



Report of the Director of City Development

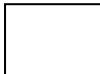
Executive Board

Date: 27 July 2011

Subject: LOW EMISSION ZONES – COUNCIL RESOLUTION 6 APRIL 2011

Electoral Wards Affected:

None



Ward Members consulted
(referred to in report)

Specific Implications For:

Equality and Diversity

Community Cohesion

Narrowing the Gap

Eligible for Call In



Not Eligible for Call In

(Details contained in the report)



EXECUTIVE SUMMARY

1. At the Full Council meeting on 6 April 2011 Members resolved to request that Executive Board undertake a study into the feasibility of implementing a Low Emission Zone (LEZ) in Leeds.
2. LEZs are areas where the most polluting vehicles, generally goods and public service vehicles, are restricted from entering an area either through a ban or alternatively a charge for non compliance.
3. Currently the London LEZ which covers most of Greater London and imposes a charge on non compliant vehicles is the only scheme operating in the UK. A second LEZ for Oxford city centre which will be restricted to buses is in preparation.
4. In general the effect of an LEZ is to accelerate the modernisation of the vehicle fleet to higher emission standards than would otherwise occur through the investment cycle.
5. To understand the feasibility of an LEZ it is critical to define its scope and understand the likely impact on vehicle operators. It is also necessary to consider how enforcement would be undertaken in order to determine the costs and benefits.
6. This report sets out the options and recommendations for considering an initial LEZ feasibility study for Leeds.

1.0 Purpose Of This Report

1.1 This report addresses the request of Full Council for a feasibility study into the establishment of a Low Emission Zone in Leeds to be undertaken.

2.0 Background Information

2.1 At the 6th April 2011 Council meeting Members RESOLVED –

“That this Council recognises the health and environmental benefits of reduced air pollution to Leeds communities, especially those in inner city areas, and notes the success of the Low Emissions Zones in London and Oxford which prevents the most polluting vehicles from entering the city.

Council therefore requests the Executive Board to undertake a feasibility study with a view to implementing a similar scheme in Leeds.”

2.2 Low Emission Zones (LEZs) are areas where access for the most polluting vehicles is restricted by regulation and enforcement with the objective of reducing exhaust emissions from vehicles, mainly fine particles (PM10), oxides of nitrogen (NOx) and indirectly ozone..

2.3 Over 70 cities and towns in 8 countries around Europe operate or are preparing Low Emission Zones where the most polluting vehicles are regulated, to help meet the EU health-based air quality limit values. This means that certain vehicles may be banned or in some cases charged if they enter the LEZ. Generally LEZs operate 24 hours a day, 365 days a year. Schemes can be phased in to allow time for vehicle owners and operators to meet the compliance standards.

2.4 Vehicle emissions are classified by the so-called "Euro Standards" which provide maximum permitted emission levels for NOx, PM10, carbon dioxide (CO₂) & Hydrocarbons for the vehicles that they affect. Before entering a LEZ, drivers need to know the emissions standard of their vehicle. Different vehicles can be regulated, depending on the local conditions. All LEZs affect heavy duty goods vehicles (usually over 3.5 tonnes Gross Vehicle Weight (GVW)), and most buses and coaches (usually defined as over 5 tonnes GVW). Others also affect diesel and petrol cars; for example in Italy motor cycles and three-wheelers are also included. There are currently two examples of LEZs in the UK: Greater London and a scheme in development for Oxford city centre.

2.5 The London LEZ is a large scheme covering almost all Greater London. First introduced in 2004 the scheme operates full time and now covers all heavy goods vehicles, buses and coaches. At present to be compliant vehicles have to meet the Euro 3 particulate matter standard, however from 3 January 2012 the standard is to be raised to Euro 4 and large vans and minibuses are to be included. The scheme operates by Order and is enforced across London, such that non compliant vehicles are liable to a daily charge.

2.6 A second scheme now being prepared for Oxford city centre will require all buses operating in the city centre to meet the Euro 4 standard by 1 January 2014. This scheme is being specifically designed to tackle air quality issues relating to oxides of nitrogen. It is proposed that the scheme is implemented by a Traffic Regulation Condition made and enforced by the Traffic Commissioner.

- 2.7 Unravelling the technical case and benefits for an LEZ is a complex matter. This needs to have regard for trends in vehicle emissions; the Euro standard classifications of traffic flows in the area under consideration; and the particular air quality issues pertaining in the Leeds area. Studies off existing LEZs appear to show the biggest benefits are from reduced particulate emissions from the larger diesel engines,. There can also be associated benefits of reduced CO₂ emissions through the introduction of more economical vehicles.
- 2.8 The two main traffic based pollutants of concern in Leeds are PM10 and NO₂, both of which have known impacts on health which can contribute to premature deaths from heart and lung disease, as well as increased hospital admissions and absences from school or work and restricted activities related to asthma attacks. Whilst air quality in Leeds meets the EU directive objective levels for PM10, it is a widely held belief by the medical profession that there is no known safe level below which adverse effects will not occur. Conversely, Leeds has a number of areas that are in breach of the objective levels for NO₂ although the NO₂ is generally considered to have lower health impacts at the levels set by the directive than PM10.
- 2.9 However, no current LEZ appears to have had any significant impact on the concentrations of NO₂. This is because whilst the Euro Standards for diesel engines which power the largest most polluting vehicles have successfully reduced fine particulates, they have not been as successful at reducing levels of NO₂ in the atmosphere. This is a concern as it is concentrations of NO₂ that has required Leeds to declare Air Quality Management Areas. On the other hand the standards have been successful in dealing with PM10 and recent health research suggests that standards which further reduce fine particulates may be warranted.
- 2.10 The complexities of LEZ enforcement also rises significantly as the area covered and vehicle classes included increases. For this reason schemes have been generally limited to the heavier most polluting vehicles. Similarly, so far pollutants rather than carbon emissions have been the focus of measures. All schemes require the ability to accurately classify and segment vehicle flows in order to understand their fit with Euro standards and determine the optimum thresholds for any scheme.
- 2.11 The development of an LEZ therefore requires a very detailed understanding of the extent and nature of the air quality issue and the main contributory factors arising from vehicle emissions. The basis for this will be the Air Quality Action Plan (AQAP) which identifies the designated Air Quality Management Areas and Areas for Concern and the associated annual air quality review and assessment process.. A more accurate knowledge of the local vehicle fleet make up will be needed so that the different emissions scenarios can be simulated to assess the impacts of alternative LEZ options. Such information is not available in from local data and so will require reference to vehicle licensing record held by the Driver Vehicle Licensing Agency.

3.0 Main Issues

- 3.1 The decision as to whether a LEZ is the right solution to an identified air quality issue is a complex one which needs to have regard for:
- The nature and extent of the air quality problem.
 - The policy outcomes being sought, for example health and quality of life
 - The range of alternative options considered for managing the problem

- Identification of the target area and scheme boundaries
- Scope of the scheme
- Consultation and engagement, with communities, stakeholders, transport users and operators
- Legal and regulatory decisions on the form of scheme
- Enforcement strategy
- Scheme definition, design and cost
- Establishment and operating costs; and
- The investment case
- Impact on the local economy

- 3.2 Members of Council have requested that Executive Board considers undertaking a feasibility study. Since at the present time it is unclear what the impacts of a LEZ would be, a feasibility study offers the opportunity to investigate and test the efficacy of LEZ measures for air quality management in the city alongside the other traffic management and transport policy tools identified in the Local Transport Plan. However, there would be a significant procedural, technical and cost issues associated with progressing an LEZ scheme, so it is important the first feasibility steps are well designed and scoped to answer decision makers' key questions at each point in the process.
- 3.3 Whilst this report has offered limited advice on the basis of available information and officers can contribute knowledge from existing work on air quality management and transport and traffic planning, further expert input will be needed. Therefore any feasibility study will need to draw on information and specialist advice not available from within the Council. Since there is considerable uncertainty about the merits or otherwise of an LEZ for Leeds it is suggested that there is benefit in undertaking an initial feasibility study so that the issues and case for an LEZ can be more fully understood.
- 3.4 At present no specific funding is available within present budgets to fund a feasibility study. However, the Department of the Environment, Food and Rural Affairs (DEFRA) announced details of their Local Authority Air Quality Grant Programme for 2011-12 on 30 April. It is understood that DEFRA are interested in the role LEZs may play in supporting improved air quality and demonstrating action to address European standards. The deadline for bids was 17 June and therefore a bid for funding has been submitted to register the Council's interest in funding an LEZ study. A funding decision is expected on 31 July and if successful the bid should enable procurement for study to commence later in this year.
- 3.6 Further progression of a study will contingent on funding. The estimated cost of an initial feasibility study is £55,000 including the purchase of suitable vehicle licensing data and specialist analysis and advice to support the work of officers. Should the DEFRA application not succeed officers are examining alternative routes to funding including considering priorities in the Local Transport Plan programme.

4.0 Implications For Council Policy And Governance

- 4.1 An LEZ feasibility study would support action planning for the delivery of the Council's Corporate Priorities for health and wellbeing and would also contribute to the development of actions to support delivery of West Yorkshire Local Transport Plan policies in terms of transport emissions and efficient freight transport.

4.2 At this stage further consultation on the issue of an LEZ has not been undertaken. It is expected that the product of a study would assist in informing the Council's position on LEZs. The study would be the basis for subsequent consultation with stakeholders including transport operators, the Highways Agency, Metro, businesses and communities. The Director of Public Health would be consulted on the study specification. Similarly a study would provide the basis for a future evaluation of equality impacts.

5.0 Legal And Resource Implications

5.1 This report has no specific legal implications at this time. The conduct of a feasibility study, if progressed, will establish the options for regulating an LEZ for further consideration depending upon the conclusions of the report.

5.2 This report details the submission for DEFRA grant funding to cover the costs of a feasibility study. If successful it is anticipated that this will meet the costs for the feasibility study as requested by Council Members. Should the application be unsuccessful, the report has detailed actions officers will pursue, to provide Members with further advice on this matter.

5.3 The report has identified an estimated cost of £55,000 for a feasibility study. Subject to funding being in place a suitable project specification will be prepared for the procurement of the required advisory services to support the work of officers. The officer input will be provided from existing resources within the City Development and Neighbourhoods and Environment Directorates.

5.4 The establishment of an LEZ would clearly be a significant financial undertaking which is not provided for within current budgets. Further work on this issue would provide a firmer understanding of the risks in terms of achieving outcomes and project delivery. Subject to the proposed feasibility study going forward a future progress report will enable Members' to give this issue further consideration.

6.0 Conclusions

6.1 In response to the resolution of Council requesting a feasibility study into a Low Emission Zone for Leeds the issue has been reviewed further and this report identifies that there would be merit in undertaking such a study. The Air Quality Action Plan identifies key areas relating to transport emissions where an LEZ may be a route for improvement. However, the impacts are unclear and further advice is needed to ascertain whether an LEZ would be an appropriate and deliverable measure, worthy of further consideration and consultation. Specific budget provision for a feasibility study has not been made, however an application has been submitted to DEFRA for grant funding which if successful will meet the costs of a study.

7.0 Recommendations

7.1 Executive Board is requested to:

- i) Consider the content of this response to Full Council's resolution requesting a study into the feasibility of establishing a Low Emission Zone in Leeds.
- ii) To note and endorse the bid which has been made to DEFRA in respect of funding.

- iii) Subject to the DEFRA funding bid being successful to approve the further development of proposals for an initial feasibility study and to receive a further progress report in due course.

8.0 Background Papers

8.1 Background information supporting this report is as follows:

- i) Leeds Air Quality Action Plan, 2004, 2004
- ii) Air Quality Progress Report, 2010