

## DEFRA LOCAL AUTHORITY AIR QUALITY GRANT 2011/2012 – PROGRESS REPORTING

Under the air quality grant terms and conditions, local authorities awarded grant are required to provide a progress report on the supported project(s) around October the year after the grant has been paid to the authority. Reports should be provided on an annual basis for the duration of the project, including a report produced upon completion of the project. The form set out below should be used to report progress in all cases. Please return completed form/s to the email address; [air.quality@defra.gsi.gov.uk](mailto:air.quality@defra.gsi.gov.uk).

**1. Local authority name, key contact details and project title/code.**

Please provide the lead local authority name, contact details for the lead project contact and the title and reference number of the project.

The lead contact for the project is [REDACTED] Land and Air Quality Manager Aylesbury Vale District Council's Pollution Control Team. The Project Team will be the Pollution Control Section of Environmental Health at Aylesbury Vale District Council.

[REDACTED]  
[REDACTED]  
Aylesbury Vale DC  
66 High Street  
Aylesbury  
Bucks  
HP20 1SD

[REDACTED]  
[REDACTED]  
[REDACTED]  
Ref Project Number:xxxxxxxx

**2. Provide a brief description of the project.**

Please provide a brief description of the project and its aims. Please include details of project partners and division of work. Refer to Section 2 of the Project Plan if no changes to initial plans have occurred (300 words or less).

Aylesbury District Council commissioned AEA to develop the Aylesbury Vale Emission Inventory to investigate the effects of a range of options taken from the Air Quality Action plan on emissions of oxides of nitrogen. The NO<sub>2</sub> emissions throughout the town have increased significantly in the past 5 years, with rapid development and an increase in traffic. This has resulted in severe congestion in many parts and now following another Detailed Assessment the Council is considering declaring the whole town an AQMA.

In this circumstance, a range of new widespread measures needs to be considered with policy and evidence based decisions on implementation. This process has begun in conjunction with the County Council through the implementation of a UTMC. Detailed road traffic surveys have been undertaken. This specific project will use these data to ascertain the most cost effective measure or package of measures to meet the emission reduction necessary. The range of measures include a focus around the optimisation of the UTMC to improve congestion, but also around the introduction of cleaner vehicles into the town focussing on buses and HGVs through the feasibility of a Low Emission Zone study.

The aim of this project is to provide the evidence base for local decision makers. The project is to further develop and build upon the UTMC baseline emissions inventories (base year and projected year) to include domestic sources (i.e. houses) and other major sources including industry and commercial (as point sources/area sources as appropriate). The Borough and County Council have almost completed the baseline inventory which comprises of detailed traffic data for each road link together with detailed emissions from all SNAP code sectors. This has enabled detailed traffic modelling of the town and surrounds which has allowed us to understand the emission profile and provide the basis for measure examination.

The original project plan was designed as three stages process described in Work Packages with well-defined tasks and Key Milestones. The project delivery team includes Air Quality Team and Transport Steering Group, which includes members from:

- Aylesbury Vale D Senior Management
- Aylesbury Vale Council Cabinet Member for the Environment
- AVDC Spatial planning
- AVDC Climate Change Section
- AVDCMBC economic development
- Bucks Highways Services
- Bucks County Council Transport Planners
- Bucks County Council Sustainable transport team
- Highways Agency
- Bucks County Council Public Health Department

The delivery of the project was divided by Work Packages:

The Work Package 1 - *Baseline Inventory Development* developed by AEA with the data providers Transport team from Buckinghamshire County Council and Jacobs Engineering UK Ltd.

Work Package 2 - *Identification of measures* led by the delivery team which Air Quality Team and Transport Steering Group.

Work Package 3 - *Evaluation of measures* managed and developed by Air Quality Team and AEA.

<b>Project Status</b>	<b>Y/N?</b>
Is the project complete?	N

**3. Please Indicate which study area(s) / emissions source(s) are relevant to this project.**

<b>Study Area(s)</b>	<b>Y/N?</b>	<b>Emission Source</b>	<b>Y/N?</b>	<b>Pollutant</b>	<b>Y/N?</b>
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Low Emission Zones	Y	Cars	Y	NO <sub>2</sub>	Y
Emissions Abatement Technology	N	HGVs	Y	PM <sub>10</sub>	Y
Remote Sensing	N	Buses	Y	Other (CO <sub>2</sub> )	Y
Communication	N	Trains	N		
Monitoring	N	Biomass	N		
Modelling	Y	Other	Y		
Behavioural Change	N				
Fleet Improvement	N				
Traffic Management	N				
Other	N				

#### 4. Progress to Date

Please provide a brief description of the work carried out to date (500 words or less), with reference to key milestones. This should include whether or not the project is proceeding in accordance with the estimated timescales in Section 3 of the Project Plan. Where delays have occurred, an indication of revised project timescales should be provided.

The project was designed as three work packages with a specific tasks and milestones relevant to each work package.

The project was commenced with a short consultation period with the project delivery team, air quality and transport steering group and other identified stakeholders including commercial transport operators and local business to understand the overall emphasis or preference for either low emission zones or schemes and share the successful consultants experience and knowledge to help steer later phases of work.

The outputs and Key Milestones of Work Package 1 identified at the proposal stage were met. These were:

- 1) Inception Stakeholder Meeting took place on 20<sup>th</sup> February 2012
- 2) Minutes of the meeting were provided
- 3) Identification of schemes to be taken through to Work Package 2 – potential Low Emission Schemes were considered for work package 2 meeting

The tasks in Work Package 1 include:

- \* Updating the Aylesbury Vale Emission Inventory 2010 to include more recent traffic data and the most recent emission factors from the National Atmospheric Emission Inventory - **completed**
- \* Updating the inventory to include the emissions from domestic, commercial, industrial and other transport sources - **completed**
- \* Using the LADSurban model to estimate nitrogen dioxide concentrations at locations throughout Aylesbury town for the current baseline conditions – **completed**
- \* Comparing the predicted concentrations at the locations of automatic monitors and diffusion tubes with the measured concentrations in order to validate the model – **completed**

#### WP2: Scoping Phase

##### Summary of Work Package

Work to assess the potential benefits of several options and to prioritise them with the steering group. At this stage screening tools are appropriate and the priority is to quantify the potential emissions reductions and air quality benefits of the options. Domestic and commercial emissions to be added to the existing traffic emissions inventory to facilitate measure impact. Approximate health benefits, implementation and enforcement feasibility issues. Measures to be considered could include the introduction of Low emission zones or schemes, pedestrianisation, controlled parking, bus age limits and HGV age limits.

##### Outputs and Key Milestones of WP2

- 1) Stakeholder Scoping Event
- 2) Briefing report considering schemes identified at inception phase.
- 3) Identification of data requirements to carry out detailed assessment WP3. This will include the identification of supplemental traffic data/modelling that may be required.
- 4) report will be produced providing details of the methods and outcomes of the inception and scoping phases (within 4 months of contract award).

##### Tasks in WP2 and who will carry them out

- 1) Stakeholder Scoping event - Project Team meeting which took place at Buckinghamshire County Council in Aylesbury on 26<sup>th</sup> April 2012 – **completed**
- 2) Minutes of Stakeholder Scoping Event – **completed**
- 2) Screening assessment – Consultant (all schemes are to pass to detailed phase as those deemed feasible for implementation in light of other local policy were recommended for detailed analysis)
- 3) Identification of missing data for detailed assessment of schemes to be taken to detailed assessment - Consultant & KCC Transport Planner – **completed**.
- 4) Instigation of supplemental traffic data acquisition if required. Project Lead & BCC Transport Planner Traffic data gaps, meeting took place with Thames Valley Police and Bucks County Council to gain ANPR vehicle data on 22 May 2012. **completed**
- 5) Write Inception/Scoping report – Consultant – *This was subsumed into work package 3.*

WP3  
Detailed Assessment

Summary of Work Package

A small number of preferred options will be taken forward from the scoping phase and a full analysis of each carried out.

A high level of quantitative detail is possible depending on the traffic and stakeholder data available. Where data is not available the Project Lead will work with the air quality consultant and BCC Transport planners to, where possible, acquire the required modelling or surveys. Details of this cannot be provided at this time as it is dependent on WP1&2.

The detailed assessment will include an environmental assessment of the LEZ options, particularly those related to climate change.

Outputs and Key Milestones of WP2

- 1) Final Report detailing the project work which provides the evidence base for local decision makers. – *in progress*
- 2) The report will provide detailed air quality impact analysis of proposed schemes– *in progress*
- 3) The report to provide recommendations that will assist in implementing the assessed schemes. – *in progress*
- 4) Stakeholder Project Closure Event to disseminate the findings of the report to stakeholders. *To be completed*

Tasks in WP3 and who will carry them out

- 1) Data Acquisition - consultant
- 2) supplemental data acquisition - Project Lead & BCC Transport Planners
- 3) Quantitative assessment of schemes - consultant
- 4) Final report - Consultant
- 5) Stakeholder Closure Presentation - Consultant & Project Lead (to be held at AVDC Offices).
- 6) Stakeholder Project assessment questionnaire - Consultant & Project Lead.

5. Project Outputs

Please provide a summary of any initial or final observations / conclusions that can be drawn from the project, and in particular, details of any observed or estimated reductions in emissions and / or pollutant concentrations (500 words or less).

A complete list of project outputs (both completed and expected) should also be provided including the date of publication and location / source from which the outputs can be obtained. Electronic copies of any completed outputs should be submitted alongside this form.

Measures being modelled in detail:

POTENTIAL AIR QUALITY IMPROVEMENT MEASURES TO MODEL:

Introduction of Western Link Road - Funding is in place and work has already started on the Western Link Road - due for completion by late 2013. This will potentially shift a significant amount of traffic off of the Bicester Road, Buckingham Road etc.

Introduction of Northern part of Eastern Link Road and Stocklake Link - Funding has also been secured for these link roads, although work is not due to start for a few more years (2015). This will potentially shift a significant amount of traffic off of the Tring Road etc. AEA will model the potential impact of this, in combination with the Western Link Road.

Introduction of signalisation on Tring Road – BCC are replacing the mini roundabouts at the junction with Oakfield Road etc, to improve the flow, as a result of / condition of Arla. AEA will model potential impact of this in combination with any of the above link road components that are also to be in place at the same time.

Introduction of Minimum Bus Emission Standards – BCC stated that the bus contracts are up for renewal next year so it is a good time to negotiate on this front in terms of a low emission strategy.

Modelling is underway and the report for comment is expected to be submitted to the Council by the end of November 2012.

**6. Problems faced**

Please provide a brief description of any problems faced or anticipated that may or have affected project outcomes or the timescales for delivery (500 words or less).

The late delivery of the real traffic counts data and modelled traffic data to Aylesbury Vale DC and subsequently to AEA was one of the problems the project team encountered. The Transport team at Buckinghamshire County Council manages the collection of the real traffic data for Aylesbury Vale DC. The up-to-date data recorded at the real traffic counts had to undergo a validation process and was only provided in July 2012. Additionally the Transport team at Buckinghamshire County Council commissioned Jacobs Engineering UK Ltd to develop the Aylesbury Transport Model 2010 using the VISSIM software package in order to investigate the effect of infrastructure developments on road traffic. The modelled traffic data developed by Jacobs Engineering UK Ltd was provided to AEA in August 2012.

Lastly the project team hoped to receive the ANPR data from the Buckinghamshire County Council to enrich the Baseline Inventory with the detailed traffic data. This however was not possible.

**7. Knowledge Transfer**

Where possible, please provide an evaluation of the project against the plans for knowledge transfer detailed in Section 5 of the Project Plan (500 words or less)

**8. Project Evaluation**

Where possible, please provide an evaluation of the project against the success criteria detailed in Section 7 of the Project Plan (500 words or less)

**9. Financial Performance.**

Please provide details of the anticipated project spend at this stage of the project, the actual project spend, and the reasons for any difference between these figures.



Signature of Officer at the local authority



Name of local authority

Aylesbury Vale D.C.

Date

13/11/12