



## **AIR QUALITY AND VEHICLE EMISSIONS**

### **INTRODUCTION**

This appendix contains further information on the effects of air quality and the long term trends in the levels of pollutants.

In addition it contains a summary of the AQAP for the Leeds AQMA.

### **THE HEALTH EFFECTS OF AIR POLLUTANTS**

Air pollution can seriously affect the health of people living in urban and sometimes rural areas.

Short-term high pollution episodes can trigger acute health related problems to vulnerable people suffering from cardio-vascular or respiratory diseases. Scientific evidence suggests that long-term exposure to air pollution can cause chronic effects on health that can lead to premature death. Source: Committee on the Medical Effects of Air Pollutants (COMEAP).

Primary road transport pollutants such as nitrogen dioxide (NO<sub>2</sub>) and fine particles can cause both acute and chronic health effects on vulnerable members of the population. It is therefore important that the LTP2 can provide measures to help reduce emissions of these pollutants.

The West Yorkshire Transport and Health Group estimated in 2001 (based on national statistics from the COMEAP) that transport related premature deaths from air pollution in West Yorkshire could be as high as 457 premature deaths each year. Stress and anxiety are also secondary health impacts arising from the effects of air pollution. There is evidence that certain groups in the population are more affected (women, older citizens, and people suffering from respiratory or coronary illnesses).

### **TRENDS IN URBAN AIR QUALITY**

Since the introduction of the National Clean Air Acts in the late 1950s there has been a general improvement in the standard of air quality in West Yorkshire. The improvement is mainly attributable to changes in the types of industry that dominate in the region, anti-pollution legislation and a switch away from coal and oil towards much cleaner fuels.

Since the more visible types of pollution have declined, other types of pollution have become more prevalent. Road transport emissions are now the major source of urban air pollution in West Yorkshire. The following types of emissions have been contributing to poor air quality in some areas:

- Nitrogen Dioxide (NO<sub>2</sub>);
- Particulate Matter (e.g. PM<sub>10</sub>);
- Carbon Monoxide (CO);
- Lead (Pb); and
- Sulphur Dioxide (SO<sub>2</sub>);

As car ownership and total distance travelled have continued to grow over time, there has been an accompanying increase in emissions, particularly around areas of traffic congestion.

The levels of emissions are now lower than was previously the case. However, the adverse health effects that they have, even at lower levels, will continue to make the reduction of them in West Yorkshire one of the main priorities.

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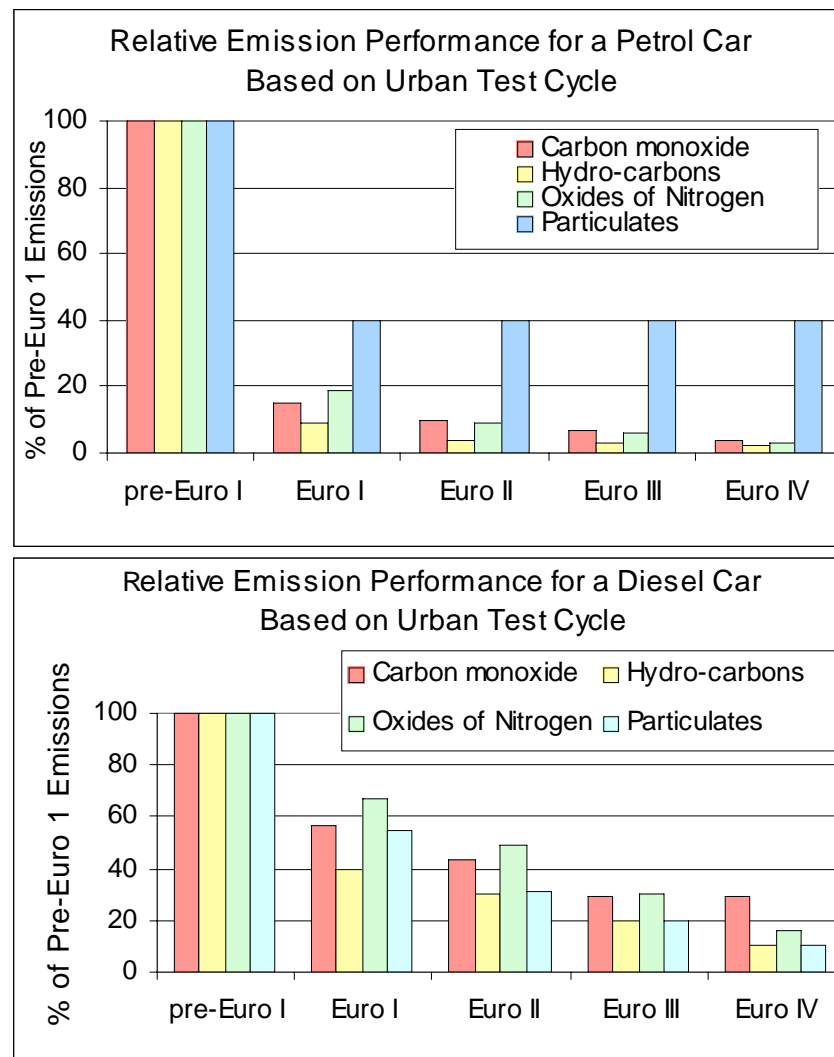
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#### The impact of the Euro Standards on transport emission reduction

A series of European Commission (EC) Directives were developed in the 1980s that have helped mitigate increases in road transport emissions. Fuel quality standards were introduced to reduce Pb, benzene and sulphur contents of both petrol and diesel. Great benefits were subsequently achieved in terms of reduced exhaust emissions of Pb and carbon particulate matter, hydrocarbons and SO<sub>2</sub>.

Additional legislation was introduced to stringently regulate emissions for different categories of vehicle types. These became known as the 'Euro' Emission Standards. The Euro I emissions standard for new petrol cars was introduced in 1993. This standard made vehicle manufacturers incorporate 3-way catalytic converters, which were able to reduce tailpipe emissions of NO<sub>x</sub>, CO and hydrocarbons by up to 90% compared to Pre-Euro I vehicles. The introduction of subsequent Euro Standards have continued to improve the emission performance of new vehicle engines (see figure D.1).

**Figure D.1 Changes in Car Exhaust Emissions with the Euro**



**Standards for Petrol and Diesel Engines**

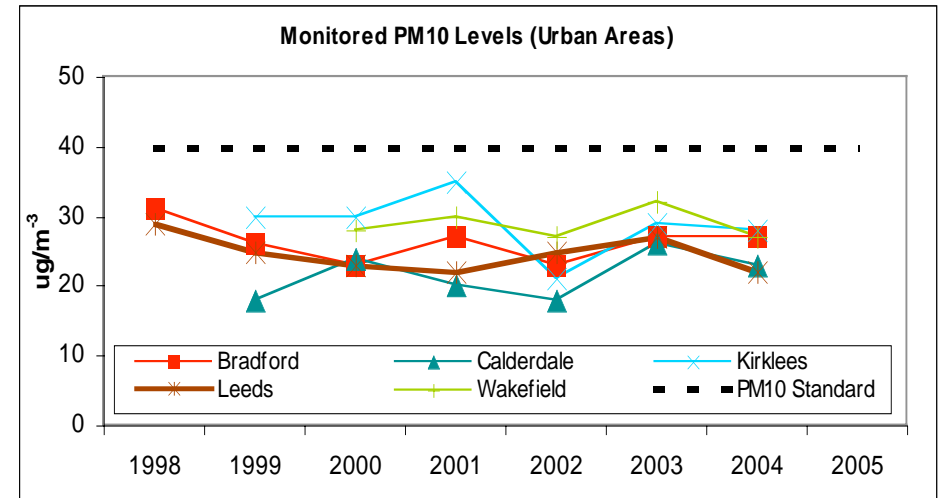
**TRENDS IN URBAN WEST YORKSHIRE**

In response to the Euro Standards, urban air quality has steadily improved nationally since the early 1990s. However, in recent years this improving trend is showing signs of becoming more variable. The figures D.2 and D.3 summarise the results of air quality monitoring in West Yorkshire urban areas since 1998. The broken horizontal lines here represent the NO<sub>2</sub> and PM<sub>10</sub> annual average air quality standards that should be met by the end of 2004 (PM<sub>10</sub>) and 2005 (NO<sub>2</sub>).

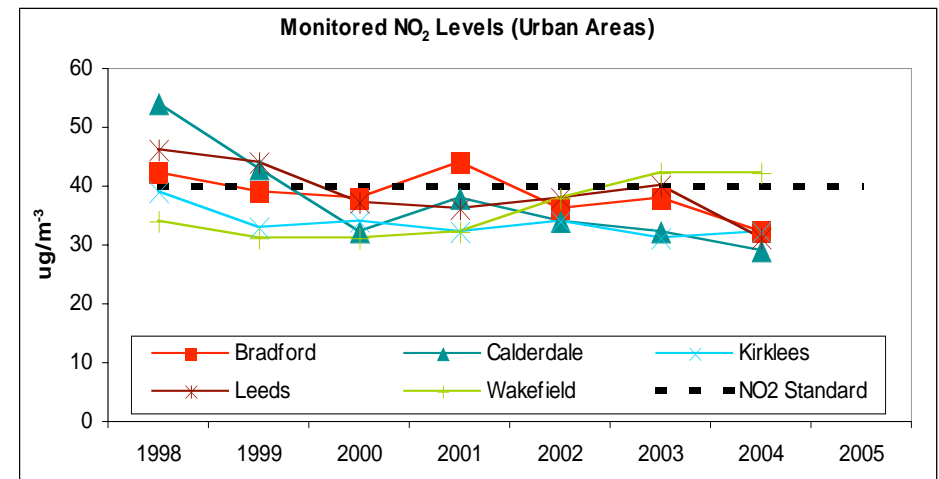
The following factors all play an important role in controlling our urban air quality:

- growth in transport movements;
- the peak period lasting longer and associated congestion;
- atmospheric chemistry and effects on NO<sub>2</sub> emissions;
- the prevailing weather conditions and climate change; and
- the shape of the urban and rural landscape.

**Figure D.2 West Yorkshire Annual Average PM<sub>10</sub> Monitoring – Summary Data**



**Figure D.3 West Yorkshire Annual Average NO<sub>2</sub> Monitoring – Summary Data**



**Summary Data**

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#### ***The growth in transport movements***

The strong growth trend in transport movements in West Yorkshire are described in Part 1. Increased traffic growth together with peak period congestion is starting to work against the benefits achieved by the Euro Standards. The effects of traffic congestion are difficult to predict, but it is estimated that exhaust emissions could increase by 20% to 30%, when traffic flows are congested. Between them, the two peak periods produce disproportionately higher rates of emissions (55% of the total emissions on a typical weekday).

#### ***Short car journeys***

Short car journeys can have a significant effect on elevating road traffic emissions. For example, in the vicinity of schools, local traffic flows can increase 20% between 08:00 and 09:00. This additional traffic will generate local congestion for commuting traffic. The effects of short journeys to schools and other destinations will further exacerbate emissions due to the problems of 'cold starts'. Emissions from modern catalyst cars can increase 10-fold during the first kilometre of a journey, prior to the engine warming and the efficient operation of the catalyst.

#### ***Changing weather conditions***

The effects of the weather, especially wind speed and stability, is an important factor for local air quality. Some weather conditions act to reduce the level of pollutant dispersion. This can create significant local and sometimes regional problems with poor air quality. Despite small variations in daily road traffic emissions, the resultant air quality, or pollutant concentrations, can increase greatly in West Yorkshire due to the effects of weather conditions.

#### ***Climate change***

The effects of climate change are now in evidence in national weather patterns. Our local and regional air quality will be effected by this. The UKCIP(02) Scenarios for UK Climate Change forecast

that the following climate change induced conditions may occur with increasing frequency:

- hotter summers increase incidence of photochemical pollution, creating low level ozone and acidic fine particles;
- drought conditions will generally increase PM<sub>10</sub> re-suspension within the vicinity of highways; and
- possible increase in storms that will help disperse pollution during the winter period.

#### ***The shape of the urban and rural landscape***

The shape of the natural and built (urban) landscape can modify the impacts of air quality. Valleys and street canyons within built up urban areas, (both characteristic of West Yorkshire), tend to trap pollutants such as vehicle exhausts, and this can lead to deterioration in local air quality.

### **ATMOSPHERIC CHEMISTRY**

Chemical reactions between emissions in the atmosphere are complicating factors. The introduction of the Euro standards have significantly reduced primary emissions of oxides of nitrogen (NO<sub>x</sub>), primarily (nitric oxide (NO) + NO<sub>2</sub>) from road transport between the early 1990s and the present day. This information is backed up by the APR data 2003/04, where predicted emissions of NO<sub>x</sub> from the principal road network of West Yorkshire, identified a 22% reduction between the years 2000 and 2003. But the actual NO<sub>2</sub> levels have not responded in a similar way across West Yorkshire.

This has been caused by urban atmospheric chemistry, which has resulted in greater levels of NO being converted to NO<sub>2</sub>.

Atmospheric chemistry is complex and little understood. As a result Leeds University has been asked to research this issue as part of the current partnership working on issues related to transport and air quality management.

### **AIR QUALITY STANDARDS**

The NAQS (2000) sets health based standards for seven air pollutants. This strategy specifies mandatory limits and makes the review and assessment of local air quality a requirement for all district authorities.

The review and assessment process involves a combination of air quality monitoring and modelling, against the standards for O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10s</sub>, SO<sub>2</sub>, CO, Pb, Benzene; and 1,3-Butadiene.

Not meeting the standards for any of the above pollutants (non-compliance) requires declaration of an AQMA together with the preparation of an AQAP to help mitigate the problem. AQAPs are also required for sites deemed to be AOC.

### **AIR QUALITY AND ECONOMIC GROWTH**

The conflict between increased traffic levels and associated air quality issues resulting from economic growth is an issue to resolve. This is particularly the case when delivering sustainable growth and spreading the success of the Leeds economy have become regional priorities.

Conflicts in priorities can arise if areas targeted for regeneration already have problems with local air quality. Any increases in traffic could potentially result in air quality standards being breached. An example is the A62 Leeds Road corridor in Huddersfield, which is identified as an AOC but is also targeted for future industrial development in Kirklees.

### **THE INFLUENCE OF VEHICLE TYPES**

In the Transport White Paper the Government has set targets for a greater use of low-carbon emitting cars and buses.

Average household car ownership levels are increasing in West Yorkshire (0.98 cars per household in 2001, compared to 0.82 in 1991). Households and businesses now have more opportunity of reducing the level of emissions they produce through their choice of vehicles for personal or business use.

With the increase in motorcycle use, which is noted by the DfT as a better alternative to the car in terms of air quality, there is the opportunity to encourage the use of lower powered motorcycles emitting far less pollution.

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**Table D.1: LEEDS' Air Quality Action Plan**

A Study is currently being undertaken to report on the progress of this Action Plan

Action	Who	Implementation	Completion date	Cost	Potential Air Quality Improvement	
<b>OBJECTIVE 1 TRAFFIC DEMAND MANAGEMENT METHODS</b>						
<b>A</b>	<b>SUPERTRAM</b> To construct and operate three major routes from Leeds City Centre to Park and Ride sites outside the Outer Ring Road. (Total Length 28km)	Approval of funding awaited from DfT Supertram Consortium	Bid Evaluation starts October 2002 Construction programme depends on DfT approval	Early 2008	High	Moderate / High Potential to reduce total commuting traffic by 5%
	Supplementary Planning Guidance (SPG) No. 5 on Supertram contributions, which seeks planning obligations from all new appropriate development to fund the Supertram initiative, is intended to be widened to support a fund for public transport in general	Development Department				
<b>B</b>	<b>Quality Bus Corridors (QBC's)</b> i) A65 Kirkstall Road QBC	DfT provisional approval for scheme designed by Development Department (Transport Planning)	Initiate preliminary design. Preparation of orders and relevant planning processes.	2008	High	Low Benefits of the QBC schemes should increase with time.
	ii) A653 Dewsbury Road QBC	Development Department	LTP	Early 2006	Low	Low
	iii) Burley Road Bus Priority	Development Department	LTP	2005	Moderate	Low
	iv) A61 Hunslet Road QBC	Development Department	LTP	2006	Moderate	Low
	v) East Leeds QBC	Development Department	LTP	2001	High	Low

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Action		Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
	vi) A61 Scott Hall Road Guided Bus Route	Development Department	LTP	1998	Moderate	Low
	vii) Leeds Bradford Road Bus Priority	Development Department	LTP	2007	Moderate	Low
	viii) Bus priority junction improvements and bus stop accessibility improvements	Development Department	LTP	2003-2006	Moderate	Low
<b>C</b>	<b>HOV LANE</b> A647 Stanningley Road	Development Department	Increase of CAR Occupancy (ICARO) European project Demonstration project 1997	Project made permanent Year 1999	Low	Low
	The combined effects of the corridor treatments listed in B) and C) above could reduce commuting traffic by up to 5%					Moderate / High
<b>D</b>	<b>FISCAL RESTRAINTS</b> Implement parking zones / discourage long stay parking	Development Department	LTP	On going	Low	Low
<b>E</b>	<b>PROMOTE CYCLING AND WALKING</b> i) Cycling Strategy	Development Department	LTP Cycle Action Plan	Approved 2002	Moderate	Low
	ii) Pedestrian Strategy	Development Department	LTP Pedestrian Action Plan	2001	Moderate	Low
	iii) Access Strategy	Development Department	LTP Action Plans in place to implement DDA (part 3)	2004	Moderate	Low

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Action		Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
	iv) The Council will form a new City Services Department which will bring all streetscene issues together in one department. This will ensure the highest possible streetscene standards which will encourage walking and cycling	City Services Department	April 2003	April 2003		Low
	The UDP contains car parking maximum guidelines, including the discouragement of long stay parking in the City Centre and the encouragement of cycle parking provision. Maximum guidelines offer the opportunity for no parking to be provided where appropriate	Development Department	Ongoing		Low	Low
<b>OBJECTIVE 2 REDUCE NEED TO TRAVEL</b>						
<b>A</b>	<b>TRAVEL PLANS</b>	Development Department	LTP / Travelwise	Proposed 6 further Plans during 2002/03	Low	Low individually
	i) Workplace / Travel Plans Through ongoing work with private sector business and public sector organisations		37 Plans introduced by 2001/02			Low / Moderate collectively
	ii) Development / Travel Plans Travel Plans are sought in association with new development that has significant trip generation	Development Department	LTP / Travelwise 33 Travel Plans attached to Planning Applications by 2001/02	Proposed 20 further Plans attached to Planning Applications 2002/03	Low	Low individually Low / Moderate collectively
	iii) School Travel Plans	Development Department	LTP / Travelwise, 38 School Travel Plans introduced 2001/02	Proposed 20 further Plans during 2002/03	Low	Low individually Low / Moderate collectively
	iv) Departmental Travel Plan	Development Department	Departmental Rideshare scheme introduced & Travel audit 2002	Full Travel Plan to be introduced 2002/03	Low	Low

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Action		Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
	v) European "Toolbox" Travel Plan Resource Kit	Development Department + several European Partners	European funding through the SAVE 2 programme	Toolbox used as a Travel Plan aid 2001/02	Low	Low Used to aid design the individual travel plans listed above
<b>B</b>	<b>LAND USE PLANNING</b> The Council will support the development of a safe transport system which achieves the most efficient movement between homes, jobs and facilities, promotes economic development and protects the environment. This aim, which includes (especially in the light of Planning Policy Guidance 13: Transport) reducing reliance on the private car, is implemented throughout the UDP, specifically in the transport, shopping, employment, housing, leisure and access for all chapters	Development Department	Ongoing	Ongoing	Low	Low
	The Council is trialling "Work/Life Balance" in various departments. This scheme includes measures such as homeworking and teleworking etc which will reduce the need for some Council employees to travel	All departments	Current trials in various departments		Low	Low
<b>C</b>	<b>TRAVELWISE CAMPAIGN</b> i) Environmental Awareness Campaigns	Development Department	Green Transport Month Events organised by Travelwise	Annual Events	Low	Low
	ii) Green Vehicle Trials	Development Department			Low	Low
	iii) Alternative Fuel Trials	Development Department			Low	Low
<b>D</b>	<b>LAND-USE PLANNING / UDP</b> i) EIA Air Quality Assessments	Development Department The Air Quality Management Team (AQMT)	LTP / UDP aid to scheme design EIA Regulations NAQS	Scheme dependant	Low	Low

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ii) EIA Screening Model	Development Department	Incorporated within a sustainability model, considers EIA for all transportation schemes	Scheme dependant	Low	Low / Moderate Combined effect of all small schemes.
The current Urban Capacity Study is identifying brownfield housing opportunities within a Priority Area only (defined by its accessibility to public transport)	Development Department	Ongoing		Low	Low
The UDP allocates land specifically for public transport initiatives e.g. park and ride schemes, Supertram, A65 quality bus initiative	Development Department	Ongoing		Low	Low
Planning Briefs highlight the need for sustainable design and transport and a reduced reliance on the car	Development Department	Ongoing		Low	Low
Retail development is required to locate in town centres in accordance with <i>Planning Policy Guidance 6: Town Centres and Retail Development</i>  This is also supported by <i>Supplementary Planning Guidance No. 2: Leisure Developments and Other Key Town Centre Uses</i> which takes <i>Planning Policy Guidance 6: Town Centres and Retail Development</i> into consideration	Development Department	Ongoing		Low	Low
Town Centre Action Plans and Market Town Initiative aim to support town centres and amongst other issues support public transport improvement	Development Department	Ongoing		Low	Low
Supporting the City Centre as <i>inter alia</i> a focus for District-wide trip generators:  The City Centre is promoted and protected as hub for retail, leisure and employment opportunities	Development Department	Ongoing		Low	Low

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<p>The Plan is also supporting the development of major residential development in the City Centre and Town Centres. Holbeck Urban Village seeks to promote live/work and high technology industries in a site which has high public transport accessibility</p> <p>Environmental initiatives around City Station and the Bus Station</p>	Development Department	Ongoing		Low	Low
<p>It is intended to introduce a more solid base for sustainable development in the Reviewed UDP, to include:</p> <ul style="list-style-type: none"> <li>- a sustainability appraisal of the Review which may include air quality or reducing the need to travel indicators</li> <li>- more sustainable design policies</li> <li>- a focus on sustainable urban regeneration and brownfield re-use in areas accessible to public transport</li> </ul>	Development Department	Ongoing		Low	Low
<p>The layout of a site is particularly important for movement and transport; individual developments should ensure ease of movement for pedestrians and cyclists as a priority</p>	Development Department	Ongoing		Low	Low
<p>Rat running in residential areas should actively be avoided. Safe Routes to School schemes should be considered to discourage exacerbating "the school run". Travel Plans are sought in association with major development to facilitate assessment of transport impacts and encourage the reduction in the use of the private car. Car-free development is also encouraged</p>	Development Department	Ongoing		Low	Low

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Action	Who	Implementation	Completion date	Cost	Potential Air Quality Improvement	
<b>OBJECTIVE 3 IMPROVEMENTS TO HIGHWAY NETWORK</b>						
<b>A</b>	<b>EAST LEEDS LINK ROAD (ELLR)</b> (Scheme includes HOV/HGV lane)	Development Department	Enabled "indirect" air quality improvements and implementation of East Leeds QBC along A63 / A64	2005	High	Low / Moderate
<b>B</b>	<b>COMPLETION OF INNER RING ROAD</b> (stage 7)	Development Department Scheme accepted by DfT	LTP major scheme should reduce congestion in areas close to AQMAs	2007	High	Low / Moderate
<b>C</b>	<b>A6120 OUTER RING ROAD ROUTE STRATEGY</b>	Development Department	Development of a long term strategy and investment plan for the A6120, to be implemented through LTP2	2006 – 2011	High	Moderate
<b>D</b>	<b>UTMC SYSTEM</b> (PHASE 2 UPGRADE) Improved traffic management at congested junctions and QBC schemes	Development Department	Upgraded UTMC will promote smooth flow, and aid traffic demand management. UTMC area extended, with development of new inter-phase to promote operation of Public Transport & Supertram system	Scheme dependant 2001 onwards	Moderate	Moderate

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Action		Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
<b>OBJECTIVE 4 ACTIONS TO REDUCE VEHICLE EMISSIONS</b>						
<b>A</b>	<b>REMOTE SENSING / EMISSION TESTING</b> Trialing of remote sensing to target gross polluters	Development Department TRL Huddersfield University	Travelwise, working with Vehicle Inspectorate using remote sensing as a screen for gross polluters	1998 - 2001	Low	Low
<b>B</b>	<b>LOW EMISSION ZONE (LEZ)</b> Feasibility air quality assessment of LEZ inside Inner Ring Road	Leeds University in collaboration with Development Department	Master of Research (MRes) Student project to be fully evaluated in terms of air quality & AQMAs	2002	Moderate Difficult to enforce	Moderate locally Low overall. Similar benefits are likely to occur with time due to fleet clean-up
<b>C</b>	<b>BIOGAS PROJECT</b>	Various Depts AQMT Consultants	EU Target Project / LTP / Travelwise pilot study set up, Biogas refined into Methane	Project failed 2002	Low	
<b>D</b>	<b>COUNCIL'S OWN FLEET</b> The Council will reduce vehicle emissions from its diesel fleet by continuing to run their vehicles on Ultra Low Sulphur Diesel (ULSD) fuel and by fitting all new vehicles with Continuously Regenerating Trap (CRT) equipment	Transport Agency, City Services Department	Ongoing	Ongoing		Low/Moderate
	The Council will ensure all new HGV units will comply with Euro III standard	Transport Agency, City Services Department	October 2002	Ongoing		Low/Moderate
	The Council will introduce vehicle safety/driving training initiatives which will contribute to more efficient driving and reduced fuel usage	Transport Agency, City Services Department	Ongoing	Ongoing		Low/Moderate

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Action	Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
The Council will use electric powered vehicles where possible for uses of less than 30 miles/day and will investigate the use of electric pool cars for out of town offices	Transport Agency, City Services Department	2002/03			Low/Moderate
The Council will use route planning to reduce HGV vehicle mileage	All Departments	Ongoing	Ongoing		Low/Moderate
The Council will utilise fuelling points located at strategically located Depot sites across the City to minimise journey time and mileage required for refuelling purposes	Transport Agency, City Services Department	Ongoing	Ongoing		Low/Moderate
<b>E COUNCIL CONTRACTORS</b> The Council will issue all Approved Contractors with the "Passport to the Environment" document and will hold workshops to help raise contractors' awareness of environmental issues	Procurement Unit, Legal and Democratic Services	Ongoing	Ongoing		Low/Moderate
<b>F LAND USE PLANNING</b> UDP Policy encourages freight transfer from road to rail and water	Development Department	Ongoing	Ongoing		Low
Support for using brownfield sites to aid urban regeneration rather than greenfield sites which tend to be on the edge of the urban area	Development Department	Ongoing	Ongoing		Low
The UDP supports town centres as hubs of public transport and the most accessible locations for major trip generators	Development Department	Ongoing	Ongoing		Low
The UDP aims to ensure that a wide range of shops is available in locations to which all sections of the community, including those without access to private cars, have access by a choice of means of transport	Development Department	Ongoing	Ongoing		Low

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Action	Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
<b>OBJECTIVE 5 ACTIONS TO REDUCE INDUSTRIAL AND DOMESTIC EMISSIONS</b>					
<b>A</b> <b>AUTHORISED PROCESSES – PART B AND INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC) PROCESSES A2</b> The Council will improve enforcement activities in respect of approximately 250 industrial processes it regulates under the provisions of Part I of the Environmental Protection Act 1990 and of the processes which fall under the provisions of the Pollution Prevention and Control Act 1999. The Council will continue its search for industrial premises which may be operating a prescribed process without an authorisation or permit	Authorisations team in Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium
<b>AUTHORISED PROCESSES – PART A AND IPPC PROCESSES A1</b> The Council will scrutinise the public register with regard to the enforcement activities of the Environment Agency in respect of the industrial processes it regulates under the provisions of Part I of the Environmental Protection Act 1990 and the Pollution Prevention and Control Act 1999	Authorisations team in Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium
<b>B</b> <b>EMISSIONS FROM CHIMNEYS</b> The Council will enforce the provisions of the Clean Air Act 1993 with respect to emissions of smoke from chimneys	Area teams in Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium

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Action	Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
<p><b>BOILER PLANT AND CHIMNEY HEIGHTS</b></p> <p>The Council will enforce the provisions of the Clean Air Act 1993 with respect to ensuring new boiler plant can operate smokelessly and approving the heights of chimneys</p>	Area teams in Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium
<p><b>C BONFIRES ETC</b></p> <p>The Council will enforce the provisions of the Clean Air Act 1993 with respect to emissions of smoke from bonfires anywhere in the city</p> <p>The Council will encourage residents to compost waste rather than burning it in bonfires</p>	Area teams in Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium
<p><b>D DUST AND SMOKE NUISANCE</b></p> <p>The Council will enforce the provisions of the Environmental Protection Act 1990 with respect to the emissions of dust from construction sites and other sources, and smoke nuisances throughout the city</p>	Area teams in Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium
<p><b>E ENERGY EFFICIENCY</b></p> <p>The Council will continue to implement its energy efficiency plans for both public and private sector housing to achieve improvements in energy efficiency which will result in improving air quality</p>	Energy Unit Environmental Health Services, Neighbourhoods and Housing Department	Ongoing	Ongoing		Low/medium
<p>The Council will continue to produce monthly reports on energy usage for Leeds City Council Buildings. Solid fuel and oil-fired plant will be replaced, where feasible, with low NO<sub>x</sub> natural gas fired plant to reduce emissions. Condensing boilers will be used unless contra-indicated</p>	Design Services Agency City Services Department	Ongoing	Ongoing		Low/medium
<p>The Council will encourage Combined Heat and Power (CHP) supporting layouts and designs</p>	Development Department				
<p>The Council will consider CHP schemes for its housing stock</p>	Neighbourhoods and Housing Department				Low

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Action		Who	Implementation	Completion date	Cost	Potential Air Quality Improvement
	The Council will provide advice to Small and Medium Sized Enterprises on energy usage to achieve improvements in energy efficiency which will result in improving air quality	Energy Unit Environmental Health Services, Neighbourhoods and Housing Department	Ongoing			Low
<b>F</b>	<p><b>DEVELOPMENT CONTROL</b></p> <p><i>Supplementary Planning Guidance No. 10 Sustainable Development Design Guide (SDDG)</i> encourages developers to examine the wider context of a site and appraise it with regard to sustainable development. [This encouragement is hopefully soon to be given a stronger Policy basis in the UDP Review where developers will be required to demonstrate by an appraisal of their development how they accord with <i>inter alia</i> SDDG principles.]</p> <p>This wider context includes levels of atmospheric pollution</p>	Development Department	Ongoing	Ongoing		Low
	The Development Department will consult with other Departments represented on the AQMT, where it is anticipated that air quality could be an issue (either the effect of development on air quality or the impact of air quality on development). For schemes which could have a significant impact on air quality, applicants will be encouraged to discuss with relevant officers at an early stage, preferably before an application is submitted, the form and content of an Air Quality Assessment report	Development Department	Ongoing		Low	Low

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<p>The Council will have regard to air quality objectives, the results of air quality reviews and assessments and the AQAP when considering planning applications</p> <p>Where the impact of any development is likely to be significant in air quality terms, the planning application may be refused, providing the impact relates to the use and amenity of land, and harm can be clearly demonstrated</p>	Development Department	Ongoing		Low	Low