

The London Borough of Hillingdon



Progress Report, 2006

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Executive Summary

This report provides an update on progress with the London Borough of Hillingdon's air quality action plan (AQAP), covering the period 2005-2006. It has been produced in accordance with guidance laid down by DEFRA. Hillingdon's plan is of national strategic importance as any further expansion at Heathrow Airport requires pollution levels in surrounding areas to be brought and maintained within the limit values defined by the EU Directive on air quality. A major concern in the development and implementation of the plan is that technological improvements to vehicles, domestic appliances, aircraft, etc. for improvement of local air quality do not lead to increased greenhouse gas emissions.

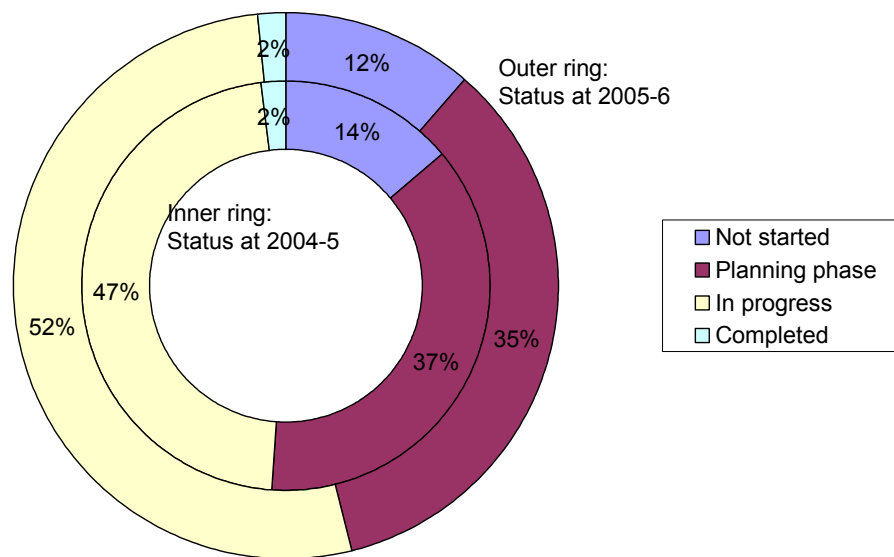
This year, unlike last, monitored pollution data is presented separately in the 'Updated Screening Assessment' (USA). The USA finds that:

- **National objectives for nitrogen dioxide were not achieved in all parts of the borough in 2005.** All locations exceeding the NO₂ objective are within the existing AQMA. Initial assessment for 2010 has indicated that there will continue to be exceedances in certain areas of the borough, especially in the south, around Heathrow.
- **National objectives for PM₁₀ for 2004 were achieved in 2005.** However, an initial assessment for 2010 forecasts that there will be exceedances, though at the present time this analysis has been undertaken only for information purposes as the 2010 objectives have yet to be adopted under the Regulations.
- **It is forecast that objectives for other pollutants have been, or will be, met.**

On this basis the AQMA, as currently declared, remains unchanged.

Trends in emissions need careful consideration. Reports such as AQEG's 'Nitrogen Dioxide in the United Kingdom' identify potential for future increases in primary NO₂ emissions and in future background ozone levels. These could negate future predicted decreases in NO₂ concentrations.

The action plan includes a large number of measures grouped into a series of eight packages dealing with cleaner vehicles, switching to cleaner transport modes, Heathrow Airport, improved energy efficiency, planning, etc. **This report shows that good progress has been made in the first 18 months of implementation of the plan.** The following figure shows that most measures are either at the planning stage or beyond. Comparing the latest information, shown in the outer ring, with information from the previous year (inner ring) provides a broad overview of movement through the chain from starting measures through to their completion.



% of actions listed in the various packages of the action plan in each stage of implementation

Measures that are still not started are typically not behind schedule, but are scheduled to start in future years. The fact that only two measures are so far complete is not of great concern, as it reflects factors such as the long term nature of the plan, the need to make funding applications for many measures, and the rolling nature of some programmes, such as Safer Routes to School.

Highlights of Action Plan implementation over the last year include:

- Integration of an air quality improvement programme into the Local Implementation Plan (LIP). All relevant transport measures from the Air Quality Action Plan have been incorporated and linkages made with other relevant areas of the LIP. This covers the following packages:
 - 1. Switching to cleaner transport modes
 - 2. Tackling through traffic
 - 3. Promotion of cleaner vehicle technology.

This is intended to secure a funding stream and, therefore, implementation of relevant transport measures within the action plan. It is also intended to ensure that air quality is taken into account in other areas of the LIP. Since submission of the LIP to Transport for London (TfL), Hillingdon have been awarded £60,000 for environmental improvements through the 2006/07 Borough Spending Plan.

- Continued involvement of council officers in the Project for the Sustainable Development of Heathrow.
- Development and piloting of “A Breath of Fresh Air” – a series of programmes of activities relating to air pollution, for children at Key Stages 1, 2 and 3. This

has been designed as part of the Safer Routes to School Programme. A CD of these programmes is provided with this progress report.

- Integration of air quality objectives into the Hillingdon Local Development Framework currently undergoing consultation. The need for a specific Southern Hillingdon Area Action Plan has been identified and improvement of air quality is one of the key objectives of the Plan.

Although much is being done to improve air quality in the Borough, **there are a number of significant new challenges to the plan:**

- Predicted increases in traffic
- Increased NO_x emissions from Heathrow Airport due to the operation of Terminal 5, from 2008. In addition, proposals for operating the existing runways on Mixed Mode, and for the addition of a 3rd runway will be consulted on during 2006 by DfT. These proposals are likely to add further pressure to the pollution climate of the area through increased traffic and congestion, and increased aircraft movements,
- Potential future developments reflecting The London Plan, and the related Hillingdon Local Development Framework. The majority of areas identified in these plans for Hillingdon are within the AQMA.

Ultimate responsibility for most of these sources lies not with the London Borough of Hillingdon, but with other bodies, such as the Department for Transport and the Highways Agency. In order to meet the standards it is therefore essential that these bodies back up Hillingdon in its actions.

Contents

CHAPTER 1 INTRODUCTION.....	1
1.1 OBJECTIVES.....	1
1.2 BACKGROUND TO THIS REPORT	1
1.3 MONITORING DATA	2
1.3.1 <i>Conclusions from the USA report</i>	2
1.3.2 <i>Additional monitoring</i>	3
1.4 TRENDS IN EMISSIONS OF NOX AND PM ₁₀	4
1.4.1 <i>Road traffic</i>	4
1.4.2 <i>Heathrow Data</i>	4
CHAPTER 2 OVERVIEW OF PROGRESS WITH THE ACTION PLAN.....	5
2.1 SITUATION	5
2.2 OPPORTUNITIES	6
2.3 DEMONSTRATION OF LINKS TO CLIMATE CHANGE POLICY.....	7
2.4 POSSIBLE PROBLEMS WITH THE PLAN	8
CHAPTER 3 SELECTED HIGHLIGHTS.....	9
3.1 PACKAGES 1, 2 AND 3 – TRANSPORT MEASURES	9
3.1.1 <i>Actions led by Hillingdon</i>	9
3.1.2 <i>Partnership activities</i>	10
3.2 PACKAGE 4 - HEATHROW	11
3.2.1 <i>Actions led by Hillingdon</i>	11
3.2.2 <i>Partnership activities</i>	11
3.3 PACKAGE 5 – LOCAL INDUSTRIES AND OTHER BUSINESSES	11
3.3.1 <i>Actions led by Hillingdon</i>	11
3.3.2 <i>Partnership activities</i>	11
3.4 PACKAGE 6 – PLANNING FOR A SUSTAINABLE FUTURE	12
3.4.1 <i>Actions led by Hillingdon</i>	12
3.4.2 <i>Partnership activities</i>	12
3.5 PACKAGE 7 – CORPORATE AND REGIONAL MEASURES.....	12
CHAPTER 4 CONCLUSIONS, AND THE WAY AHEAD	13
4.1 CURRENT SITUATION	13
4.2 PROGRESS WITH THE PLAN IN 2005/6.....	13
4.3 FUTURE PRIORITIES	14
APPENDIX 1: PROGRESS WITH THE ACTION PLAN	15
APPENDIX 2: INTEGRATION OF THE AIR QUALITY ACTION PLAN WITH THE LIP.....	44

List of Abbreviations

$\mu\text{g}/\text{m}^3$	Micrograms (10^{-6} , 0.000001, grams) of pollutant per cubic metre of air.
ALG	Association of London Government
AQAP	Air Quality Action Plan
AQEG	Air Quality Expert Group
AQMA	Air Quality Management Area
APPLE	Air Pollution Planning and the Environment group
ARC	Airport Regions Conference
ATM	Air Traffic Movements
BSP	Borough Spending Plan
CAEP	Committee on Aviation Environmental Protection
CHP	Combined Heat and Power
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EPU	Environmental Protection Unit
EU	European Union
GLA	Greater London Authority
HA	Highways Agency
HATF	Heathrow Area Transport Forum
HEX	Heathrow Express
HOV	High Occupancy Vehicle (typically, cars containing more than 1 person)
LA	Local Authority
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LARCS	Longitudinal Assessment of Route Characteristics
LDF	Local Development Framework
LEZ	Low Emission Zone
LIP	Local Implementation Plan
LPG	Liquefied Petroleum Gas
LSP	Local Strategic Partnership
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen (the mixture of NO and NO ₂ in the atmosphere)
PCT	Primary Care Trust
PM _x	Particulate matter with a diameter of x micrometres (typically 10, as in PM ₁₀) or less
PSDH	Project for the Sustainable Development of Heathrow
SCE	Supplementary Credit Expenditure
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
T5	Heathrow Terminal 5
TfL	Transport for London
USA	Updated Screening Assessment
WLA	West London Alliance
WLFQP	West London Freight Quality Partnership

Chapter 1 Introduction

1.1 Objectives

The objective of this report is to discuss progress in implementation of the air quality action plan developed for the London Borough of Hillingdon and published in 2004. The first progress report on the plan, published in 2005, included additional information on pollution monitoring and planning applications. However, this information is supplied in a separate and more detailed report for 2006¹. Summary information on monitoring, trends in traffic, etc., is, however, given below.

1.2 Background to this report

The need for an air quality action plan in Hillingdon was demonstrated earlier, when large parts of the Borough were found unlikely to meet the national air quality objective for annual mean concentrations of nitrogen dioxide (NO₂) of 40 µg.m⁻³ by the target year of 2005 (Figure 1). This objective is designed to offer a reasonable level of protection to health.

Following this work, an Air Quality Management Area (AQMA) was declared in September 2003. The AQMA covers all parts of the Borough south of the Chiltern-Marylebone railway line. Although the AQMA was declared specifically for NO₂ it was agreed that Hillingdon would continue to monitor fine particles (PM₁₀) because of the importance of their health effects, and would consider them in the development of its action plan.

Given that analysis, combined with monitoring data, demonstrated that the major contributors to exceedance of air quality objectives were Heathrow Airport and traffic on major roads, subsequent development of the air quality action plan was primarily focused on these sources, though others in the industrial, commercial and domestic sectors were considered as well. A large number of measures were included in the plan (adopted by the Council in June, 2004), grouped into the following packages:

1. Switching to cleaner transport modes
2. Tackling through traffic
3. Promoting cleaner vehicle technologies
4. Measures specific to Heathrow Airport
5. Measures concerning local industries and other businesses
6. Improving eco-efficiency of current and future developments
7. Actions to be taken corporately, regionally, and in liaison with the Mayor
8. Management of the plan

¹ The Air Quality Updating and Screening Assessment for London Borough of Hillingdon 2006. Available at: <http://www.hillingdon-air.info/>

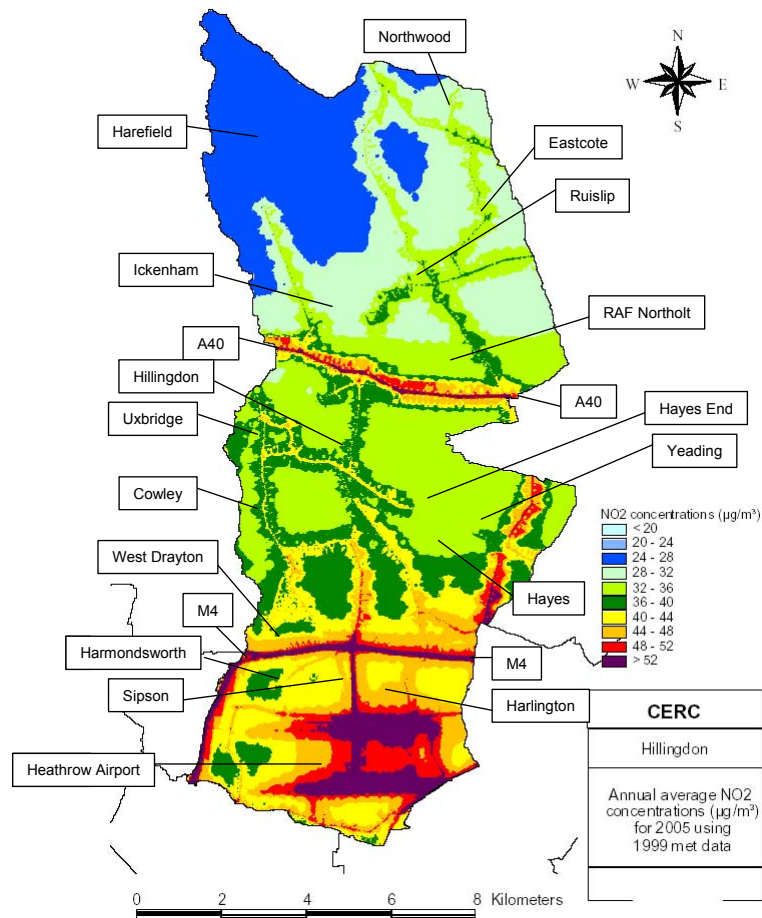


Figure 1. Projected annual mean NO₂ concentrations in the London Borough of Hillingdon in 2005 (from CERC 2003a).

1.3 Monitoring data

1.3.1 Conclusions from the USA report

Last year's progress report contained a detailed review of measurements of air quality in the borough. However, for 2005/6 Hillingdon, under the national regulations on Local Air Quality Management, is required to provide such information in a more detailed "Updated Screening and Assessment" (USA) Report. The purpose of the USA is to establish whether circumstances both within the borough, and in neighbouring authorities, have changed since the last USA. If emissions have changed significantly in either direction, the local authority is expected to proceed to a Detailed Assessment in order to assess more accurately whether an existing AQMA boundary, or the pollutants it is declared for, need to be changed. The main findings of Hillingdon's USA are that:

- Results from automatic continuous monitoring stations within the borough plus assessments of the major roads using the screening model DMRB, indicate that the strategy objectives for NO₂ were not achieved in 2005. Indicative results from the DMRB modelling showed that there will be predicted exceedances in 2010 at locations in the south of the borough.

- Results from automatic continuous monitoring stations within the borough plus assessments of the major roads using the screening modelling tool DMRB, have indicated that the strategy objectives for PM₁₀ were achieved in 2005. Indicative results from the DMRB modelling showed that there will be exceedances in 2010 although the 2010 objectives are not in the current Regulations.

The current AQMA in Hillingdon is declared for NO₂. As all the locations exceeding the NO₂ objective identified in the USA are within the existing AQMA there is no need to progress to a detailed review and assessment for this pollutant at this stage.

Although the 2004 objectives for PM₁₀ were achieved, Hillingdon will continue to monitor emissions and concentrations of this pollutant and consider what can be done to reduce them through the AQAP. This reflects both the high health risks associated with this pollutant and the prediction for exceedance of the provisional objective for 2010.

1.3.2 Additional monitoring

Continuous monitors

The London Borough of Hillingdon sited an additional air quality monitor in the south of the borough in March 2005. It is located in a residential area at a place of predicted worst-case exposure both from emissions from the Bath Road and from operations at Heathrow Airport. Results from this monitoring station will help to inform the debate on the proposal by DfT for expansion at Heathrow Airport. This expansion can only proceed if strict conditions on environmental criteria, such as the EU limit value for NO₂, are both achieved and continually maintained.

Potential additional monitoring in the future

Talks are proceeding with the Environment Agency and Grundons, operators of a new incinerator in Slough, due to start operation in 2006/07. The area of Harmondsworth was predicted to be the closest area within Hillingdon where emissions from the incinerator were likely to come to ground given worst-case weather conditions. Hillingdon are currently working with both the EA and Grundons in reviewing potential sites for an air quality monitor in this area. It is anticipated that the station will include analysers for the monitoring of NO₂ and particulate matter.

Hillingdon are investigating the siting of an additional analyser for measuring NO₂ in the residential location of Sipson in the south of the borough. A site is currently being sought, away from road sources, that would best represent any potential impact from aircraft emissions as the planes accelerate down the runway at Heathrow. Results from this will also inform the debate regarding airport expansion.

Diffusion Tubes

Hillingdon continue to use NO₂ diffusion tubes in order to collect data from a wide geographic area around the borough. During 2005 additional diffusion tubes were located at sites both outside the AQMA, and in new sites within the AQMA, where there is both residential exposure and a relevant source such as a road and/or junction.

Results from the tubes are bias-adjusted against co-located tubes from the monitors around the borough. However the results are used only as an indication of levels and for assessing trends over time. They are not a suitable method for assessing compliance with the EU Directive limits or UK national standards.

1.4 Trends in emissions of NO_x and PM₁₀

1.4.1 Road traffic

Trends in road traffic, over time, were reviewed for the Local Implementation Plan (LIP) for use as a baseline against which to assess the extent of change required to meet the objectives of the LIP. Baseline data indicate the following over the period 1991 to 2001:

1. An increase in total journeys made.
2. Some increase in public transport patronage.
3. A reduction in walking and cycling.
4. A significant increase in car usage.

The LIP is looking to address these trends although not all of the solutions are in the direct control of the London Borough of Hillingdon. A study has been commissioned jointly by the Boroughs of Hillingdon and Hounslow to assess trends in emissions in this area up to 2010. This will aid understanding of future problems, for example, whether increases in traffic volume and changes in fleet profile will offset emission reductions gained from the use of new vehicle technology. As recent studies such as the AQEG 'Nitrogen Dioxide in the United Kingdom' report, prepared for DEFRA, have indicated, problems may also arise in the future through increased emissions of primary NO₂ through a switch from petrol to diesel engined vehicles.

1.4.2 Heathrow Data

Emissions from the operation of Heathrow Airport impact greatly on residential areas in the south of the borough. These emissions come from a range of sources, including aircraft and traffic related to both air passengers and airport workers. The emission inventories produced by BAA Heathrow for the years 2002 and 2010 demonstrate a 30% increase in NO_x emissions, linked largely to greater emissions from aircraft, particularly increased air traffic resulting from the opening of Terminal 5.

The relationship between aircraft emissions and air quality objective exceedances is not straightforward. It is being examined as part of the Project for the Sustainable Development of Heathrow (PSDH). PSDH was set up by DfT following publication of the Aviation White Paper which stated that expansion at Heathrow could only be supported if environmental criteria, including air quality, could be brought and maintained within EU limit values. An Air Quality Technical Panel report is expected to be published imminently and will include recommendations for best practice for compiling a Heathrow Emission Inventory and for modelling the airport. Hillingdon will look to using the recommendations from the Technical Panels in future Detailed Assessment work for the air quality review and assessment process.

Chapter 2 Overview of progress with the Action Plan

2.1 Situation

As noted already, Hillingdon's Air Quality Action Plan contains a large number of measures, arranged into a series of packages, as follows:

Package 1: Switching to cleaner transport options, for example, shifting freight from road to rail and promoting cycling and walking

Package 2: Tackling through traffic

Package 3: Promotion of cleaner vehicle technology

Package 4: Measures specific to Heathrow Airport

Package 5: Measures concerning local industries and other businesses

Package 6: Improving the eco-efficiency of current and future developments, including those owned or operated by the Council

Package 7: Actions to be taken corporately, regionally, and in liaison with the Mayor

Package 8: Plan management

Summary information on progress with all measures in the action plan in 2005/6 is provided in [Appendix 1](#). Progress in 2004/5 was described in last year's progress report.

Progress within each package is summarised in Figure 2. This shows the number of measures in each package at each of the following four stages of development:

- Not started
- In the planning phase
- In progress
- Completed

A total of 13 measures, in packages 3, 4, 5 and 7 have yet to be started. These measures are typically scheduled to start later (e.g. measure 4.04, which requires completion of Terminal 5 before it can be started).

37 measures are currently in the planning phase. Many of these measures still need final commitment on funding to be made before they can go ahead.

59 measures are currently underway. Many of these are parts of rolling programmes that will take some time to complete, for example, the Safer Routes to Schools Programme.

2 measures have so far been completed. As reported last year, they are:

- 3.14 – Ensure freight developments in the West London area are subjected to an air quality assessment before implementation
- 4.11 – Review the air quality monitoring regime at Heathrow and identify potential gaps.

The year has seen some progress in starting measures, and some progress in moving from the planning phase to implementation.

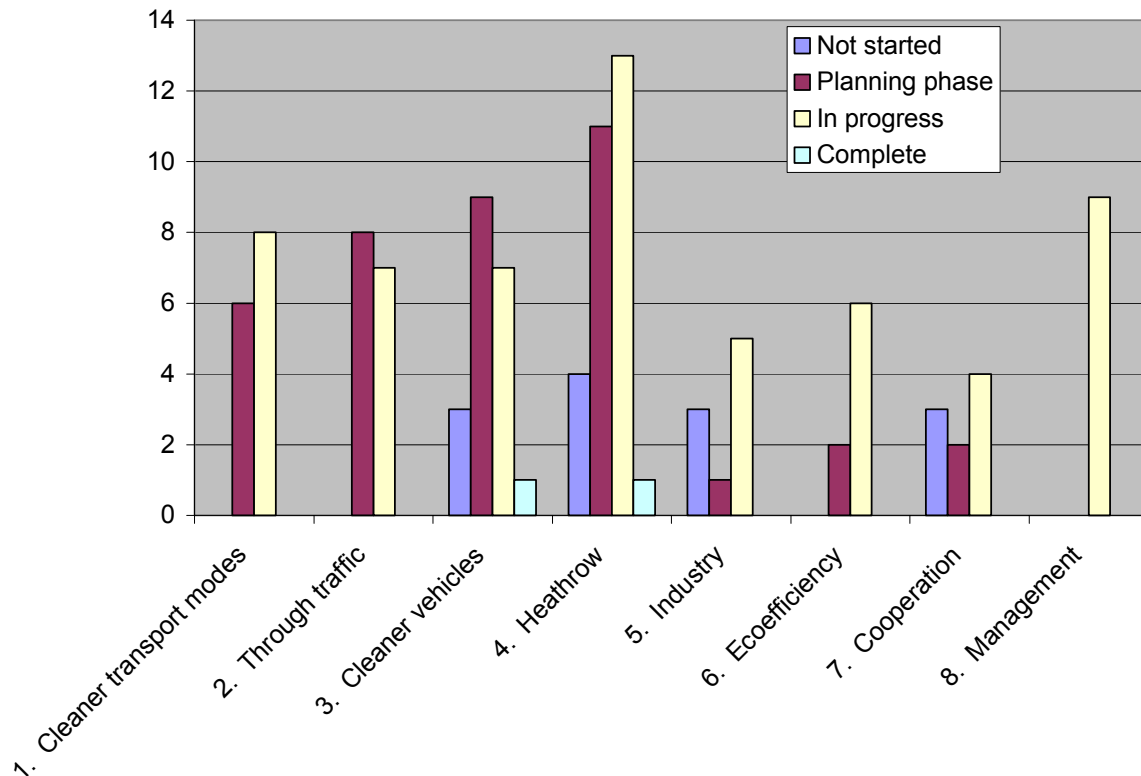


Figure 2. Progress of actions in each package in the action plan, showing the number of measures at each of the four stages listed (at end April 2006).

2.2 Opportunities

In 2005/6 no significant new opportunities arose, though action was taken to develop a number that had been identified in the earlier progress report.

Significant effort went into integration of action plan measures with transport planning through the LIP (Local Implementation Plan) and (associated with it), the BSP (Borough Spending Plan). As can be seen from Appendices 1 and 2, a large number of measures identified in the action plan have been adopted through the LIP, providing a significant source of funding for the action plan.

The Environmental Protection Unit has continued to enjoy support for the action plan from other departments in the Council, from procurement to transport planning. Effective collaboration within the Council is greatly assisting the delivery of the plan and reducing the costs of implementation. With this in mind, much thought has gone into plan management, as shown by the development and continued use of the Action Plan Tracker database.

Good collaboration with other local stakeholders continues, particularly with neighbouring local authorities. This provides the scope for effective regional working through the West London Alliance in particular.

The opportunity to submit a funding application to the EU's LIFE programme, regarding sustainable operation of airports, was investigated, though it did not proceed to bid submission. However, this has initiated links between Hillingdon and ARC (the Airport Regions Conference) – which could have benefits in the future through improving links to other local authorities across Europe that have airports within their territory.

2.3 Demonstration of links to climate change policy

During the development of the action plan, each measure was scored against the following criteria:

1. Impact on NOx emissions
2. Attractiveness of public transport
3. Congestion
4. Economic vitality
5. Noise
6. Other air pollutants
7. Social inclusion

Not surprisingly, most attention was focused on [1: NOx emissions] for which a detailed quantitative analysis was undertaken. Greenhouse gas emissions are included under [6: Other air pollutants]. Together with the other non-NOx effects this category was scored on a simple scale as follows:

- 3 = significant negative impact
- 2 = possibly significant negative impact
- 1 = minor negative impact
- 0 = no impact
- +1 = minor positive impact
- +2 = possibly significant positive impact
- +3 = significant positive impact

These scores are part of the data held in Action Plan Tracker. In 2005/6 they were reviewed and found likely to be broadly accurate, as the following examples show:

Table 1. Examples of scoring performance of measures against the 'Other air pollutants' category.

Measure	Title	Score	Rationale
4.15	Congestion/access charging around Heathrow	+ 3	Encourages shift to less polluting transport modes
2.07	Improve coordination of road works	+2	Potentially important through congestion control, but unclear how important
3.04.1	Ensure the implementation of the Idling Vehicles Regulations	+1	Clearly positive, but limited to those vehicles that are idling
4.02	Develop system for auditing the ATM limit and parking provisions post-T5	0	Audit is necessary, but has no direct effect on emissions

These results were then collated to assess the extent to which the plan, in addition to reducing NO₂ concentrations, supports action to reduce greenhouse gas emissions. It was concluded that most measures would lead to a reduction in greenhouse gas emissions whilst addressing local air quality. However, there is potential for some

measures targeted at NOx emission controls to cause an increase in CO₂ emissions from some sources – with particular concern focused on new aircraft technologies. The local authorities around Heathrow have also raised the issue with BAA Heathrow with regard to the emerging revised BAA Air Quality Strategy and Action Plan due in 2006.

This work will be continued in the coming year through:

1. Review of prioritisation of action plan measures, considering results for all of the impacts assessed in development of the plan.
2. Development of a climate change strategy and action plan for Hillingdon.

2.4 Possible problems with the plan

Air quality problems in Hillingdon will not be solved without serious action to deal with emissions from traffic. Whilst the funding linked to the LIP will be extremely useful, it is insufficient to fully implement the action plan. Further sources of funding therefore need to be identified, and other stakeholders such as the operators of Heathrow Airport, the Department for Transport, Transport for London and the Highways Agency all have significant roles to play.

Any change to maximise further airport operation, be this by a change to mixed mode operation, addition of a 3rd runway, or increased use of larger planes, will need to be accompanied by fully funded transport infrastructure improvements. Hillingdon would expect these to be funded by Central Government and the airport operator.

Chapter 3 Selected highlights

3.1 Packages 1, 2 and 3 – Transport Measures

3.1.1 Actions led by Hillingdon

Probably the most significant progress made in the reporting year concerned integration of air quality action plan measures with the Local Implementation Plan (LIP) for transport improvement. All relevant transport measures from the Air Quality Action Plan have been incorporated and the linkages made with other relevant areas of the LIP. It is hoped that this will help secure a funding stream and, therefore, ensure both implementation of relevant transport measures within the action plan and that air quality is taken into account in other areas of the LIP. Since submission of the LIP to Transport for London (TfL), Hillingdon have been awarded £60,000 for environmental improvements from the 2006/07 Borough Spending Plan bid. Details of the Air Quality LIP form, showing its linkages across the LIP are provided in Appendix 2.

Joint transport and air quality projects this year have included a pilot study for the inclusion of air quality as part of the Safer Routes to School Programme, called “*A Breath of Fresh Air*”². Four schools were chosen (covering infant, junior, secondary and special schools) in an area and the project involved introducing air quality information into Key Stages 1, 2 and 3. This covers:

Key Stage 1

- Task A: Introduction to air pollution
 - Introduction
 - Make your own pollution monitor
 - Mucky leaves
 - Air pollution poster
- Task B: Traffic surveys
 - Interpreting traffic survey data
 - Conduct your own traffic survey
- Task C: How we travel
 - How we travel to school
 - How green is your class?
- Task D: Transport and air pollution
 - Reducing pollution

Key Stage 2

- Task A: Introduction to air pollution
 - As KS1, though at a higher level
- Task B: Traffic surveys
 - As KS1, though at a higher level
- Task C: How we travel
 - How we travel to school
 - How green is your class?

² These materials are provided on the CD that accompanies this progress report.

- Travel choices
- Task D: Transport and air pollution
 - Dirty vehicles
 - Reducing pollution

Key Stage 3

- Task A: Introduction
 - Exploring pollutants, sources and effects
 - Air quality in the London Borough of Hillingdon
- Task B: How population and resources are inter-related
 - Air pollution sources and population
 - Travel choices and improving local air quality
- Task C: Exploring and interpreting traffic data
 - Interpreting traffic data
 - Conduct your own travel and traffic surveys
- Task D: Car sharing and sharing the pollution problem

This varied from simple classroom studies involving making basic air quality monitors, to obtaining traffic counts for the specific area and a portable pollution monitor to provide scientific data for analysis by Key Stage 3 students. It is intended to extend this project to all schools in the borough providing that funding is made available.

The experience of the four schools is currently being assessed with a view to refinement of the package, and possible extension to include material on climate change.

3.1.2 Partnership activities

Continuation of the joint work with the West London Transport Strategy under the New Solutions to Shared Pollution banner. This year work has included assessment of air quality impacts of freight operations across the West London area. During this project, the opportunity was taken to raise operator awareness of the proposed London Low Emission Zone (LEZ). Hillingdon continue to support the proposed London LEZ and welcome the inclusion of a NO_x standard, if deemed suitable, and the tightening of standards plus inclusion of light goods vehicles when appropriate to do so. Opportunities to increase awareness of the LEZ have been taken at the Hillingdon Business Forum “Greening the Agenda” conference and as part of the Freight and Air Quality study carried out by Hillingdon at the Uxbridge and South Ruislip Trading Estates.

Other activities undertaken in partnership include engagement with the Highways Agency, along with the boroughs of Hounslow, Slough and Spelthorne. This has led to the establishment of a forum at which to discuss potential improvements along the M4, M3 and M25 in the area around Heathrow. It has been agreed that this will be an annual meeting.

3.2 Package 4 - Heathrow

3.2.1 Actions led by Hillingdon

Council officers have continued to be involved in the Technical Air Quality Panels of the Project for the Sustainable Development of Heathrow. The full report of the Panels is due for publication in May 2006 and Hillingdon will seek to use the methodologies recommended for future review and assessment work around Heathrow. As part of the recommendations of the Panels, Hillingdon sited a new air quality station in Oxford Avenue, north-east of Heathrow, monitoring NO₂ and PM₁₀.

3.2.2 Partnership activities

Hillingdon and Hounslow have continued to lobby at National and European levels for aviation and airports to be recognised as significant sources of air pollutants and also for the climate change impact of aviation emissions to be considered more fully. This year this has included consultations submitted on the EU Thematic Strategy on Air Quality and the AQEG report on 'Air Quality and Climate Change: A UK Perspective'.

Hillingdon, Hounslow, Spelthorne and Slough have given preliminary comments to BAA Heathrow under the consultation on the development of the new Heathrow Air Quality Action Plan, due for completion in 2006. It is anticipated that the local authorities will continue to work with BAA Heathrow and other stakeholders to ensure quantification of the measures included in the Plan and its ability to improve the air quality in the Heathrow area. Initial concerns have already been raised with regard to ensuring that the BAA Action Plan gives sufficient regard to trade-offs between improving local air quality to the detriment of climate change emission reductions.

3.3 Package 5 – Local Industries and other Businesses

3.3.1 Actions led by Hillingdon

The establishment of a Hillingdon Business Forum has given the opportunity for local air quality issues to be brought to the attention of local businesses. The first conference, "Greening the Agenda", focussed on changing travel behaviour. There is a proposal for 2006/07 to look towards the introduction of a Green Award for businesses. Hillingdon will seek to ensure environmental criteria such as air quality objectives, are a part of this process.

3.3.2 Partnership activities

Hillingdon is a core member of the Air Pollution Planning and the Local Environment (APPLE), London Air Quality Working Group. The first output from this group is the 'Best Practice Guide: Control of Emissions from Construction and Demolition Sites' which is currently out for consultation on the GLA and ALG websites. Hillingdon will use the recommendations from this Guide on relevant developments within the Borough.

3.4 Package 6 – Planning for a Sustainable Future

3.4.1 Actions led by Hillingdon

Hillingdon continued to use the Air Quality Supplementary Planning Guidance to ensure that air quality was taken into account in new developments. Recent planning applications for a new residential development and for a new supermarket complex are currently under appeal with predicted worsening of the air quality as one of the grounds for refusal. This planning guidance will be reviewed as part of the LDF process and will look to incorporate climate change emissions as well as the local air quality pollutants

3.4.2 Partnership activities

As part of the APPLE working group, Hillingdon is working to review the ALG Planning Guidance on Air Quality for use across London. This is currently out for consultation and due for adoption by the ALG in June 2006

3.5 Package 7 – Corporate and Regional Measures

Air quality objectives are being integrated into the Hillingdon Local Development Framework that is currently out for consultation. The need for a specific Southern Hillingdon Area Action Plan has been identified and improvement of the current poor air quality of this part of Hillingdon is one of the key objectives of the Plan.

Consultation comments were returned on the West London Sub Regional Development Framework asking for greater emphasis on the challenges faced by the West London region with regard to air quality and the constraint that this can impose both on allowing new development and on the quality of life for existing residents.

Campaigns to raise awareness have included:

- Stands at the Borough Carnival under the banner “Driving Down Pollution”,
- Articles in the Borough magazine,
- Presentations at meetings of local residents associations,
- Agreement for the establishment of a West London Air Quality Network website.

Chapter 4 Conclusions, and the way ahead

4.1 Current situation

The major sources of air pollution in Hillingdon are road traffic and Heathrow Airport. As shown in Section 1.4, there remains significant pressure for a worsening of air quality in Hillingdon in spite of the provisions of the air quality action plan, in particular through:

- Predicted increase in traffic volume in the Borough up to 2010.
- Increased NO_x emissions from Heathrow Airport, partly through the operation of Terminal 5 due to open in 2008.

Further pressure arises from:

- The London Plan, and hence the emerging Hillingdon Local Development Framework. These documents identify areas for future development. The majority of these areas in Hillingdon are within the AQMA.
- Potential for further expansion at Heathrow, although the Government have stated that this will not occur unless the air quality objectives are met and maintained.

It is notable that the Council does not have direct control of either the airport or traffic on major roads. It is essential therefore that it continues to encourage the relevant government departments and agencies and the airport operator to improve performance and to actively participate in air quality improvement in the Borough.

4.2 Progress with the plan in 2005/6

There are a number of encouraging signs on implementation of the action plan from progress made in 2005/6 as the following examples show:

- Integration of air quality action plan measures with the LIP, and the degree of synergy that exists between the two plans. This is vital to the success of the plan, as without it there would be no realistic funding option for most of the measures in packages 1 to 3, and hence very limited opportunity to address emissions from traffic. Alongside this, the growing collaboration between environmental protection and transport planners is also encouraging.
- It has also been demonstrated that the air quality action plan is broadly supportive of other environmental policy, in particular, on climate change.
- Links to other stakeholders, for example, neighbouring local authorities and the Highways Agency, have been strengthened.
- The continued use of Section 106 Agreements where appropriate.
- Awareness of the role of local people in air quality improvement is improving, through various profile raising activities, including the production of teaching resources for children at Key Stages 1, 2 and 3.

In addition, there has been a general movement of measures through the chain from 'Not started' to 'Planning phase' to 'In progress'. It may thus be considered that the plan has not only been developed, but that substantial groundwork has been done on its implementation.

4.3 Future priorities

Following on from Section 4.1, and recognising existing difficulties with respect to attainment of the air quality objectives in Hillingdon, the clearest priorities are:

1. Through the Local Development Framework, ensuring that major developments in the AQMA are not permitted unless they include action to mitigate their emissions. Particular attention has been given in the LDF to the south of the borough where the air quality is poorest.
2. Taking action to reduce emissions on the major road network, requiring the action involvement of Transport for London and the Highways Agency;
3. Development of a timetabled delivery plan for the LIP. This will be developed in conjunction with the Hillingdon Transportation team and progress will continue to be monitored via Action Plan Tracker.
4. Development of a climate action programme by Hillingdon linked to the air quality action plan, to strengthen some of the measures identified here. It should be noted that this would create potential for significant financial savings through more efficient use of resources.
5. Continued development of regional strategies, such as the London Low Emission Zone.
6. Seek quantification of the new Heathrow Air Quality Strategy and Action Plan, due in 2006, to identify where reductions in pollutants can be secured. Continue to oppose further expansion at Heathrow if the current air pollution levels cannot be brought to, and maintained, below the EU Directive levels;

Appendix 1: Progress with the Action Plan

The following tables were produced using EMRC’s Action Plan Tracker database, showing progress against each measure made in the reporting year 2005/6. Progress for 2004/5 is not reported, but is available in last year’s report. Overall progress with the plan was reviewed above in Chapter 2.

- [Package 1: Switching to cleaner transport options, for example, shifting freight from road to rail and promoting cycling and walking 16](#)
- [Package 2: Tackling through traffic..... 21](#)
- [Package 3: Promotion of cleaner vehicle technology..... 26](#)
- [Package 4: Measures specific to Heathrow Airport..... 30](#)
- [Package 5: Measures concerning local industries and other businesses 36](#)
- [Package 6: Improving the eco-efficiency of current and future developments, including those owned or operated by the Council..... 38](#)
- [Package 7: Actions to be taken corporately, regionally, and in liaison with the Mayor 40](#)
- [Package 8: Plan management..... 43](#)

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
1. Switching to Cleaner Transport Modes							
1. 01.	Establish a Green Travel Plan for Hillingdon.	2010	In progress	<p>Green Travel Plan for Hillingdon Council has been drafted and will be finalised in 2006. Implementation will be on-going process and will ensure an overall approach is taken in terms of transport facilities for staff and visitors.</p> <p>Collection of baseline information, from which progress will be measured, will be undertaken in 2006 as part of the implementation strategy.</p>	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Timescales – 2006/07 for completion and start of implementation strategy, then ongoing.</p> <p>Air Quality Action – monitor progress and quantify, if possible, modal shift and emission reductions.</p>	Local Authority Led	Planning and Transportation
1. 02.	Improve access to, and quality of, public transport travel information for people living and working in the Borough.	2008	Planning phase	This will be an integral part of the Hillingdon Green Travel Plan.	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Timescales – 2006/07 for completion and start of implementation strategy, then ongoing.</p> <p>Air Quality Action – to seek all opportunities to help promote travel information and link to neighbouring boroughs/regional bodies where possible.</p>	Local Authority Led	Planning and Transportation
1. 03.	Encourage the development of more dedicated cycle (priority) lanes and signalling.	2008	Planning phase	Programme has been identified to complete a series of mid to long distance strategic on and off road facilities linking important areas of the borough. These routes will be identified and developed in consultation with local cycling groups with particular attention being given on main roads to increase safety. The aim is to implement 2 cycle tracks/routes per year.	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>There is a target in the LIP to increase cycling in the borough by 80% by 2011. This target will be monitored by TfL.</p> <p>Air Quality Action – to monitor progress of schemes in relation to the air quality exceedance corridors.</p>	Local Authority Led	Highways

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
1. 04.	Extend provision of more parking for motorcycles, mopeds and bicycles at public sites and new developments.	2007	In progress	Cycle Parking Programme aims to upgrade existing facilities and implement additional secure cycle facilities. Provision of this is concentrated in areas of demand around the borough, especially at libraries, shopping centres and transport interchanges. A database for cycle parking across the borough will be developed.	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Timescales - 2006/07 for development of database, then ongoing.</p> <p>Air Quality Action – to monitor progress of schemes in relation to the air quality exceedance corridors.</p>	Local Authority Led	Highways
1. 05.	Improve provision for pedestrians.	2008	In progress	<p>Pedestrian Crossings</p> <p>An audit of all existing crossings to be undertaken and improvements made where required;</p> <p>Installation of new crossings where the need is identified (the need is normally identified through public petitions or consistent complaints);</p> <p>Review of all traffic signal junctions to implement pedestrian phases where absent;</p> <p>Pedestrian Footpaths, Footways, Lighting Programme</p> <p>Annual condition survey plus safety inspections;</p> <p>Maintenance programme for any identified defects;</p> <p>Strategic Walking Network</p> <p>Hillingdon will contribute to completing the Strategic Walk Network across London. The borough also has large areas of public open space and promotes walking through its Green Spaces Team.</p>	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Timescales - Pedestrian Crossings 2005/06 – 8 new crossings, 2006/07 – funding sought for further 10.</p> <p>Timescales - Pedestrian Footpaths 2005/06 – completion of annual survey, 2006/07 for maintenance programme completion. Funding asked for through to 2008/09.</p> <p>Air Quality Action – look to use increasing access to transport hubs as part of prioritisation process for location of new crossing facilities.</p>	Local Authority Led	Borough Transport Strategy

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
1. 06.	Introduce more Safe Routes to School throughout the Borough with special regard to the schools within the highest exceedance areas.	2010	In progress	<p>18% schools with plans at end of 2005.</p> <p>Timescales - 36% schools with plan by 2006; 57% by 2007; 78% by 2008, 100% by 2009.</p> <p>Air Quality and Safer Routes to School Project developed to introduce concept of air quality and links with transport into schools to increase pupil awareness.</p> <p>8-Jun-05 - 4 schools identified as a cluster in Eastcote for pilot study. Although not in the exceedance areas this project will act as a pilot and be rolled out across the borough.</p> <p>1-Nov-05 – Presentations in schools, air quality monitoring introduced, traffic counts conducted during Walk to School week and “normal” week.</p>	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Funding sought via BSP bid to roll out to other schools. If bid is successful will introduce into other schools, with priority given to those within the AQMA.</p>	Local Authority Led	Borough Transport Strategy
1. 07.	Ensure Green Travel Plans are a requirement for all businesses (new and existing) employing more than a specified number of people in the Borough.	2007	In progress	<p>iTrace now installed on Council computers. This is Travel Plan Monitoring database and will allow for accurate monitoring of travel plans throughout the borough.</p> <p>24-Mar-06 - Greening the Agenda organised by the Hillingdon Business Forum will include best practice on effective developing travel plans.</p>	<p>Travel plans planning condition on all relevant new developments.</p> <p>Air Quality Action – use data from iTrace to monitor progress in Travel Plans to inform quantification of modal shift.</p>	Local Authority Led	Planning Department
1. 08.	Improve access to, and quality of, public transport travel information on a regional basis both inside and outside the GLA boundary.	2008	In progress	<p>March 2006 – Attendance at Commuter Sub-Group under Heathrow Area Transport Forum. Identified the need for joint working opportunities with regard to promotion of regional travel information and promotion of more sustainable modes of transport.</p> <p>March 2006 –scheme identified for regional promotion of car share, to be implemented 06/07.</p>	<p>Air Quality Action – report on success of promotion, identify other opportunities through the partnership organisations for joint promotion around Heathrow and also West London.</p>	Partnership	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
1. 09.	Seek to ensure improvements in overall public transport service (facilities, cleanliness, safety, frequency, reliability) across the Borough and West London, and particularly in declared AQ Management Areas AQMAs.	2008	In progress	<p>Bus Priority Measures:</p> <p>Will involve measures to enhance the flagship priority routes including 207/427 and new routes as identified on the London Bus Priority Network. Programme of works will include appropriate use of bus lanes, reallocation of parking where necessary, junction improvements.</p>	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Timescales -</p> <p>2006/07 – production of signage database for bus lanes;</p> <p>2007/08 – upgrade programme to ensure bus lane signage is to standard required by DfT for camera enforcement.</p> <p>Air Quality Action – monitor journey time reliability and modal shift in order to assess potential emission reductions. Monitor effectiveness of enforced bus lanes for easing congestion.</p>	Partnership	Borough and West London Transport Strategy
1. 10.	Improve the north-south public transport provision in the Borough.	2010	Planning phase	<p>Support sought for extension of A10 bus route further north, beyond Uxbridge to Ruislip. This would give direct links to Heathrow from Ruislip, West Ruislip and Ickenham.</p> <p>Support sought for continuous improvement to 140 and N140 to provide an essential link from Harrow and Wealdstone to Heathrow Airport.</p> <p>Support sought for bus linkage between Harefield, Hillingdon and Mount Vernon hospitals.</p> <p>Funding sought for 2007/08 and 2008/09.</p>	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Air Quality Action – monitor success of funding bid, use opportunities within WLA groupings and Heathrow Area Transport Forum to seek support for proposals.</p>	Partnership	Borough Transport Strategy

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
1. 11.	Support multi modal travel by further development of public transport interchanges for rail/cycle/bus/walking both within Hillingdon and the West London area.	2008	In progress	Funding received via BSP for access improvements to Uxbridge, Eastcote and Hayes and Harlington stations.	<p>Timescales -</p> <p>2006/07 – onwards for Hayes and Harlington improvements;</p> <p>2007/08 – for Uxbridge Station improvements;</p> <p>2007/08 – for Eastcote Station improvements.</p> <p>Air Quality Action – seek to ensure improvements protect members of the public from emissions from public transport in the waiting areas within the stations, seek to ensure signage is in place, where relevant, to switch off engines where appropriate, e.g. on bus stands.</p>	Partnership	West London Air Quality and Transport Group
1. 12.	Encourage development of efficient and high quality bus corridors.	2008	Planning phase	See 1.09.	This action plan measure has been incorporated into the LIP for implementation.	Partnership	West London Air Quality and Transport Group
1. 13.	Investigate potential for more night buses.	2007	Planning phase	Improvements are being sought by Hillingdon for Safer Travel at Night initiatives. These would be required to be in place before proposals for night buses could be safely assessed. Initiatives include ensuring the adequacy of lighting, paving, street furniture, signage and CCTV at Eastcote, Uxbridge and Ruislip stations and involvement in a Safer Travel campaign across the borough.	<p>This action plan measure has been incorporated into the LIP for implementation.</p> <p>Air Quality Action – monitor success of funding bid.</p>	Partnership	Transportation Team
1. 14.	Investigate the feasibility of working with relevant stakeholders to subsidise bus, train and underground fares in order to achieve significant modal shift.	2007	Planning phase	This was highlighted in the consultation on the LIP as a measure to take forward.	Air Quality Action – to identify, in conjunction with the Transportation team, opportunities to lobby for subsidised travel.	Lobbying	West London Authorities

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
2. Tackling Through Traffic							
2. 01.	Introduce Home Zones/20 mph in residential areas subject to significant amounts of through traffic that should use alternative routes.	2007	In progress	2005/06 - Phase 2 of Home Zone in Harefield; 2006/07 – new Home Zone in Oak farm, Hillingdon. Consideration of further site in Barnhill.	This action plan measure has been incorporated into the LIP for implementation. Air Quality Action – analyse before and after traffic assessments around new sites to assess potential emissions reduction on local residents.	Local Authority Led	Transportation Team
2. 02.	Support the West London Transit Scheme project if appropriate.	2007	Planning phase	Although Hillingdon have been actively involved in the progress of this scheme for the last 3-4 years, key concerns of the Council remained unresolved. 2006 – the Council Cabinet resolved to be an objector to the West London Tram Scheme.		Local Authority Led	Planning and Transportation
2. 03.	Ensure the provision of sufficient signage and details of spaces for public car parks.	2007	In progress	Now have a total of 15 car parks in Hillingdon assessed for the Park Mark award. This is given for creating safe, secure environments.		Local Authority Led	Highways Department
2. 04.	Investigate the creation of Clear Zones.	2007	Planning phase	Camden identified as good practice.	Air Quality Action – to seek information from Camden on condition and criteria for Clear Zone.	Local Authority Led	Hillingdon Transportation Team

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
2. 05.	Develop best practice advice to ensure air quality assessments are made for proposals for new transport infrastructure and changes to traffic management.	2005	In progress	<p>1-May-05 – WLAQ commissioned consultants to produce best practice guide for assessment of transport issues with regards to air quality impacts.</p> <p>1-Sep-05 – guide published, assistance sought from GLA/TfL for promotion across London.</p> <p>Timescales -</p> <p>2006/07 – WLAQ group to establish communication strategy for guide;</p> <p>2006/07 -</p> <p>Project Audit Programme in Hillingdon.</p> <p>Hillingdon to develop project audit programme to ensure all new significant highway and transport infrastructure and management schemes are audited for safety, air quality, use by other sustainable modes and accessibility to pedestrians.</p>	This action plan measure has been incorporated into the LIP for implementation.	Partnership	West London Air Quality and Transport Group
2. 06.	Work in partnership with TfL to implement schemes along the high exceedance corridors designed to smooth traffic flows.	2006	Planning phase	<p>1-Apr-05 – commissioned consultants to audit strategic travel routes through WL in order to identify potential causes of congestion along the routes.</p> <p>21-Jul-05 – launch of report.</p>	2006/07 – West London Air Quality group to link with WL Transport Group for implementation of findings and promotion to TfL for use as audit tool across London.	Partnership	West London Air Quality and Transport Group
2. 07.	Improve coordination of road works and provide more effective signing around them.	2007	Planning phase	Traffic Manager in place in Hillingdon to co-ordinate road works across the borough to minimise traffic disruption.		Partnership	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
2. 08.	Investigate use of high occupancy vehicle lanes and freight priority schemes along the major exceedance corridors such as the M4, A4, A40 and A312.	2007	In progress	<p>January 2006 - Meeting with HA and local authorities around Heathrow:</p> <p>HOV lanes – pilot study currently on M1, tend to work better on radial routes than orbital but may be consideration on M25 close to t5 spur;</p> <p>Freight only lanes – not applicable at present to areas around Heathrow as would mean relocating slow moving freight closer to residential houses close to M4.</p>	Meeting to be arranged for 2007.	Partnership	West London Air Quality and Transport Group
2. 09.	Investigate the use of light rail/tram schemes along other high exceedance corridors such as the A4 and A40.	2010	Not started			Partnership	West London Air Quality and Transport Group
2. 10.	Investigate measures such as variable message signing to smooth traffic flows on the HA/TfL routes M4 and surrounding link roads.	2007	Planning phase	<p>January 2006 - Meeting with HA and local authorities around Heathrow:</p> <p>Brief being brought together looking at traffic management aspects. Variable speed signs on M25 have not shown demonstrable effects on journey times, also are very expensive;</p> <p>Motorway Access Management scheme assessing feasibility of ramp metering. Need to ensure measures are in place to prevent traffic queuing on local roads.</p>	Meeting to be arranged for 2007.	Partnership	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
2. 11.	Investigate use of speed limits on major roads at the optimal level for NOx and PM10 emissions for the current traffic profile.	2007	In progress	<p>January 2006 - Meeting with HA and local authorities around Heathrow:</p> <p>Junction 4 improvements predicted to reduce queuing at junction and therefore have +ve air quality benefit;</p> <p>HA drawing together modelling study looking at effect on change in emissions on a flowing network;</p> <p>HA to ask local authorities to participate in diffusion tube monitoring exercise.</p>	<p>Meeting to be arranged for 2007.</p> <p>2006 – M4 Junction 4 improvements scheduled for 2006.</p> <p>Diffusion tube monitoring sites identified in Hillingdon for a) residential exposure, b) motorway boundary location.</p>	Partnership	West London Air Quality and Transport Group
2. 12.	Identify air quality congestion-related hotspots throughout West London and the appropriate measures for delivering improvement in both congestion and air quality e.g. new access road from the A40 to Ruislip industrial areas.	2009	In progress	<p>Congestion Hot Spots programme developed in Hillingdon. 30 priority locations identified for assessment over 3 year timescale.</p> <p>2005 – Hillingdon commissioned detailed assessment of specific air quality hotspot junctions in the borough with regard to vehicle types, speeds and proximity of residents.</p> <p>2005/06 - 10 congestion hotspots alleviated by traffic management measures.</p>	<p>Air Quality Action – request detailed assessments at future hotspots prior to, and after, implementation of congestion-relieving schemes, especially in the cases where there is relevant public exposure to pollutants.</p>	Partnership	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
2. 13.	Support rail projects that have the potential effect to cut through traffic e.g. Crossrail and extending the Underground system (e.g. Central Line to Uxbridge).	2010	Planning phase	Central line extension to Uxbridge; Extension to Uxbridge Metropolitan and Piccadilly lines to Heathrow; Cross Rail; Air Track – rail service link between Heathrow and Staines; Extension of Piccadilly and HEX to Terminal 5; Provision of Heathrow Connect – stopping service (at Hayes) from Paddington to Heathrow. June 2005 – Heathrow Connect launched. 2008 – extension to T5 due for completion.	This action plan measure has been incorporated into the LIP for implementation. Air Quality Action – assess modal shift of Heathrow Connect and HEX with regards to access to Heathrow, quantify in terms of emissions reductions where feasible to do so.	Lobbying	West London Transport Group
2. 14.	Work in partnership to investigate use of fiscal measures, such as road pricing, for reducing traffic on major road networks.	2007	In progress	January 2006 - Meeting with HA and local authorities around Heathrow: Road pricing will be lead by DfT, not the HA; Project Heathrow will be evaluating the area around Heathrow; Local authorities to identify any potential sites for application to HA Travel Behaviour programme (Slough Estates in 2006/07).	Meeting to be arranged for 2007.	Lobbying	DfT
2. 15.	Consider establishment of cross-agency regional group to address air quality issues with regards to roads.	2006	Planning phase	Suggested at HATF in June meeting. Discussed as AOB at December HATF meeting. Group approval, Chair of Steering Group to action.		Lobbying	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
3.	Promotion of Cleaner Vehicle Technology						
3. 01.	Develop and implement an Action Plan via the BAA Heathrow Clean Vehicle Programme to make improvements in the Council vehicle fleet with regard to reducing emissions.	2006	In progress	March 2006 - Briefing note sent to fleet manager outlining emissions criteria for London LEZ.	So far we have achieved the level of Silver Award.	Local Authority Led	Hillingdon Fleet Management Team
3. 02.	Encourage local businesses and freight operators in Hillingdon to sign up to the Clean Vehicle Programme and develop and implement action plans for reducing emissions.	2007	In progress	June 2005 - Project commissioned to audit two freight sites in Hillingdon with regard to fleet profile, freight routes, existence of fleet/travel management plans, raise awareness of LEZ. 24-Mar-06 - Green the Agenda meeting organised by Hillingdon Business Forum.	LEZ leaflets to be handed out at meeting.	Local Authority Led	Green Business Network
3. 03.	Provide training for local authority drivers to minimise emissions, and consider opening training opportunities to other drivers working for businesses in Hillingdon.	2006	Planning phase	Will pursue via TfL		Local Authority Led	Hillingdon Fleet Management Team
3. 04.1.	Ensure the implementation of the Idling Vehicles Regulations.	2006	Planning phase	Signs up in Uxbridge Station requesting engines to be switched off when on the stands.	This action plan measure has been incorporated into the LIP for implementation. Audit needed for rest of the borough, ensure is part of the Project Audit Programme.	Local Authority Led	Hillingdon Transportation Team
3. 04.2.	Actively promote the use of the Dirty Diesel Hotline for reporting smoky vehicles spotted in Hillingdon.	2006	Planning phase	9-Jul-05 - Promoted at Hayes Carnival, postcards produced for residents use. Included in AQ information in Hillingdon People magazine.	1-Nov-05 - Concerns raised over use of expensive 0870 number, email and letter sent to Dirty Diesel hotline asking for their comments.	Local Authority Led	Hillingdon Transportation Team

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
3. 05.	Consider the recommendations of the London Low Emission Zone Feasibility Study jointly with the GLA, ALG and TfL.	2006	In progress	Attendance at Low Emission Zone meeting on 13-Dec-04 by Air Quality and Transportation officers from Hillingdon. Joint consultation comments returned on LEZ project. 14-Dec-05 - Presentation arranged for the HATF on LEZ. Attendance at West London update meeting.	Included in the LIP for implementation. Briefing note issued to Cabinet Environment Member and Transport Member recommending support for LEZ.	Local Authority Led	Cabinet
3. 06.	Install signs in waiting areas of Council premises, bus garages, coach stations and major leisure venues, etc. advising drivers to switch off engines when stationary.	2006	Planning phase	Turn off engine signs in Uxbridge Station, need to check other relevant locations.	This action plan measure has been incorporated into the LIP for implementation. Audit needed for rest of the borough, ensure is part of the Project Audit Programme.	Local Authority Led	Highways
3. 07.	Lead the way in trialling new technology, where appropriate, and act as a point of information for businesses and other stakeholders in Hillingdon for cleaner vehicle technologies, national schemes and grant systems for the use of alternative fuels.	2007	In progress	Two electric bikes purchased, electric van trialled but not suitable for potential identified purpose. Demonstrations at Hayes Carnival of Goinggreen car and electric bike and LPG van. 2 SMART cars purchased by Planning and Transportation as a pool car to reduce officer mileage.		Local Authority Led	Hillingdon Fleet Management Team
3. 08.	Participate in the London-wide Vehicle Emissions Testing programme.	2007	In progress	No further funding to pursue on Hillingdon-only basis.	To assess as potential regional project with West London boroughs in 2006/07.	Local Authority Led	Vehicle Emissions Testing Steering Group
3. 09.	Investigate the provision of low or zero emission buses for schools within the high exceedance areas.	2010	Planning phase	Linking with existing school travel plan initiative		Local Authority Led	Fleet Management Team

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
3. 10.	Focusing on areas and corridors of high exceedance within residential areas, investigation into the banning or restricting of traffic, or particular types of traffic, from identified roads.	2010	Not started			Local Authority Led	Transportation Team
3. 11.	Investigate the potential for discounts for residents with low emission vehicles in Parking Management Areas.	2006	Planning phase	Discussions planned with parking enforcement		Local Authority Led	Sustainability Steering Group
3. 12.	Develop sub-regional Bus Quality Partnerships focussed on addressing the contribution of buses and coaches to emissions.	2010	Planning phase	Sub regional partnerships developed West London Transport Strategy.		Partnership	West London Air Quality and Transport Group
3. 13.	Work in partnership for the provision of low emission buses in the West London/Heathrow region.	2010	Planning phase	Sub regional partnerships developed with Heathrow Area Transport Forum - March 2006 - awaiting publication of Bus and Coach Strategy. Consultation comments given on emerging Heathrow Surface Access Strategy to include linkages with air quality action plans and requirements for reduction in emissions.		Partnership	Heathrow Area Transport Forum (HATF)
3. 14.	Ensure freight developments in the West London area are subjected to an air quality assessment before implementation.	2005	Completed	May 2005 - Project commissioned for audit at 5 key freight hubs across West London, objectives to identify freight routes, raise awareness of the LEZ and gather activity data for future review and assessment work. December 2005 – project results disseminated to WL Freight Quality Partnership.	Complete with regards to policy.	Partnership	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
3. 15.	Work with the West London Freight Quality Partnership to develop a Freight Strategy to include reducing the air quality impact of freight maximising opportunities to move freight from road to other modes e.g. canals.	2006	In progress	December 2005 – joint meeting of air quality officers and freight quality partnership reps. Potential joint working areas identified: Establishment of a freight depot map; Periodic freight audits to validate assumptions used for freight impact.		Partnership	West London Freight Quality Partnership (WLFQP)
3. 16.	Facilitate the uptake and use of alternative fuels, including water-diesel emulsion. This should include development of appropriate alternative refuelling infrastructure where necessary e.g. charging points for electric vehicles.	2007	In progress	Assessing feasibility of other schemes being run by neighbouring local authorities.		Partnership	West London Air Quality and Transport Group
3. 17.	Lobby national government to provide incentives through the fuel duty system for cleaner fuels, inc. further vehicle excise duty reductions for retrofitting to smaller vehicles and increased retrofitting grants.	2005	Not started	Establishment of West London Air Quality Website - will include current consultations page.		Lobbying	West London Air Quality Group
3. 18.	Work to ensure fiscal encouragement of the adoption of low and zero emissions vehicles through the provision of discounts when entering any proposed LEZ or Congestion charging zone.	2005	Not started	No progress to date.		Lobbying	West London Air Quality and Transport Group
3. 19.	Promote best practice in terms of emissions management with the train operators, the Strategic Rail Authority and Network Rail.	2010	Not started	Latest LAEI has suggested emissions from trains in Hillingdon area may need investigation. Will form part of USA for 2006.		Lobbying	West London Air Quality and Transport Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
4. Measures Specific to Heathrow Airport							
4. 01.	Continue to oppose any further expansion at Heathrow that leads to negative air quality impacts.	2010	In progress	Air Quality panel work now completed. March 2006 - awaiting publication of final Report.		Local Authority Led	Environmental Protection Unit (EPU)
4. 02.	Develop system for auditing the ATM limit and parking provisions for operational T5.	2008	In progress	Whilst compliance with the ATM limit is a matter for BAA to manage, the Council, in common with the T5 Inspector, regards it as a critical control over the environmental impact of Heathrow. Currently asking BAA to confirm that in any in the event of any unforeseen overrun of the agreed 480,000ATM limit, it would reduce the ATMs in the following year by twice the amount of the overrun.	The responsibility of monitoring the ATMs lies with BAA however Hillingdon have asked, where possible, for BAA to provide corroboration of the results from the CAA's figures.	Local Authority Led	Aviation Team
4. 03.	Audit all air quality conditions for the construction phase of Terminal 5.	2008	In progress	This is a continual on-going process.		Local Authority Led	Environmental Protection Unit (EPU)
4. 04.	Pursue the retaining of the T5 related air quality monitoring network post T5 construction.	2008	Not started	Meeting to be arranged with BAA planning team to discuss securing of the network post T5 construction and into operation.		Local Authority Led	
4. 05.	Quantify and pursue emission reductions for all new on-airport development.	2007	In progress	Car park extension in Longford assessed for air quality impacts. Mitigation sought for the increased impact on residential areas.	Consultation sought with neighbouring boroughs where impacts from on-airport development impact on their residents as opposed to Hillingdon.	Local Authority Led	Aviation Team
4. 06.	Evaluate best practice from European and International airports with regard to the minimisation of air quality impacts and assess feasibility of application at Heathrow.	2006	Planning phase	August 2005 - Lack of resources resulted in failure to submit a successful bid.	Recommendation from consultant that Hillingdon could continue pursuit of this objective by joining the ARC organisation.	Partnership	Heathrow Air Quality Working Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
4. 07.	Work with National Government to ensure the use of all relevant fiscal measures to reduce emissions from Heathrow in order to achieve the 2010 EU limit.	2010	Planning phase	<p>November 2005 - Attendance at EFTEC "Reducing Greenhouse Gas Emissions from Aviation" conference.</p> <p>Review of Aviation White Paper due end of 2006. It is expected to include mitigation measures to ensure air quality limits are met and maintained at levels below the EU limit.</p> <p>July 2005 - Sustainable Aviation Strategy launched with targets stated for improvements in NOx emissions.</p>	<p>EFTEC Conference - Hillingdon to ask DfT/DEFRA to consider the conclusions from the conference for application in the UK/Europe. The forthcoming European Commissions Working Group on this issue is due to report April 2006.</p> <p>Aviation White Paper - Hillingdon will maintain dialogue with DEFRA, DfT and neighbouring local authorities to ensure the measures suggested are adequate in terms of air quality mitigation.</p> <p>Sustainable Aviation Strategy - Hillingdon to seek independent review of targets set.</p>	Partnership	Local Authorities
4. 08.	Assess the potential to set an emissions cap for Heathrow.	2008	Not started	<p>February 2006 – report from USA Clean Air Policy Center on NOx emissions trends and the potential to apply an emissions cap to airports.</p> <p>Hillingdon to work with partners to consider potential application at Heathrow.</p>	This report suggests that with the new CAEP standard expected in 2008 for aircraft engines, NOx emissions around several US airports are predicted to increase in future years.	Partnership	Heathrow Air Quality Working Group
4. 09.1.	Assess the potential to use landing emissions charges scheme to create revenue stream for public transport improvements.	2008	Not started	No progress to date		Partnership	Heathrow Air Quality Working Group
4. 09.2.	Introduce differentiated landing charges at a level that would force cleaner engine technology.	2010	In progress	Assessing via PSDH	Hillingdon to pursue quantification of the current scheme in relation to any achieved air quality benefits.	Partnership	BAA

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
4. 10.	Audit progress on the BAA Heathrow Air Quality Action Plan (2001-2006).	2005	In progress	<p>The Action Plan is currently being revised and a new plan will be published in the next month. Highlights from the 2001-2006 action plan include:</p> <p>Completion of the pre-conditioned air (PCA) trial. PCA will be fitted to all stands for new generation large aircraft up to 2007;</p> <p>Increase of the number of airport companies signed up to the Clean Vehicle programme to a total of 55;</p> <p>Establishment of a retail consolidation centre which has reduced retail delivery trips into the Central Terminal Area by more than 60%;</p> <p>Trials hosted of alternatively fuelled vehicles, LPG fuelling facilities installed landside and airside;</p> <p>Studies commissioned into the Heathrow vehicle fleet to identify opportunities for emissions reductions;</p> <p>Improvements made to Heathrow Emissions Inventories via the Project for the Sustainable Development of Heathrow process.</p>		Partnership	Heathrow Air Quality Working Group
4. 11.	Review air quality monitoring regime at Heathrow and identify potential gaps.	2005	Completed	Air quality monitoring regime reviewed as part of PSDH. New monitoring station located north east of Heathrow in February 2005.	2006/07 – new station to be located.	Partnership	Heathrow Air Quality Working Group
4. 12.	Maintain production of externally audited Emissions Inventory on bi-annual basis.	2010	In progress	PSDH report will refine further inventories.		Partnership	BAA Heathrow
4. 13.	Identify the areas where the existing BAA 5 year Action plan can be strengthened.	2006	Planning phase	Draft new Strategy expected March/April 2006. Comments sent from Heathrow local authorities requesting inclusion of quantification of emission reductions on measures, cost-effectiveness and annual progress reports in line with DEFRA guidance.		Partnership	Heathrow Air Quality Working Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
4. 14.	Pursue quantification of measures in the BAA Air Quality Action Plan and Surface Access Strategy in terms of air quality impacts.	2006	In progress	Waiting for new strategy.		Partnership	Heathrow Air Quality Working Group
4. 15.	Assess feasibility of Congestion/Access Charging at Heathrow to reduce overall travel movements to the airport.	2006	Planning phase	Suggestion of congestion charge by London Mayor. Hillingdon would lobby for charge to be ring-fenced for public transport infrastructure improvements.		Partnership	DfT
4. 16.	Assess feasibility of a Heathrow specific LEZ to reduce emissions and accelerate take up of cleaner vehicle technology.	2006	Planning phase	Heathrow included in the London Low Emission Zone area, however will not affect airside vehicles therefore this will need to be important part of new Heathrow Air Quality Strategy.		Partnership	DfT
4. 17.	Assess appropriate target for modal shift to maximise air quality improvements.	2006	Planning phase	Hillingdon will review the revised Heathrow Surface Access Strategy and Bus and Coach Strategy due for publication in 2006 with regard to the setting of realistic targets for modal shift.	Hillingdon will want to independently assess the feasibility of the target being achieved.	Partnership	DfT
4. 18.	Define programme for the establishment of code of practice for airlines best operating practice to maximise reduction of emissions.	2006	Planning phase	British Airways research work includes: Estimation of total NOx from engine ground running; Reverse thrust examples from BA operations; Surveys of power settings during taxi operations; Estimation of particulate matter from aircraft tyre wear.		Partnership	Heathrow Air Quality Working Group
4. 19.	Develop best practice guidelines to ensure air quality impact assessments are integral part of relevant transport and transport infrastructure proposals, and that appropriate mitigation measures are inclusive part of any scheme.	2006	In progress	Surface Access Strategy due for consultation in summer 2006.		Partnership	Heathrow Air Quality Working Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
4. 20.	Assess feasibility of specifying emissions criteria for Heathrow taxis, buses and coaches using the Central Bus Terminal, and car hire shuttles, hopper buses etc.	2006	In progress	Bus and Coach strategy due for publication in summer 2006. Presentation on criteria for compliance with London LEZ to Heathrow Area Transport Forum.		Partnership	Heathrow Air Quality Working Group
4. 21.	Ensure the minimisation of the air quality impact of freight deliveries to and from Heathrow is a key objective of the West London Freight Quality Partnership (WLFQP).	2006	Planning phase	Freight expected to be part of revised Heathrow Air Quality Strategy.	Hillingdon to assess Heathrow Air Quality Strategy when published.	Partnership	Heathrow Air Quality Working Group
4. 22.	Assess the use of bus priority, guided buses and high occupancy vehicle lanes in the Heathrow area.	2010	In progress	Trial started on M606 and M62 between Bradford and Leeds, in west Yorkshire should be fully operational in 2007. It is believed the one-mile lane will cut the average peak-time journey by eight minutes.	Agenda item for next meeting with Highways Agency in January 2007 to assess scheme and suitability in Heathrow area.	Partnership	Heathrow Air Quality Working Group
4. 23.	Assess the feasibility of a Park and Ride scheme specifically for Heathrow.	2006	Planning phase	Park and Ride may be part of the mitigation measures in the review of the White Paper. Park and Ride may form part of the revision of the Surface Access Strategy due for consultation in summer 2006.	Hillingdon to pursue full air quality assessment of any potential Park and Ride scheme.	Partnership	Heathrow Air Quality Working Group
4. 24.	Assess the health impact of Heathrow Airport and associated activities.	2007	In progress	Initial assessment underway through PCT		Partnership	Heathrow Air Quality Working Group
4. 25.	Lobby Central Government to pursue more stringent emission standards for plant, aircraft and airside vehicles.	2007	In progress	January 2006 – Joint Hillingdon and Hounslow letter sent to DEFRA asking for consultation with local authorities if there is an intention to seek derogation for 5 years in the Heathrow area.		Lobbying	Local Authorities
4. 26.	Explore feasibility of reducing fares on the Heathrow Express.	2010	Not started	No progress to date.		Lobbying	Local Authorities
4. 27.	Pursue relevant organisations to prioritise public transport provision to Heathrow, particularly rail links to the west, east and south.	2008	Planning phase	Hillingdon LIP has Heathrow Traffic Programme LIP proposal form. Several initiatives are supported for improving traffic to and from Heathrow including rail schemes, targeted travel plans, promotion of car share.		Lobbying	Local Authorities

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
4. 28.	Explore feasibility of an airport passenger tax, ring-fenced for increased public transport.	2010	Planning phase	Linking to PSDH		Lobbying	Local Authorities

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
5. Measures Concerning Local Industries and Other Businesses							
5. 01.	Support opportunities for Combined Heat and Power where appropriate within the Borough.	2010	In progress	The Apple group (Air Pollution Planning and the Local Environment - London Air Quality Working Group) will assess CHP and Biomass issues in London.	Mayoral support for biomass plants across London.	Local Authority Led	Planning
5. 02.	Introduce (within reason) progressively stricter conditions on Part A processes, including incineration processes, especially when located within high exceedance areas or where the impact is predicted to be within high exceedance areas.	2007	In progress	Agreement for monitoring station at Harmondsworth with regard to Colnbrook Incinerator – due to be sited 2006. Meeting with the EA in March 2006 to discuss Heathrow Part A issues and new T5 boilers – awaiting details from EA.		Local Authority Led	Environmental Protection Unit (EPU)
5. 03.	Work with the Environment Agency to improve public dissemination of industrial pollutant emissions data and other relevant information, for example on performance against permit conditions.	2005	Not started	March 2006 – meeting with Heathrow EA representative; Invitation to EA to attend West London Air Quality Cluster Group meetings.		Local Authority Led	Environmental Protection Unit (EPU)
5. 04.	Discourage the use of bonfires on all industrial sites.	2005	In progress	Best Practice Guide: Control of Emissions from Construction and Demolition for consultation on GLA website March 2006. Document out for consultation March 2006, to be finalised and agreed by ALG-Tec in June 2006.	Recommendation in the Best Practice guide for no bonfires to be permitted on construction sites across London.	Local Authority Led	Environmental Protection Unit (EPU)
5. 05.	Adopt best practice strategy for all proposed demolition and development projects. This will include the use of low emission vehicles and equipment and the use of dust minimisation techniques.	2005	In progress	Best Practice Guide: Control of Emissions from Construction and Demolition for consultation on GLA website March 2006. Document out for consultation March 2006, to be finalised and agreed by ALG-Tec in June 2006.	Recommendations in the Best Practice guide for use of low emissions vehicles on construction sites including retro-fitting of specialist vehicles.	Local Authority Led	Environmental Protection Unit (EPU)

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
5. 06.	Ensure continued regulation of part B processes and maintenance of part B register. Ensure register is available on-line.	2006	Planning phase	Waiting for 2005/06 report from Kings College.		Local Authority Led	Environmental Protection Unit (EPU)
5. 07.	Investigate introduction of Air Quality Action Plans for local industries, including those currently un-regulated under EA.	2008	In progress	Hillingdon Business Forum looking to set up Green Awards for businesses as part of their 2006/07 work programme (this could also include measures 5.08 and 5.09 if the Green Award scheme is a good one).		Local Authority Led	Environmental Protection Unit (EPU)
5. 08.	Consider introduction of Environmental Award system for local industries and businesses.	2008	Not started	No progress to date.		Local Authority Led	Sustainability Steering Group
5. 09.	Encourage businesses to participate in environmental management schemes and to continue to improve environmental performance.	2008	Not started	No progress to date.		Local Authority Led	Sustainability Steering Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
6. Improving Eco-efficiency of current and future developments, inc. Council properties							
6. 01.	Provide a consolidated platform for advising businesses and the public of the risks of air pollution, ways of reducing pollution, and campaigns such as Bike to Work Week, combining information from various Council departments and other bodies.	2007	In progress	Community plan includes target for awareness raising campaigns each year. July 2005 – Driving Down Pollution stand at Hayes Carnival, included electric car and bike, LPG van, children’s competition on Filthy Fumes. February 2006 – Hillingdon signed up to YourAir and AirTEXT project – this will provide air quality predictions on a street by street basis via the website and offer a texting service to vulnerable receptors with regards to high air pollution episode warnings.		Local Authority Led	Sustainability Steering Group
6. 02.	Work with existing buildings and housing stock to secure improvements in emissions.	2007	Planning phase	See 6.06.		Local Authority Led	Energy Efficiency Programme
6. 03.	Ensure continued use of existing mechanisms such as Section 106 agreements for improvements in air quality.	2008	In progress	Refusal on new residential development subject to appeal in 2005, one of the grounds for refusal is the worsening of air quality in the area as a result of the development.	APPLE working group project programme to include use of section 106 agreements and planning obligations.	Local Authority Led	Planning Department
6. 04.	Review and update Air Quality Supplementary Guidance when appropriate (see planning application form at Appendix 7).	2006	In progress	Air Quality SPG to be reviewed and incorporated into the LDF process in 2006.		Local Authority Led	Planning Department
6. 05.	Quantify cumulative effects of new developments within AQMA.	2007	In progress	London Plan targets for “opportunity areas” in Hillingdon identified, cumulative impact assessment to be sought in 2006/07.	Several opportunity areas identified in the London Plan in the south of Hillingdon where the air quality is currently poor.	Local Authority Led	Environmental Protection Unit (EPU)
6. 06.	Develop supplementary planning guidance for sustainable design and construction.	2006	Planning phase	Mayor’s Sustainable Design and Construction SPD adopted by Hillingdon in summer 2005.		Local Authority Led	Planning

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
6. 07.	Raise awareness of sustainable waste management practices.	2006	In progress	Full kerbside and green waste collection now available across the entire borough.		Local Authority Led	Sustainability Steering Group
6. 08.	Development of West London Air Quality SPD to ensure consistency across borough boundaries, explore opportunities for joint Section 106 agreements.	2005	In progress	The Hillingdon LDF is currently being formulated, consultation comments will be submitted to include cross-boundary issues.		Partnership	West London Air Quality Group

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
7. Actions to be Taken Corporately, Regionally and in Liaison with the Mayor							
7. 01.	Ensure that the London Development Framework, Borough Transport Strategy the Community Plan and future corporate strategies incorporate the borough air quality action plan and local air quality strategy measures where appropriate.	2006	In progress	<p>July 2005 - Links made with air quality in the draft West London Economic Development Strategy;</p> <p>Borough LIP incorporates all relevant Air Quality Action plan measures and has targets in the LIP monitoring framework– see Appendix X.</p> <p>September 2005 - West London sub-regional development framework – consultation response included - inadequate inclusion of impact of Heathrow therefore need for extensive environmental improvements, no mention of Freight Quality partnership and the need to address the issue of introducing people into areas of poor air quality.</p> <p>September 2005 – attendance at West London Environmental Strategies seminar – need for strong environmental objectives across the region identified as key objective;</p> <p>Hillingdon LDF currently at consultation stage, air quality policies identified for inclusion: link air quality and climate change, address issues of introducing receptors into areas of poor air quality, separation of sensitive receptors from polluting sources.</p>	Ensure air quality comments are logged in current LDF consultation process.	Local Authority Led	Planning Policy Unit
7. 02.	Develop an environmental management system for Hillingdon Borough Council.	2008	Not started	No progress.		Local Authority Led	LSP
7. 03.	Establish an Environment Coordination Office for more effective integration of actions to improve environmental performance within and outside the Council.	2008	Not started	No progress.		Local Authority Led	LSP

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
7. 04.	Implement an integrated procurement strategy so that purchase of goods and services is evaluated against London sustainability targets. This to include support to environmental industries in London, where appropriate.	2006	Planning phase	Briefing note on London LEZ sent to Business Manager outlining criteria for compliance with LEZ.		Local Authority Led	Sustainability Steering Group
7. 05.	Provide air quality information to interested parties and link with other health initiatives.	2006	In progress	September 2005 – air quality exceedance data sent to PCT for health analysis statistics; Presentation on air quality to Ickenham Residents Forum. October 2005 - Article in Hillingdon People on air quality. February 2006 – consultant commissioned for development of west London air quality website; Funding sought via BSP to support 4 initiatives in the borough – Car free day, Bike week, Walk to School week, Walk on Wednesdays.		Local Authority Led	Environmental Protection Unit (EPU)
7. 06.	Work with the London Sustainable Distribution Partnership to implement infrastructure for effective and integrated distribution of goods in London.	2008	Not started	No progress.		Partnership	LSP
7. 07.	Work in partnership to ensure consistency of Action Plan measures and explore all opportunities for regional measures for reducing emissions.	2007	In progress	Commuter sub-group of HATF identified as new area for potential joint working, meeting attended March 2006. Joint projects identified with WL Freight Quality partnership. Highways Agency meetings identified as annual event. Environment Agency meetings identified as 6-monthly event.		Partnership	West London Alliance

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
7. 08.	Development of regional Air Quality Strategy to tackle cross-boundary issues and include all National Air Quality Strategy pollutants, climate change etc.	2007	Planning phase	March 2006 - Consultation response sent on AQEG Air Quality and Climate Change report – included recommendation to link air quality and climate change within LAQM regime, more research needed to tackle impacts from aviation.		Partnership	Local Authorities
7. 09.	UK Government to actively support air quality improvement in Hillingdon.	2007	In progress	Opportunities identified in 2006/06 include responses to EU Thematic Strategy, the PSDH process, the review of the National Air Quality Strategy.		Lobbying	DEFRA

Ref.	Action Plan Measure	Original Timescale	Progress with Measure	Outcome to date	Comments	Local Authority Role	Responsibility
Package							
8.	Action Plan Management						
8. 01.	Develop and maintain management system for implementation of the plan.	2010	In progress	Continual process.		Local Authority Led	Environmental Protection Unit (EPU)
8. 02.	Identify and secure all potential funding for Action Plan initiatives.	2010	In progress	BSP funding sought via LIP for 2005-2009; SCE grant sought for 2006/07; Climate Challenge Fund bid applied for March 2006.		Local Authority Led	Environmental Protection Unit (EPU)
8. 03.	Maintain, and where necessary expand, the existing air quality monitoring network.	2010	In progress	March 2006 - participation in Highways Agency diffusion tube survey; Diffusion tubes located outside AQMA, to be used in USA for 2006.	Looking to site new NOx analyser in Sipson this year.	Local Authority Led	Environmental Protection Unit (EPU)
8. 04.	Review and assessment of air quality in line with DEFRA guidance.	2010	In progress	Consultants commissioned to compile USA report for 2006.		Local Authority Led	Environmental Protection Unit (EPU)
8. 05.	Prioritise measures, providing a schedule for implementation.	2006	In progress	Workshops not set up in 2005, will look to include for 2006/07.		Local Authority Led	Environmental Protection Unit (EPU)
8. 06.	Provide progress report to DEFRA on annual basis.	2010	In progress	EMRC contracted to compile Progress report.		Local Authority Led	Environmental Protection Unit (EPU)
8. 07.	Review and adapt the action plan according to opportunity and circumstance.	2010	In progress	Ongoing process.		Local Authority Led	Environmental Protection Unit (EPU)
8. 08.	Maintain consultation process to disseminate information on progress against defined targets to other stakeholders.	2010	In progress	Continual process. This year has included presentations at several residents associations, articles in the local press and Hillingdon magazine.		Local Authority Led	Environmental Protection Unit (EPU)
8. 09.	Examine potential for the development of regional action plan on cross boundary issues.	2007	In progress	Continued attendance at regional groupings to ensure exploration of potential for joint action and regional improvements.		Local Authority Led	Environmental Protection Unit (EPU)

The London Borough of Hillingdon

Appendix 2: Integration of the Air Quality Action Plan with the LIP

This appendix reproduces Form 14 of Hillingdon's Local Implementation Plan (LIP) for transport improvements in the Borough. The material presented identifies a number of measures for air quality improvement, and also demonstrates the linkages between these measures and other parts of the LIP.

LIP PROPOSAL DELIVERY FORM 14	
Summary of Proposal:	Air Quality Improvement Programme
Location:	Borough Wide
Dates:	Continuous
Description of Main Elements:	
<p>This programme seeks to improve air quality in Hillingdon. It is forecast that annual average concentrations of nitrogen dioxide (NO₂) in several parts of the Borough will exceed the national target for 2005. This target defines a level of pollution, which experts consider represents an acceptable level of risk to human health. In accordance with regulations an Air Quality Management Area (AQMA) has already been declared.</p> <p>The main sources of oxides of nitrogen in the Borough are road traffic and activities associated with Heathrow Airport. Cabinet approved the London Borough of Hillingdon's Air Quality Action Plan in June 2004. As part of this plan a series of packages designed at reducing emissions from road transport were identified. These included:</p> <ol style="list-style-type: none"> 1. Switching to cleaner technologies – promoting use of public transport, cycling, etc, shifting freight from road to rail 2. Tackling through traffic 3. Promotion of cleaner vehicle technology 4. Heathrow measures <p>A number of measures were identified for each of the packages some of which encompass initiatives set out in other LIP programmes. Further assessment of feasibility will be undertaken for those measures identified below not included in existing programmes.</p> <p>A major project would be the development of a Low Emission Zone (LEZ) as part of a London initiative. The LEZ would need to be a proven cost benefit positive measure and be acceptable to local residents to ensure support. The Borough would require to be fully funded for any LEZ measures that may be proposed. Hillingdon would assist with the implementation of a phased programme with the initial pilots providing valuable information as regards to the suitability of the LEZ.</p> <p>TfL committed £120,000 to environmental programmes as part of Hillingdon's 2005/06 BSP allocation. The following table outlines funding requirements for this programme of work through to 2008/09. It is expected that this level of funding will be increased though to 2010-11 as more initiatives are adopted.</p>	

Air quality improvements are strongly linked to improvements in transport. The main improvements will come from measures focused on reducing traffic, using and promoting cleaner vehicle fleets and measures to relieve congestion along with reductions in traffic movements associated with access to Heathrow Airport. Twenty five of the transport-related measures in the air quality action plan have been linked to the LIP via inclusion in the relevant LIP forms throughout the document. The focus of the requirements for BSP (Borough Spending Plan) funding will be for the

remaining transport-related measures that are not covered by the current Forms. These are tabulated below:

Table A2.1 Action plan measures specific to Form 14 of the LIP

Package 2 Tackling Through Traffic
Ensure the provision of sufficient signage and details of spaces for public car parks
Investigate the creation of Clear Zones
Work in partnership with TfL to implement schemes along the problem corridors designed to smooth traffic flows
Package 3 Promotion of Cleaner Vehicle Technology
Develop and implement an Action plan via the BAA Heathrow Clean Vehicle Programme to make improvements in the Council vehicle fleet with regard to reducing emissions
Encourage local businesses and freight operators in Hillingdon to sign up to the Clean Vehicle Programme and develop and implement action plans for reducing emissions
Provide training for Local Authority drivers to minimise emissions, and consider opening training opportunities to other drivers working for businesses in Hillingdon
Ensure the implementation of the Idling Vehicles Regulations and actively promote the use of the Dirty Diesel Hotline for reporting smoky vehicles spotted in Hillingdon
Consider the recommendations of the London Low Emission Zone Feasibility Study jointly with the GLA, ALG and TfL
Install signs in waiting areas of Council premises, bus garages, coach stations and major leisure venues, etc advising drivers to switch off engines when stationary
Lead the way in testing new technology where appropriate e.g. greater use of electric vehicles in Council fleet, and act as a point of information for businesses and major fleet operators and other stakeholders in Hillingdon for cleaner vehicle technologies, national schemes and grant systems for the use of alternative fuels
Participate in the London-wide Vehicle Emissions Testing programme
Investigate the provision of low or zero emission buses for schools within the high exceedance areas
Facilitate the uptake and use of alternative fuels, including water-diesel emulsion. This should include development of appropriate alternative refuelling infrastructure where necessary e.g. charging points for electric vehicles
Package 4 Measures Specific to Heathrow Airport
Assess appropriate target for modal shift to maximise air quality improvements
Assess feasibility of specifying emissions criteria for Heathrow taxis, buses and coaches using the Central Bus Terminal, and car hire shuttles, hopper buses etc
Assess feasibility of an Heathrow specific LEZ to reduce emissions and accelerate take up of cleaner vehicle technology
Assess the use of bus priority, guided buses and high occupancy vehicle lanes in the Heathrow area

Initiatives for the above will include:

- Audit of the transport corridors in the pollution exceedance areas to develop an implementation plan for smoothing traffic flows and relieving congestion. This will use the LARCS system developed for West London via "New Solutions for Shared Pollution Phase 2";
- Development of an emission inventory for the Council Fleet via the Clean Vehicle Programme. This will include an action plan for reducing emissions and a communication strategy for signing up local businesses to the Clean Vehicle Programme;
- Full funding for the implementation of the London Low Emission Zone within and just outside of the Hillingdon boundary including appropriate signage,

local communication strategy for borough businesses, enforcement infrastructure where relevant;

- Identification of opportunities for alternative fuel infrastructure within Hillingdon and promotion of cleaner vehicle technology to local businesses and residents;
- Enforcement of the Idling Vehicle legislation including an audit of appropriate signage at depots, bus and coach stations, schools and other sensitive locations;
- Quantification and review of the Heathrow surface access strategies including the Bus and Coach Strategy, Surface Access Strategy and staff travel plans in order to assess the modal shift required to achieve air quality improvements;
- Feasibility study to assess the air quality improvements of a Heathrow specific LEZ and traffic management measures in the Heathrow area such as high occupancy vehicle lanes, freight priority lanes and guided buses;

Air Quality Assessment of Other Relevant LIP Actions

In order to assess the improvements of the other relevant LIP actions, each LIP form will have a monitoring mechanism attached in order to assess the potential air quality improvements. Table A2.2 indicates the air quality action measures which are incorporated within other LIP forms.

Regional working

A lot of the actions to be taken to improve air quality will need to be regional in approach. It is the intention to continue to bid for TfL funding via the West London Transport Strategy under the “Delivering New Solutions for Shared Pollution” project which is currently at the Phase 2 stage. There will also be opportunities under the West London Freight Quality Partnership for joint bidding to secure air quality improvements. Examples of the measures that will be put forward for regional funding are shown in Table A2.3.

Funding

A final summary funding table for LIP Form 14 is given as Table A2.4. Funding for air quality improvement measures linked to other parts of the LIP is not included in this table.

Table A2.2 Links between the Air Quality Action Plan and the LIP

Package 1 Switching to Cleaner Transport Modes	
Establish a Green Travel Plan for Hillingdon	Form No 17
Improve access to, and quality of, public transport travel information	Form No. 12
Encourage the development of more dedicated cycle (priority) lanes and signalling	Form No. 17, 38, 39, 40
Extend provision of more parking for motorcycles, mopeds and bicycles at public sites and new developments.	Form No. 25, 26, 30, 31, 34
Improve provision for pedestrians	Form No. 35, 36, 37
Introduce more Safe Routes to School throughout the Borough with special regard to the schools within the highest areas	Form No. 4, 12, 42
Ensure Green Travel Plans are a requirement for all businesses (new and existing) employing more than a specified number of people in the Borough.	Form No. 17
Seek to ensure improvements in overall public transport service, facilities, cleanliness, safety, frequency, reliability across the Borough and West London, and particularly in declared AQMAs)	Form No. 9, 25, 26, 30, 31
Improve the north-south public transport provision in the Borough	Form No. 9
Support multi modal travel by further development of public transport interchanges for rail/cycle/bus/walking both within Hillingdon and the West London area	Form No. 25, 26, 30, 31
Encourage development of efficient and high quality bus corridors	Form No. 8, 10
Investigate potential for more night buses	Form No. 9
Package 2 Tackling Through Traffic	
Introduce Home Zones / 20mph in residential areas subject to significant amounts of through traffic that should use alternative routes	Form No. 6
Develop best practice advice to ensure air quality assessments are made for proposals for new transport infrastructure and changes to traffic management	Form No. 3
Improve coordination of road works and provide more effective signing around them	Form No. 47
Investigate the use of light rail/tram schemes along other high exceedance corridors such as the A4 and A40	Form No. 19
Identify air quality congestion-related hotspots throughout West London and the appropriate measures for delivering improvement in both congestion and air quality	Form No. 13
Support rail projects that have the potential effect to cut through traffic e.g. Crossrail and extending the Underground system (e.g. Central Line to Uxbridge)	Form No. 16, 20
Package 3 Promotion of Cleaner Vehicle Technology	
Focusing on areas and corridors of high exceedance within residential areas, investigation into the banning or restricting of traffic, or particular types of traffic from identified roads	Form No. 1, 2, 6
Investigate the potential for discounts for residents with low emission vehicles in Parking management Areas	Form No. 24
Ensure freight developments in the West London area are subjected to an air quality assessment before implementation	Form No. 3
Package 4 Measures Specific to Heathrow Airport	
Assess appropriate target for modal shift to maximise air quality improvements	Form No. 23
Develop best practice guidelines to ensure air quality impact assessments are integral part of relevant transport and infrastructure proposals and the appropriate mitigation measures are inclusive part of any scheme	Form No. 3
Assess feasibility of specifying emissions criteria for Heathrow taxis, buses and coaches using the Central Bus Terminal, and car hire shuttles, hopper buses etc	Form No. 8
Pursue relevant organisations to prioritise public transport provision to Heathrow, particularly rail links to the west east and south	Form No. 23
Assess the use of bus priority, guided buses and high occupancy vehicle lanes in the Heathrow area	Form No. 8

Table A2.3. Regional working

Package 1 Switching to Cleaner Transport Modes
Investigate the feasibility of working with relevant stakeholders to subsidise bus, train and underground fares in order to achieve significant modal shift
Improve access to, and quality of, public transport information on regional basis
Package 2 Tackling Through Traffic
Support the West London Transit Scheme project if acceptable
Work in partnership to investigate use of fiscal measures such as road pricing, for reducing traffic on major road networks
Consider establishment of cross-agency regional group to address air quality issues with regards to roads
Investigate use of high occupancy vehicle lanes and freight priority schemes along the major exceedance corridors such as the M4, A4, A40 and A3112
Investigate the use of light rail/tram schemes along other high exceedance corridors such as the A4 and A40
Investigate measures such as variable message signing and other measures to smooth traffic flows on the HA/TfL routes M4 and surrounding link roads
Investigate use of speed limits on major roads at the optimal level for NO _x and MP ₁₀ emissions for the current traffic profile
Package 3 Promotion of Cleaner Vehicle Technology
Consider the recommendations of the London Low Emission Zone Feasibility Study jointly with the GLA, ALG and TfL
Work in partnership to investigate use of fiscal measures such as road pricing, for reducing traffic on major road networks
Develop sub-regional Bus Quality Partnerships focussed on addressing the contribution of buses and coaches to emissions
Work in partnership for the provision of low emission buses in the West London/Heathrow region
Work with the West London Freight Quality Partnership to develop a Freight Strategy to include reducing the air quality impact of freight maximising opportunities to move freight from road to other modes e.g. canals
Ensure freight developments in the West London area are subjected to an air quality assessment before implementation
Package 4 Measures Specific to Heathrow
Assess feasibility of Congestion/Access Charging at Heathrow to reduce overall travel movements to the airport
Pursue relevant organisations to prioritise public transport provision to Heathrow, particularly rail links to the west east and south
Ensure the minimisation of the air quality impact of freight deliveries to and from Heathrow is a key objective of the West London Freight Quality Partnership (WLFQP)
Assess the feasibility of a Park and Ride scheme specifically for Heathrow
Explore feasibility of reducing fares on the Heathrow Express
Pursue relevant organisations to prioritise public transport provision to Heathrow
Explore feasibility of an airport passenger tax, ring

Table A2.4 Funding table

TOTAL FUNDING TABLE (£K)		2005/06	2006/07	2007/08	2008/09	Total (£K)
FUNDING REQUIRED FROM BSP		120	45	100	100	365
TOTAL FUNDING REQUIRED		120	45	100	100	365
OTHER FUNDING SOURCES	AMOUNT (£k)	STATUS (Requested, Approved)		COMMENTS		
OTHER (please specify)				If available S106 money from developer schemes may be used to contribute to this programme		
Key Delivery Partners:		Dependencies and Risks:				
Hillingdon Officers, Members, emergency services, interest groups, the general public, BAA and other stakeholders, West London Transport and Air Quality Cluster Group		<ul style="list-style-type: none"> • Improvement measures are not identified • Suitable initiatives are not developed • Initiatives are compromised • Initiatives or aspects of initiatives are not supported • Missed funding opportunity 				

