

**West of England Partnership
Joint Scrutiny Committee
23 January 2009**

Transport and Air Quality

Purpose of the Report

1. At the 10th October 2008 meeting the Joint Scrutiny Committee received a working draft report on the Joint Local Transport Plan (JLTP) Progress Review. The Committee noted the report and requested further information on the issue of transport and air quality (ref WEPJSC 52.10/08).
2. A brief presentation will be given to illustrate the main issues highlighted in this report.

Background

3. Transport emissions have a significant influence on the quality of air in the West of England and for this reason Council strategies to improve air quality have been integrated into the JLTP. JLTP targets have been set for reducing 'annual mean roadside Nitrogen Dioxide (NO₂) levels' in the sub-region's two 'Air Quality Management Areas' (AQMAs) in Bath and Bristol.

Air Quality Management Areas

4. AQMAs are 'declared' where air quality is above national thresholds. Our two AQMAs cover the central areas of Bath and Bristol (see Maps below). In Bristol, the AQMA has been recently amended to remove the Avonmouth area but to include the A432 Fishponds Road corridor. The AQMA in Bath has been significantly increased to cover major roads in and on the approaches to the city centre.

Progress with the Targets

5. Data for 2007 show that we are currently off-track to meet JLTP targets. In Bristol, conditions improved significantly between 2004 and 2005 but have worsened since and show that we are above the planned trajectory (Figure 1). In Bath, conditions worsened in 2005 and 2006, although 2007 saw a significant recovery, although still some way off track (Figure 2).

Figure 1 Air Quality in Bristol Air Quality Management Area
Based on ug of Nitrogen Dioxide/ M³

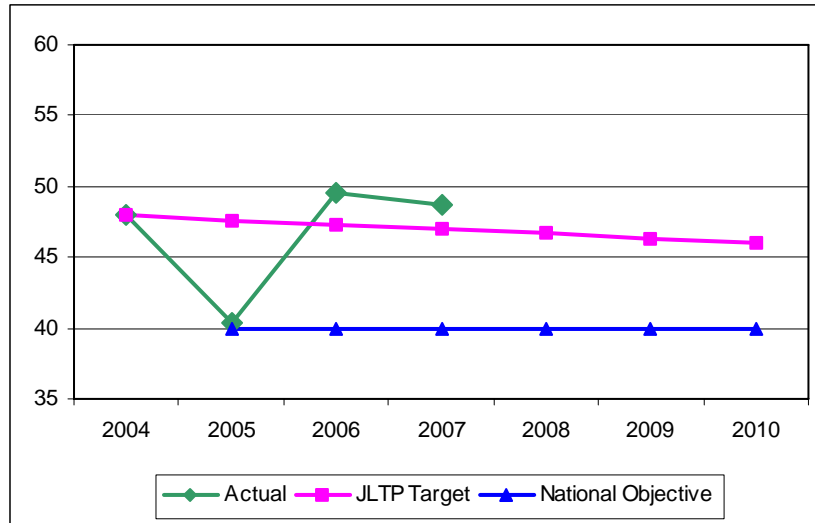
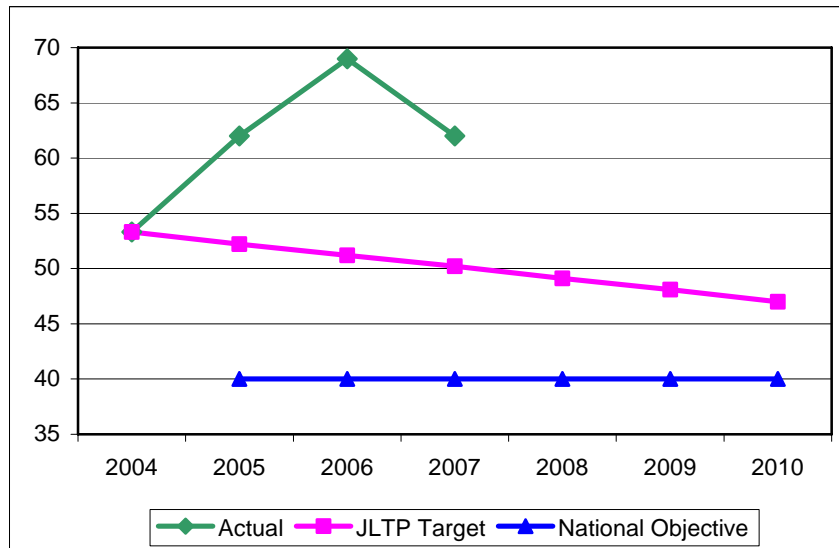


Figure 2 Air Quality in Bath Air Quality Management Area
Based on ug of Nitrogen Dioxide/ M³



6. The reasons for these fluctuations are not certain. Whilst the JLTP Review shows that sub-regional traffic has grown by 4% since 2004, morning peak traffic flows into Bath and Bristol city centres have actually decreased by 3.6% and 8% respectively. However, variable weather conditions will have influenced air quality along with disruption on the highway network associated with the delivery of city centre developments.
7. However, recent research suggests that, whilst NO_x emissions are falling, the main cause for increased NO₂ emissions levels is likely to be the growth in the number of diesel cars and light goods vehicles. With a greater proportion of NO₂ being emitted directly from the tailpipes of diesel vehicles concentrations of NO₂ at roadside sites are at best levelling off and at worst rising. Information from the Core Cities Transport Group suggests our experiences are not dissimilar to other large urban areas in England.
8. The 2007 data relate to the previous AQMA boundaries. Figures for 2008 will cover the new boundaries and may yield different results. We will keep the JLTP air quality

targets under review: delivery of the GBBN and Bath Transportation Package major schemes in particular could be linked to more demanding targets.

Action Plans

9. The JLTP puts forward an action plan aimed at improving air quality across the West of England and specific action plans directed at the two AQMAs. There are four themes:

- Information and education – making people more aware of transport’s effect on air quality;
- Promotion and provision of alternatives – enabling people to choose to use more sustainable forms of transport;
- Managing the road network – addressing congestion problems; and
- Emissions management – promoting less polluting vehicles and driving methods.

Information and Education

10. Actions under this theme are focusing on:

- ‘Hearts and minds’/ influencing travel behaviour/ more environmental information;
- Promoting ‘smarter choices’;
- Travel plans for schools and workplaces to reduce car dependency;
- Better information for drivers and bus passengers through deployment of variable message signs and real time information; and
- ‘Personalised travel planning’ projects.

Promotion and Provision of Alternatives

11. Under this theme the aim is to give people the opportunity to use alternatives to the car. Recent and future actions include:

- Comprehensive renewal of the bus fleet in Bath and extended park and ride operating times in the city;
- Launch of A420 showcase route with new low emission buses;
- Implementation of Greater Bristol Bus Network major scheme to provide new showcase routes with extensive bus priorities, infrastructure enhancements, new services and fleet of new low emission buses;
- Further work on Bath Transportation Package major scheme to deliver new showcase bus routes, the sub-region’s first rapid transit route, expansion of existing park and ride sites and a new A4 Eastern Bath site, together with HGV management, pedestrian improvements;
- Enhanced park and ride facilities, including a proposed site near Bristol Parkway station, and the expansion of the existing site at Portway;
- Better rail stations, more Severn Beach services, new Bristol bus station, Bath city centre bus interchange at SouthGate;
- Greater Bristol ‘Cycling City’ and continuing investment in cycle infrastructure;
- More facilities for pedestrians and delivery of local safety schemes;

- Expansion of the car club networks in Bath and Bristol; and
- Range of measures through Bath's EU CIVITAS Renaissance project including cycle hire scheme and city centre environmental, safety and security enhancements.

Managing the Road Network

12. In line with the JLTP air quality action plan and the requirements of the Traffic Management Act 2004 we are aiming to achieve freer flowing traffic, especially at congested peak times. Actions being taken include:

- Implementation of measures to relieve congestion hotspots put forward in the Congestion Delivery Plan agreed with DfT, aided by performance-related funding;
- Expansion of Urban Traffic Management and Control network in Bath and Bristol and investment to address congestion hotspots such as Junction 3 of the M32;
- Greater role for the Bristol Traffic Control Centre in monitoring the road network and bus movements, better reaction to incidents and congestion and future civil enforcement of moving traffic offences;
- Expansion of freight consolidation for Bristol city centre deliveries and providing similar facilities for Bath;
- Residents parking schemes to discourage car commuters
- Parking charges in Bath and Bristol city centres set to discourage long stay parking for commuters; and
- Future extensions in residents parking schemes in both Bath and Bristol.

Emissions Management

13. Improved engine technology, alternative fuels and changes in driving habits can all assist in reducing emissions. The actions we are undertaking include:

- Introduction of the Bus Emissions Management Project with First in Bristol to provide upgrades to engine management systems on buses and improved performance in terms of emissions;
- Investment in alternative fuels for council vehicle fleets;
- Use of electric vehicle for Bristol Freight Consolidation Centre deliveries;
- EU CIVITAS Renaissance project in Bath to investigate alternative fuels; and
- Continuing 'eco-driving' training.

Future Challenges

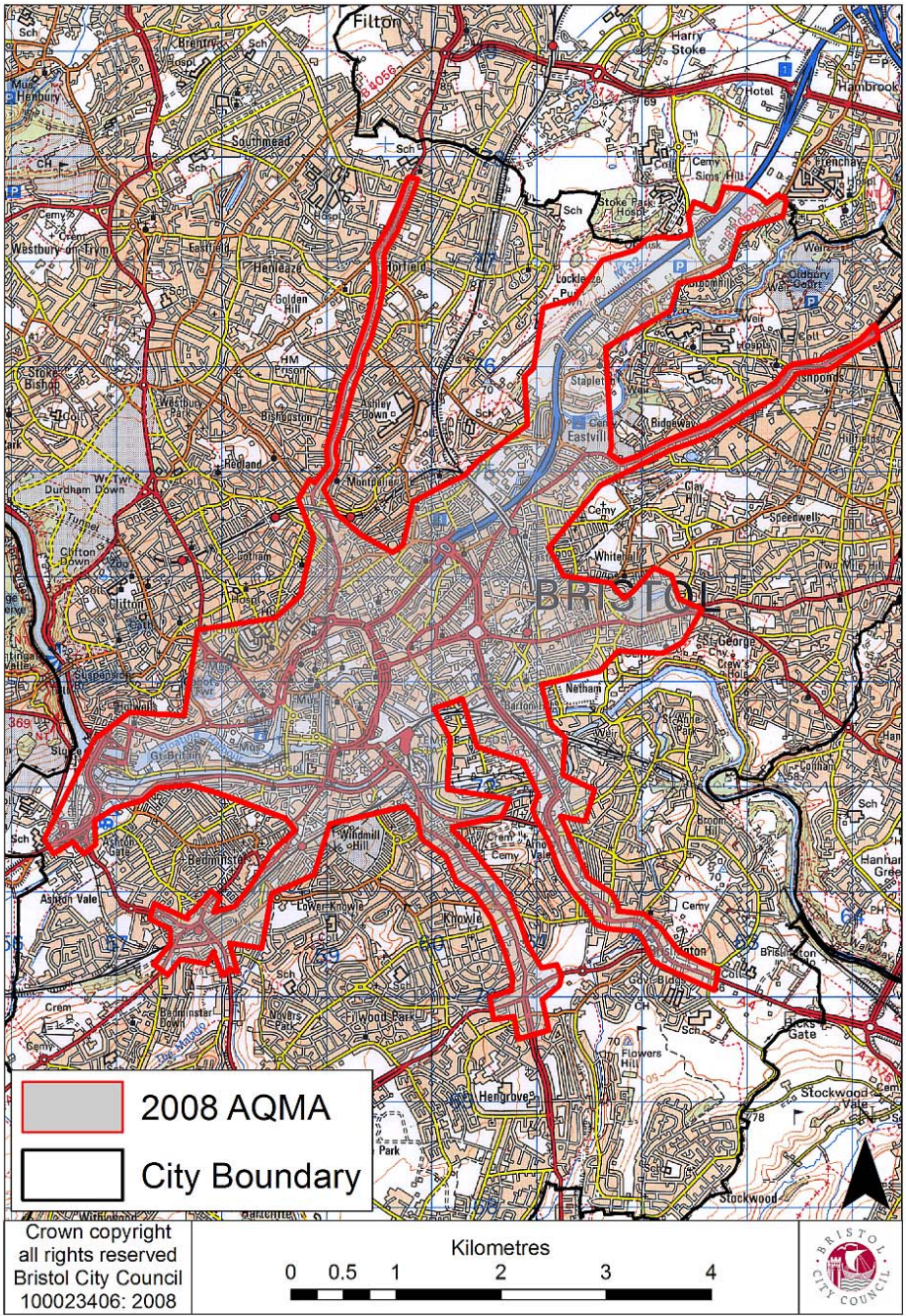
14. The JLTP runs until March 2011 and we will continue to track NO₂ concentrations against the targets set for the Bath and Bristol AQMAs. Traffic flows in the short term may also be affected by wider economic conditions. Transport demands are likely to arise however as central area regeneration and redevelopment progresses, for example the opening of the SouthGate retail complex and implementation of schemes at Harbourside and Western Riverside. To minimise additional vehicle emissions we will need to ensure that new trips are offset by mode shift away from the car for existing land uses.

15. In future years, background traffic growth associated with forecast residential and employment development across the sub-region will raise similar challenges, and the next tranche of major schemes, including Rapid Transit, will assist in addressing the air quality implications.

Recommendation

That the Committee notes the report.

Officer presenting report: Bill Davies, West of England Partnership



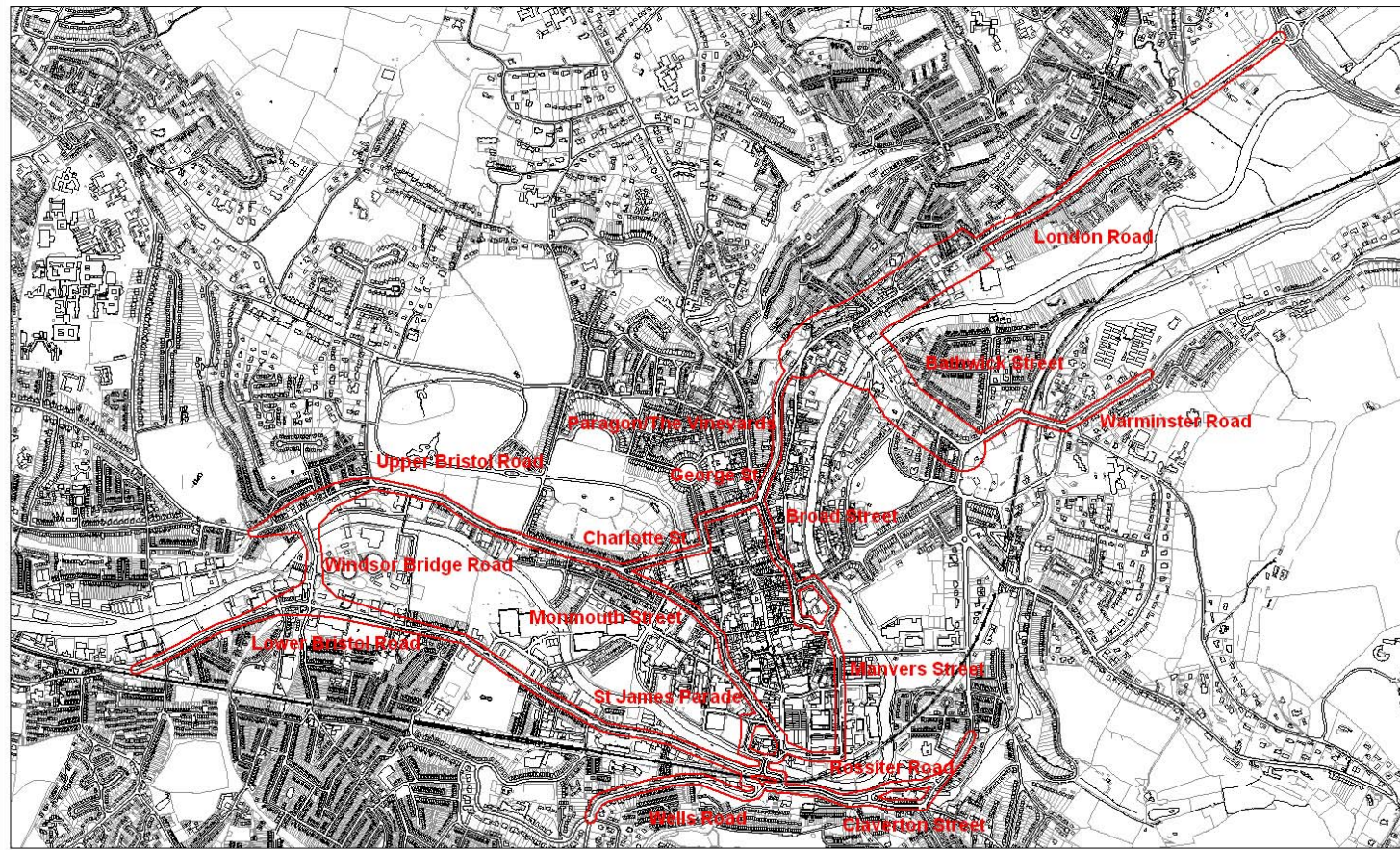
Amendments to Air Quality Management Area 2008

NO2 Annual Mean

Compiled by N. Courthold on 20 February 2008

Scale 1:11500

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