APPENDIX J

WAVERLEY BOROUGH COUNCIL

EXECUTIVE – 05/03/2013

Title:

AIR QUALITY - FARNHAM TRAFFIC MANAGEMENT AND LOW EMISSION FEASIBILITY STUDY REPORT

[Portfolio Holder: Cllr Bryn Morgan]
[Wards Affected: All]

Summary and purpose:

To update the Executive on progress with the Council's Defra- (Department for Environment Food and Rural Affairs) funded Air Quality projects. To receive the final report for the (above) Farnham project and endorse its recommendations.

How this report relates to the Council's Corporate Priorities:

Value for Money: Under the requirements of the Local Air Quality Management (LAQM) process, as set out in Part IV of the Environment Act 1995, the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents, the Council is obliged to regularly review and assess air quality in the Borough, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are considered likely, the Council must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

Waverley's AQMAs were declared due to pollution from traffic; thus measures to improve Air Quality are beyond the remit of the Council. Instead, many of the significant measures identified in the AQAP require input from Surrey County Council, but the potential effectiveness of the suggested actions has not been fully assessed. In order to determine the potential for pollution reduction measures in Waverley, a series of projects, in partnership with Surrey County Council and funded mainly by Defra, is underway.

Understanding Residents' Needs: Feedback from Farnham residents, interest groups and Farnham Town Council indicates pollution levels in Farnham are of real concern. Surrey County Council is responsible for potential changes to the existing traffic management regime. In order to provide additional information to help in their decision-making process, properly validated and auditable findings on emissions mitigation measures will be made available as a result of these studies.

Environment: Reductions in pollution are closely related to reductions in carbon-use; measures that identify improvements in Air Quality are likely to improve sustainability.

Financial Implications:

The Council's duties under the LAQM process mean pockets of poor Air Quality have been identified. In order to focus improvements in AQMAs on measures that have the best potential to reduce pollution, the efficacy of those measures must be assessed before being considered for putting into practice – Defra recognises this and has funded a series of projects in Waverley to better inform the decision-making process.

The grants from Defra total £81,500 to-date. The initial project was supported with £21,500 in November 2011. The funding round in 2012 realised a further £60,000 for the 3 current projects – as detailed in the Capital Monitoring Programme.

Under the Localism Act 2012 provision is made for passing fines levied by the European Commission (EC) on the UK to Local Authorities. The UK failed to meet its national air quality objective targets in 2010 and is likely to fail again in 2015. As a result of these AQ projects, the Council will be in a stronger position than other local authorities to defend the passing down of fines by Westminster.

Any grant monies provided by Defra remaining unspent shall be repaid.

Legal Implications:

The Council has a legal duty under the Environment Act 1995 to regularly assess and review air quality within the Borough. Undertaking the proposed measures would assist the Council in meeting that duty.

Background

1. The Council's Overview & Scrutiny Committee (18 June 2012) and Executive (3 July 2012) requested that Surrey County Council and other bodies continue to try and make changes to air quality in the Borough and across Surrey. Previous efforts had focussed on behavioural change and awareness-raising schemes but it is difficult to show empirically what effects, if any, these have had.

2. In 2008-09, Waverley's first AQAP identified a number of physical actions that would, it was felt, play key roles in improving areas of poor air quality. Many of these measures relied on major schemes outside the remit of the Local Authority and beyond the scope of air quality legislation. The AQAP is reviewed annually and, in 2011, application was made to Defra to grant fund a project intended to identify the benefits of the AQAP's main actions and to rank them in terms of pollution reduction: the "Farnham Traffic Management and Low Emission Feasibility Study".

3. The Council's Environmental Health Service submitted a detailed project to Defra which was funded by them in November of that year. Working in partnership with Surrey County Council, and taking into account the interests raised by Farnham Town Council, the UK's leading air quality consultancy (AEA Technology) was engaged to:

- Model the baseline pollution emissions from traffic in the Farnham AQMA at that date
- Model a variety of scenarios identified in the AQAP in terms of pollution reduction; including traffic management measures, HGV changes, changes in speed limits, etc.
- Model future emission levels if changes recommended in the AQAP were in place and rank them
- Investigate the feasibility of changes to the environs of the Farnham level crossing area
- Provide commentary on options that were worthy of progressing or could be determined otherwise

4. The report at Annexe 1 contains the findings of this study. The document at Annexe 2 is an accompanying 'frequently asked questions' paper to assist in summarising the report's main findings.

Introduction

5. Waverley's statutory Air Quality Action Plan lists a number of measures commonly expected to reduce the amounts of pollution in the three AQMAs (at Farnham, Godalming and Hindhead). It is anticipated that the A3 tunnel at Hindhead will allow for the revocation of the associated AQMA. The AQMAs for Godalming and Farnham remain due to the continuing exceedence of NO_2 levels above the UK Air Quality Objective target level.

6. In the early years of the LAQM regime there was an expectation nationally that pollution levels associated with traffic would drop, as cleaner and more efficient vehicles and fuels were introduced. In fact, the amount of traffic appears to have risen to such an extent that these qualitative gains have been overshadowed by quantitative losses. As a result, in 2012 the government published new, higher emission factors for use with pollution modelling. The mix of diesel and petrol engine vehicles has also changed beyond the proportions anticipated early on in the LAQM regime.

7. The Council, in meeting its duties for measuring and reporting on air quality data, has (like many other Local Authorities) identified traffic related pollution as the main cause for concern. Outside of London there are only two out of over 200 AQMAs where physical measures such as low emission zones or traffic management measures have been adopted. Such measures are the responsibility of the Highways Authority – in order to better inform their future design and implementation processes, the findings of this local study should show the potential outcomes of the various actions proposed.

8. Thus, when considering future road or traffic management changes that affect Waverley's AQMAs, the County Council will be able to have regard to professionally researched findings not available elsewhere in Surrey. It is hoped that these findings will contribute to any future decisions on such changes.

9. The main findings of the study (Section 4 of the report) are:

1. The introduction of a 20 m.p.h speed limit would not reduce pollution levels sufficiently to warrant further consideration and is likely to worsen air quality through most of the town
2. Reducing access to HGVs is insufficient to significantly reduce pollution levels due to their small overall contribution to pollution. However, in combination with other measures, this could help improve overall pollution levels
3. A low emission zone for buses and goods vehicles is insufficient to reduce pollution levels due to their small overall contribution to pollution. However, in combination with other measures, this could help improve overall pollution levels
4. Measures to reduce congestion likewise would not significantly reduce pollution levels but could, in combination with other measures, help improve overall pollution levels
5. Restricting access to the town centre for diesel engine cars would have a significant impact on pollution levels such that national air quality objective target levels might be achieved
6. Changes in traffic circulation could achieve a significant impact on pollution levels such that national air quality objective target levels might be achieved

10. It is important to note that the results and recommendations of the report are based on modelling of emissions from vehicles using Farnham. The modelling tool cannot design traffic management models, pedestrianisation schemes or other regimes that might affect pollution levels – the feasibilities of such measures must be assessed separately along with all other necessary considerations.

11. The assessment of measures at the Farnham level crossing remains outstanding. This area is not part of the Farnham AQMA, although levels of NO_2 are near the UK Air Quality Objective trigger point. The effects of an automatic signage system, designed to encourage drivers in queuing traffic to turn off their engines, is being assessed.

12. The initial, draft findings of the Farnham report were reported to the project Steering Group during the period that Defra allowed submissions for further grant funding (July to September 2012). Following discussions with Farnham Town Council and other partners, submissions were made for four further air quality projects:
    - a detailed study of the traffic modelling that would come out of the current report
    - an Economic and Health Impact Assessment of the existing and future impacts of pollution on Farnham
    - a similar traffic management and low emission study of the Godalming AQMA, and
    - an awareness raising and behavioural-change project on behalf of the Town Council

13. Funding was again very limited and the majority of proposals around the country were refused. However, the Council was successful in receiving backing for three of the four projects, the exception being the Town Council initiative. The success of these submissions has encouraged the Council's partners to continue with extensive survey work, data collection and scoping work. It is important to recognise the contributions of Surrey's Public Health, Health Protection and Transport Planning staff, both in reaching this stage and for the work ahead.

14. As a result 2013 should see the completion of all the current recommendations, the level crossing study and the Godalming project. The findings from which will be directed to the appropriate channels, e.g. Surrey County Council's Farnham Transport Strategy group and their Local Committee, for consideration.

Conclusion

15. Measures exist whereby the levels of traffic-related NO_2 in Farnham could be brought down to annual average levels below the UK objective trigger. The highest ranked of these are through changes in traffic circulation and through restrictions on diesel cars. The latter finding was unexpected but is of national significance in the debate between pollution reduction and carbon-use reduction.

16. However, these measures are not stand-alone items that can be introduced independently of other factors: cost, physical constraints, business considerations, residents' wishes, existing planned development, health impacts, and so on. Their efficacy needs to be looked at through a more rigorous and detailed study and such a study would include a full feasibility assessment of these approaches.

17. The report recognises that pollution reduction is one of many considerations when proposing significant changes to existing infrastructure. It recommended (Section 6 of the report) that changes in traffic circulation be subject to detailed traffic modelling and then reviewed to see if the air quality objectives would be achieved. Also that an economic and health impact assessment is undertaken to examine the feasibility of such measures and finally, that measures be considered to raise awareness on diesel vehicles' polluting effects and if steps could be taken to achieve a reduction.

18. The learning coming out of the Farnham report is valuable and can be shared both locally and nationally. A similar study should be undertaken for the Godalming AQMA. The level crossing study findings should also be made available on completion.

Recommendation

That the Executive:

1. endorses the report *Farnham Traffic Management and Low Emission Feasibility Study;* and

2. supports the further air quality projects funded by Defra:

   - a detailed modelling study of traffic circulation changes and diesel car use;
   - an economic and health impact assessment of the feasibility of this detailed modelling study; and
   - a Godalming traffic management and low emission feasibility study.

Background Papers

There are no background papers (as defined by Section 100D(5) of the Local Government Act 1972) relating to this report.

CONTACT OFFICER:

Name: Colin Giddings **Telephone:** 01483 523435
E-mail: colin.giddings@waverley.gov.uk