that can influence residents' travel behaviours. This could be achieved by providing viable travel choices that can be set out within cycling and walking action plans (directly linked to the Joint Health and Wellbeing Strategy).

Windsor AQMAs

Windsor AQMA – The area was declared in 2005 and extended in 2009. The extended area includes Arthur Road. The annual mean concentration measured at Clarence Road roundabout in 2005 was 48 µg/m³ this dropped to 40.6 µg/m³ in 2013. One contributing factor to the decrease of NO₂ concentrations is the redesign of the Clarence Road roundabout which improved traffic flow and moved some traffic lanes away from the monitoring station/residential properties. Annual mean concentrations in Arthur Road (key monitoring location), while remaining above the AQO have dropped from 60 µg/m³ in 2007 to 48 µg/m³ in 2013. Similar decreasing trends since 2005 have also been observed in Maidenhead.



Improvement measures need to be considered carefully in terms of their implementation cost and their resultant effectiveness to improve AQ. The main actions undertaken in Windsor that contributed to the downward trend include:

Travel Plans – the Council supports workplace travel plans and car sharing, this is helping to reduce the percentage of ‘driving to work’

Junction Improvements - Comprehensive redesign of the Clarence Road roundabout. The new scheme contributed to improving traffic flow. The realignment of the roundabout has increased the distance between main traffic and building façade/monitoring site.

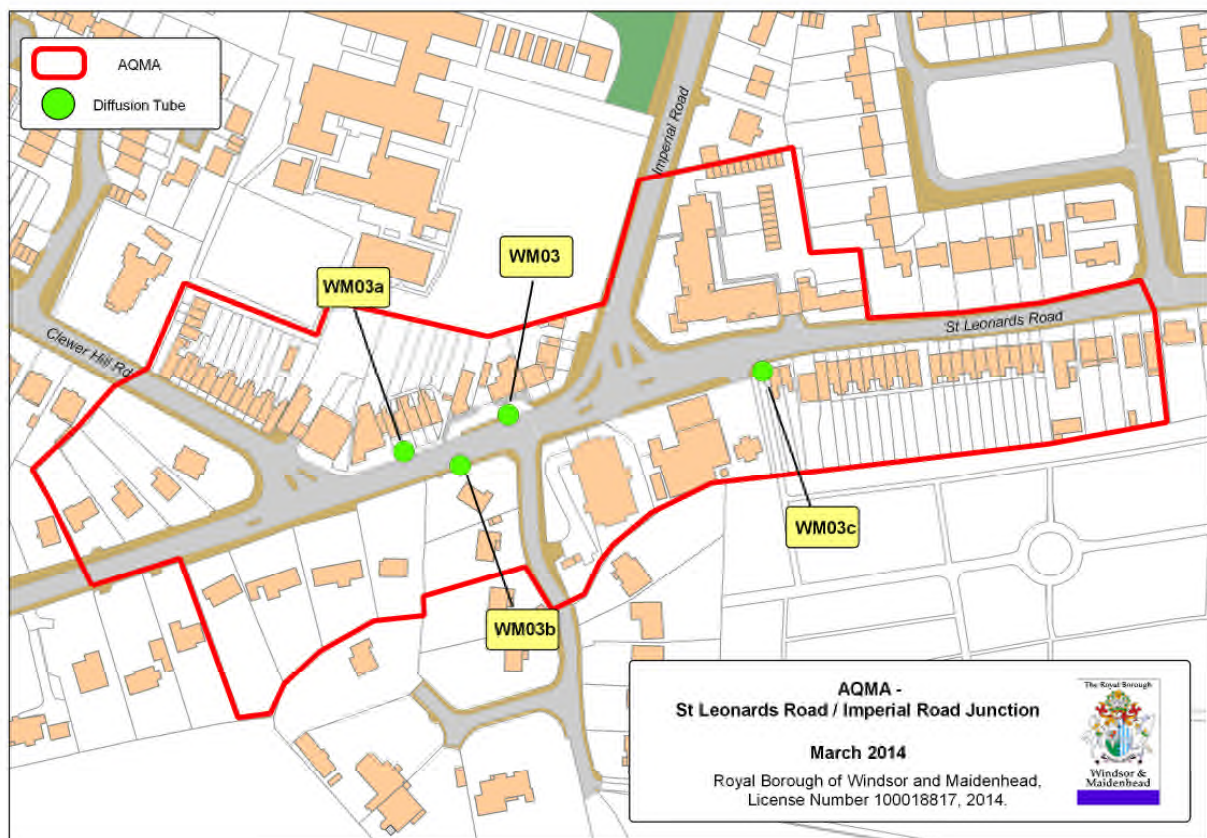
Windsor Parking and Transport Strategy - Car parking includes a ring of small-scale park and ride sites; Home Park car park extension; East Berkshire College (extended public use); weekend public use of King Edward VII Hospital car park; improved accessibility at Windsor Dials; new park and ride schemes from Centrica. This is aimed at reducing road traffic congestion by reducing circulating traffic.

Quality bus partnership - Partnership between BAA Heathrow, First, Slough BC and RBWM. This includes a direct bus service to Heathrow.

Supported bus services - Introduced W1 bus service in West Windsor to help commuting to and from the town centre.

St Leonards/Imperial Road Junction AQMA

This area was declared in 2014; it is linked to Clarence Road roundabout and Windsor AQMA by Imperial Road and is on route to Legoland. There are four monitoring points within this area, with concentrations (monitored since 2007) having dropped from 50.3 $\mu\text{g}/\text{m}^3$ in 2007 to 46.8 $\mu\text{g}/\text{m}^3$ in 2013. However, trends in concentrations from other monitoring points show no significant change and the concentration monitored at the worse monitoring location in 2013 was 57.8 $\mu\text{g}/\text{m}^3$. This is a complex junction with chronic congestion problems and it may require particular attention when considering possible junction improvement options. The Council is engaging with Legoland on possible measures to reduce their traffic impact along this route.



Summary of Local Transport Plans & Strategies

Key strategic themes to further develop the AQAP have been agreed within the LTP working group. These include:

1. The AQAP will focus on those measures intended to reduce car use by giving residents and those who work in the Borough more and better options about the way they travel.
2. Reducing roadside emissions means adopting a range of measures to reduce the volume of traffic at peak time.
3. Undertake improvement studies on possible option on how to increase traffic flow and reduce congestion at specific hotspot areas
4. Securing travel plans through the development control system to encourage increased walking, cycling and public transport usage
5. Increase voluntary take up of travel plans by targeting major business parks as well as personalised travel planning initiatives aimed at residents
6. AQ funds from different funding sources should prioritise these areas

Hot-spots areas include Arthur Road and Imperial/St Leonards Road junction

Summary of proposed measures for 2014/15 include:

- A308 Maidenhead Road cycle route, Windsor – upgrades to existing cycle route
- Clewer Village to Town Centre cycle route – lighting and signage upgrade
- Cycle parking – Windsor (various sites)
- Urban Traffic Management Control (UTMC) update - Installation and maintenance of remote monitoring UTC equipment
- Traffic congestion schemes - Changing 5 Sites in Castle Without Ward to Microprocessor Optimised Vehicle Actuation (MOVA), reducing delays and increasing capacity
- Traffic signal review – Dedworth Road / Hatch Lane, Windsor
- School cycle / scooter parking – various sites in Windsor
- Safer Routes to School – various site in Windsor