Air Quality Action Plan Progress Report 2010

Author: Ben Rose

Email: b.rose1@manchester.gov.uk

Telephone: 0161 234 4868

Address: Neighbourhood Services

Environmental Protection Group

Hammerstone Road

Gorton Manchester M18 8EQ

Date: July 2010



Table of Contents

1.	Introduction	1
2.	Actions to Improve Air Quality	2
3.	Local Transport Measures	4
4.	Energy Strategies	5
5.	Effective Use of Enforcement Powers	6
6.	The Way Forward	7
7.	Conclusions	9
Table 1.	Manchester's Air Quality Actions - Local Transport Measures	10
Table 2.	Manchester's Air Quality Actions - Energy Efficiency Measures	33
Table 3.	Manchester's Air Quality Actions - Regulatory and Enforcement Measures	39
Appendix A.	New Local Developments	44
Appendix B.	New regulated industrial installations	46

1. Introduction

The ten local authorities that make up Greater Manchester published an Air Quality Action Plan in 2004 in order to improve air quality in the conurbation. Each authority also produced a local Air Quality Action Plan, which are contained within the Greater Manchester Air Quality Action Plan (GMAQAP) document as local annexes. The Manchester Air Quality Action Plan includes measures to deal with specific 'hot-spots' of pollution within the City that require extra pollution control measures above and beyond those set out in the GMAQAP. The Action Plan also includes additional measures that seek to reduce the background levels of pollution across the City in order to benefit all residents and people who visit or work in the City.

The policies and programmes in the Manchester AQAP were developed in partnership with stakeholders and are fully integrated with the Manchester Community Strategy. The City Council recognises that it must work in partnership with businesses and other interested parties across the City if it is to meet the air quality objectives. This builds upon the existing relationship with the other Greater Manchester authorities, related organisations such as the GM Passenger Transport Executive and external agencies such as the city centre businesses, and Manchester Airport which is implementing its environmental actions through its published Environment Plan (which includes a commitment to reduce air pollutant emissions).

The Manchester AQAP recognises that the solutions to the air quality issues need a coordinated response across the wider Manchester conurbation, and was launched at the same time as the GMAQAP in April of 2004. The proposals and actions detailed in this report summarise the substantial progress made since that time, but also show that the Action Plan is an active document designed as a rolling programme that will run for several years and as such, is seeing updated actions and initiatives as well as a number of individual measures that are still in their development and implementation stages. This applies especially to some of the larger projects, such as Metrolink, which are a vital part of the integrated transport infrastructure for the region, that offer a permanent solution to the air quality issues.

Transport, as the primary source of nitrogen dioxide and most of the other key air pollutants, is the focus of much of the Manchester AQAP actions with a suite of transport related policies and schemes to tackle this source of emissions. For this reason the AQAP has also been fully integrated into the Greater Manchester Local Transport Plan 2 (LTP2), which outlines the delivery of a five-year programme being taken by Greater Manchester authorities to develop the transport infrastruture across the Manchester area.

However, a number of other non-transport related schemes have also been included, all of which have an important and positive benefit for air quality. The Manchester AQAP policies to achieve the necessary improvements in air quality have therefore been separated into the following categories:

- Transport and traffic management
- Energy strategies
- Effective use of enforcement powers

2. Actions to Improve Air Quality

Manchester City Council first declared an Air Quality Management Area for nitrogen dioxide in July 2001, based on the area predicted to exceed the annual average NO₂ objective in 2005 and to a lesser extent the 24-hour PM10 objective along busy roads. Following a detailed review and assessment of pollutant concentrations in 2004, the AQMA was amended in 2007. This was based on predicted exceedences of the annual NO₂ air quality objective only.

The map in the Figure 1 shows the 2007 Manchester AQMA. It has reduced by over a third and covers a significantly smaller area than that from 2001, showing a decrease in the area of Manchester that would fail to meet the health based annual objective for NO₂. The 2007 AQMA shows the areas that may exceed this target and indicates that the priority air quality issue for Manchester are primarily in the city centre and along the main arterial routes out of the city.

Figure 2 shows oxides of nitrogen (NO_X) emissions source apportionment from the most recent emission inventory work carried out.

There is some evidence that has been highlighted recently to suggest that the hourly NO_2 air quality objective may be exceeded in certain locations. Air quality monitoring in the city has shown that all current and future air quality objectives are met in Manchester for other pollutants specified in the Air Quality (England) Regulations 2000 and the Air Quality (England) (Amendment) Regulations 2002 (lead, PM_{10} particulate matter, sulphur dioxide, 1,3-butadiene, benzene and carbon monoxide). Recent air pollution monitoring results in Manchester are outlined in the City Councils 2009 Updating and Screening Assessment report.

The 2009 Updating and Screening Assessment report identified relevant exposure for the annual NO₂ objective at locations within 30 metres of train tracks with a large number of movements of diesel locomotives, and proposed that a detailed assessment of these locations would be necessary to investigate exceedences.

Due to the identification of potential new exceedences of air quality objectives and significant enhancements made to both the emission inventory and traffic modelling in Greater Manchester, dispersion modelling across the Greater Manchester conurbation for both NO_2 and PM_{10} is currently being progressed. Results of the modelling exercise are due in Autumn 2010 and a Detailed Assessment report will follow.

Figure 1: The 2007 Manchester AQMA

Manchester Air Quality Management Area

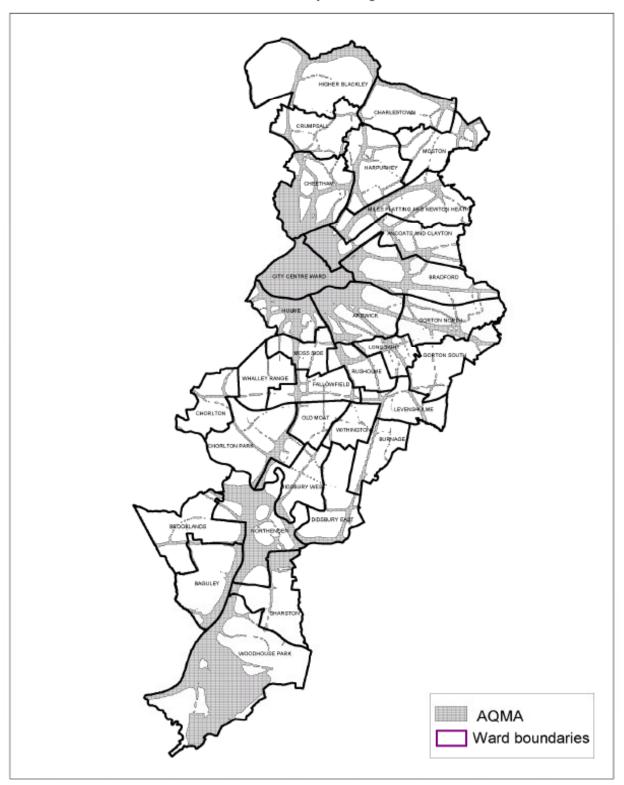
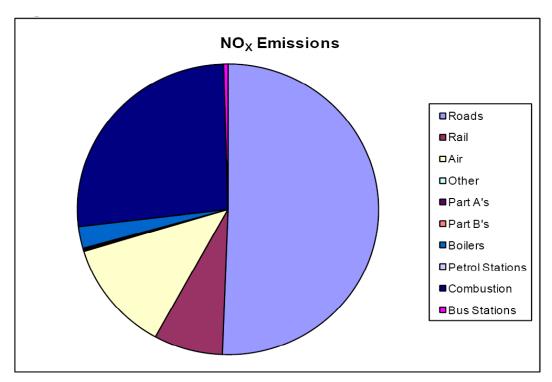


Figure 2: Source apportionment of NO_X emissions in Manchester



Since the first Air Quality Management Area was declared in Manchester the City Council has taken action to improve air quality. The programmes have been implemented through a combination of methods including technological improvements, awareness raising campaigns, enforcement action and public transport improvements. Details of the current Action Plan measure / target, original timescale for completion, progress with measure and outcome to date for the Manchester AQAP policies can be found after section 7 of this report. Tables 1 to 3 summarise local transport actions, energy efficiency programmes and regulatory and enforcement measures respectively.

A summary list of new, substantial development schemes that have been granted Planning Permission and were under construction in the financial year of 2009/10 which may have the potential to impact on local air quality is included in Appendix A. A summary list of new, regulated industrial processes that were granted an Environmental Permit in the financial year of 2009/10 is included in Appendix B.

The following summarises some of the key, recent initiatives and the context for these actions in relation to an integrated approach with other areas of environmental action by the Council.

3. Local Transport Measures

The transport element of the GMAQAP has always been seen as an integral part of the programme of action within the Greater Manchester Local Transport Plan (GMLTP). The most recent guidance for more formal integration of air quality (as one of the key indicators) within LTP2 is seen as an opportunity by the other Greater Manchester authorities and the City Council to develop closer partnership working on air quality and transport issues; a task that has already begun and is progressing. Action is being taken both within the Council and at a Greater Manchester level through the existing Local Transport Plan (LTP2) Group to progress this approach and establish effective implementation mechanisms.

Transport has been identified as the largest single source major source of NO₂ in Manchester and so air quality improvements will be heavily dependent on the delivery of GMLTP objectives. Nevertheless, there are additional measures set out in the Manchester AQAP that will have an impact on air quality at a more local level. Manchester City Council has developed a Local Public Service Agreement (LPSA) target for mode shift. This target is to increase the percentage of person trips to the regional centre made by means other than the private car. There is a clear linkage to improvements in air quality associated with this LPSA target.

Some notable successes have been achieved already, examples being the establishment of Quality Bus Corridors, the continuation of the Cleaner Vehicles Campaign, implementing workplace and school travel plans and the promotion of cycling and walking.

The Metrolink light rail system is the cornerstone of the Manchester public transport system. The Metrolink provides a high speed, high quality service, with no emissions at the point of operation. The speed, frequency, journey time and reliability offered by the Metrolink makes it a very attractive alternative to commuting by car. The existing Metrolink network has proved an outstanding success, with patronage currently at approximately 18 million passengers per year.

4. Energy Strategies

Actions have been prioritised that support both improvements in air quality and reductions in greenhouse gas emissions (primarily carbon dioxide emissions).

Manchester's Climate Change Action Plan called Manchester: A Certain Future was passed by the Chief Executive in December 2009.

This document set out the Council's objective of reducing CO_2 emissions by 41% by 2020 from 2005 levels across all sources - domestic, commercial, business and transport. This equates to a CO_2 emissions reduction from 3.2 million tonnes per annum (2005) to less than two million or a reduction in per capita emissions from 7.3 tonnes to 4.3 tonnes per head.

The climate change action plan presents a new way of thinking about climate change, which fits in the context of Manchester's Community Strategy and recognises that taking early action on climate change can deliver an even better city in which to live and work. In doing so this will strengthen the economy of the city, promote regeneration and improve the quality of life for local residents.

It is recognised that tackling climate change can have a significant contribution to improving air quality, due to the synergistic relationship between sources of CO₂ and air quality pollutants. The Council are therefore pursuing a "twin-track" approach to tackling air quality and climate change.

It is recognised that a significant proportion of the City's CO_2 emissions arise from the existing commercial and residential building stock. For the domestic sector the target is to save over 350,000 tonnes of CO_2 a year by 2020 through a major programme of retrofitting domestic buildings with energy efficiency and home energy generation measures.

In 2009, Greater Manchester was given the status of Low Carbon Economic Area (LCEA) for the Built Environment. Timescales go up to 2020. The domestic work plan concentrates on 4 areas of work:

- Intelligence and data collection
- Installing basic energy measures in 75% of the properties that still require it
- Eco-retrofitting 27% of properties

Behavioural change to save energy

The Council's work in improving the housing stock has already improved energy efficiency to date by around 26% which translates into an estimated saving of CO₂ emissions in excess of 331,000 tonnes. Progress with this measure also includes the creation of the Manchester Eco House, which is a working model demonstrating the wide range of improvements householders can make to increase energy efficiency, with information on grants and schemes that can help enable them to carry works out.

Energy Efficiency Advice Centres have been operational in Manchester since 2001, through funding from the Energy Saving Trust. The provision of free and impartial advice to householders in Greater Manchester area has resulted in assumed CO₂ savings in excess of 340,000 tonnes. Expansion of the scheme led to the formation of an Energy Savings Trust Advice Centre in 2008.

The Council has developed and adopted policies and supplementary guidance on reducing environmental impact for new developments to reduce emissions under the Unitary Development Plan objective 'To Foster a Cleaner and Less Polluted City'. The Environmental Standards section of the guidance sets out design principles to assist developers in achieving energy efficiency targets and measures to increase the use of renewable energy in new developments. The Local Development Framework Core Strategy is progressing and is in draft. This draft Core Strategy contains various policy approaches to reduce CO₂ emissions from development and minimise their impact on air quality.

The Environmental Business Pledge promotes both transport and energy actions by working with businesses located in the city centre to reduce the impact of their activities on local air quality. The scheme has received greater exposure since publication of the City Council's climate change action plan. The scheme aims to provide a 'one stop shop' for green action across the Council in partnership with businesses in the city. The companies are encouraged to look at their current policies and ways of working with a view to identifying areas where they could improve their environmental performance. There are currently 1450 companies registered with the scheme to improve their environmental performance and make reductions in energy use. This has resulted in a reduction of CO₂ emissions by 4174 tonnes and water savings of 49,991 m³.

The City Council's energy procurement policy has resulted in an aggregated total of 85% of the Council's electricity consumption coming from renewable sources, resulting in an annual CO₂ saving in excess of 32,000 tonnes.

5. Effective Use of Enforcement Powers

Several key regulatory and enforcement measures are being implemented by the City Council including:

- The Cleaner Vehicles Campaign: Phase 2 of the campaign has progressed, continuing with a regulatory approach of formal roadside vehicle emission test days, but also encompassing targeted fuel savings and CO₂ emission reductions through educational events for the general public and local authority staff in partnership with the Energy Savings Trust. 475 vehicles were tested in 2009/10. An average of 6.5% improvement in fuel efficiency (and hence emissions) based on staff receiving smarter driving techniques training has been observed.
- The Idling Vehicles Campaign: continues to take enforcement action against drivers who idle
 their vehicles unnecessarily when parked at the side of the road. In general there is felt to be a
 good level of awareness in the city centre. Street Wardens in Manchester serve fixed penalty
 notices when drivers fail to comply with the immediate switch off request. To date over 383

fixed penalty notices have been served since the start of the campaign in May 2005. Observations have shown that there is generally a high level of compliance though further joint working with the Greater Manchester Passenger Transport Executive (GMPTE) is currently being undertaken because buses are still recognised as a significant source of complaint and pollution. Partnership working with the Council's Street Management Enforcement Team has enabled pro-active working towards improving local air quality. Wardens now prioritise idling vehicles on days when pollution levels are identified as moderate or high. In addition, the Council's Street Management Team removed 1289 untaxed vehicles and 35 abandoned vehicles in the financial year of 2009/10. These figures indicate an increased level of compliance from previous years, and awareness amongst vehicle owners about their responsibilities. It has been found that these vehicles tend to be older than average, are more likely to have an out of date MOT and therefore more polluting.

- Dirty Diesels Campaign: Both residents and commuters to Manchester are still using both the
 hotline and website to report dirty / smoky diesel vehicles. Partnership working continues with
 the relevant enforcing authorities including the Vehicle and Operator Services Agency (VOSA)
 and the Council's Licensing Unit for taxis. Contact has also been made with key fleet operators
 such as the bus companies to highlight the campaign. Further promotion of the work continues,
 with Manchester as the lead for the continued partnership working across the whole of Greater
 Manchester.
- Campaign against the burning of waste: The campaign against the burning of domestic waste has continued throughout Greater Manchester. This has progressed by working in partnership with other campaigns, by encouraging the greener alternatives such as recycling and composting of waste, by Manchester residents, through education and publicity. The campaign is also backed up by regulatory action for repeat offenders, who do not dispose of their waste in a responsible matter. To date, 50 businesses have been prosecuted. However, there has been an increasing level of compliance over time. Parallel action is being progressed against commercial waste disposal by burning, through regulation under the Clean Air Act 1993 and the Environmental Protection Act 1990. In 2009/10, 3 statutory notices were issued against offenders. A commercial bonfire / trade waste leaflet has been produced and is widely used in Manchester.
- Permitting of regulated industrial processes: Manchester City Council permits over 100 processes in accordance with the Environmental Permitting Regulations, including 1 Part A2 installation, 34 Part B industrial processes, 50 petrol filling stations and 24 dry cleaners that are permitted under the regime in response to the Solvent Emissions Directive. The Council continues to comply with the Best Value Performance Indicator (BVPI) 217 for industrial processes, which is a measure of the percentage of pollution control improvements to existing installations that have been completed to timescales specified in guidance. The target has been set at 90%, which has consistently been achieved in Manchester.

In addition to the key regulatory and enforcement measures highlighted, the Greater Manchester local authorities are in partnership with Environmental Protection UK to develop internet based user friendly guidelines on air quality for construction and demolition sites in the region.

6. The Way Forward

Despite some improvements in air quality over the last decade, it is recognised that there is a need to implement further measures to reduce concentrations of NO₂ in Manchester, particularly in the city centre. The single most significant improvement will be Metrolink, which upon completion is predicted to reduce traffic by an additional 5.5 million car journeys a year. It is agreed that the implementation of the Phase 3 Metrolink extensions will have a significant beneficial impact on

improving air quality in Manchester, and is therefore one of the most effective mechanisms for improving air quality in the city.

The Council will need to continue to take a series of actions to improve air quality and make everyone aware of their responsibilities. This will require an integrated approach involving a range of different partners and with regard to the Council's climate change action plan. These improvements can be achieved through a combination of:

Technological improvements in vehicle efficiency, e.g.:

- continuing with updating the Council fleet of vehicles and piloting/adopting of low emission vehicle technologies where feasible currently the majority of Council vehicles are Euro 4 or better and the whole Council fleet now also runs on 5% bio diesel. In addition several electric vehicles are being trialled in various Council departments;
- promotion of the City Car Club in Manchester a scheme that enables users to hire a well
 maintained and relatively low polluting car by the hour, resulting in lower car ownership and
 reduced miles and vehicle usage. There are currently over 1,100 members in Manchester; and
- placing age limits on Hackney carriages and private hire vehicles there are approximately 3,000 taxis licensed in Manchester, representing 11% of all the vehicle kilometres travelled in the City Centre. In order to reduce emissions of NO_X and PM₁₀, the City Council has implemented a 12-year age limit on all Hackney carriages and an 8-year age limit on all private hire vehicles. There is an additional requirement that the engines of the vehicles must meet the Euro 3 emission standard. Several taxis have been retro fitted with particulate traps.

Increased domestic and industrial energy efficiency, e.g.:

- continuation of energy saving improvements to Council owned and registered social landlords housing stock;
- adoption of Local Development Framework policies intended to increase the sustainability of new developments and reduce emissions of CO₂ and air quality pollutants; and
- providing advice on energy saving through the Energy Saving Trust advice centre.

Improved public transport infrastructure and complementary policy measures, e.g.:

- making ongoing improvements to public transport bus services an order for the supply of 66 hybrid diesel-electric buses has been placed, including 20 city centre metroshuttle buses and 30 single deck buses to be used on subsidised services;
- Quality Bus Corridors continued investment and ongoing improvements to target bus fleet emissions and improve journey times, better waiting facilities and ticketing;
- encouraging increased uptake of electric vehicles formation of a business alliance and bidding for funding for electric vehicle charging infrastructure under the governments 'Plugged in places' scheme is proposed for September 2010; and
- continued development of school and workplace travel plans to reduce private car usage.

Enforcement measures, e.g.:

 continued enforcement of idling and polluting vehicles, waste burning and regulated industrial processes.

Campaigns:

Further improvements can be secured by continuing campaigns and awareness raising to encourage everyone in Manchester to save energy and to make a modal shift away from private car use to improve air quality.

The Emissions Inventory for Greater Manchester Area (EMIGMA) database will continue to be used as a tool to inform the air quality action plan and targeting of priority emission sources through improved source apportionment. This 'best practice' enhanced emissions database for Manchester includes CO_2 , and electricity and renewable energy use. A more sophisticated web based data collection system is now in operation and collection of 2007 and 2008 emission inventory data is in progress.

Dispersion modelling work across Greater Manchester to enable comparison with the national air quality objectives for NO_2 and PM_{10} has been commissioned by the GM local authorities and is currently being undertaken by the Greater Manchester Transportation Unit (GMTU) using 2006 emission inventory data.

EMIGMA is being seen a key tool for monitoring both current and future emission levels in relation to work programmes such as the AQAP and LTP2, providing an indicator not only for the levels of emissions but the relative importance of the relevant sources from commercial and domestic to the various classifications of road vehicles. In addition, recent forecasting work on emissions in Manchester, carried out by GMTU indicates that from 2005 to 2010 the levels of NO_X are predicted to reduce by 17.2% and the levels of PM₁₀ by 8.4%. A similar forecast for the whole of the GM conurbation showed comparable reductions for NO_X and PM₁₀ of 18.9% and 8.1% respectively. It is recognised that this facility now needs to be developed as a tool to quantify the emission changes for specific projects, to inform the Air Quality Action Plan. This is part of the future work programme for the GM Air Quality Working Group.

7. Conclusions

Good progress has been made with the Manchester AQAP to date. Action has progressed on all of the policies and measures set out in the plan. The Air Quality Management Area declared in July 2001 (which indicated potential exceedences of the annual NO₂ objective across much of the city and along the radial routes, and to a lesser extent exceedences of the 24-hour PM₁₀ objective) was replaced by a new area from the more recent modelling work carried out as part of the Round 2 Detailed Review and Assessment in 2004. The more recent AQMA was officially declared in 2007 for exceedences of the annual NO₂ objective only, and is reduced in size. It is concentrated on the business centre of the city and along the main arterial routes out of the city centre.

The actions set out in Tables 1 to 3 and their effective implementations are estimated to enable Manchester to meet the national air quality objectives. However, it is recognised by the Council that the pace of improvement needs to quicken and more work needs to be concentrated on the city centre. The achievement of the plans within the Council's Climate Change Strategy and Energy Strategy will also greatly assist in reducing emissions.

Both the Manchester and Greater Manchester AQAP are under constant review and are being developed further with increased links to climate change. In summary, the Council will need to use a combination of regulatory controls, influence and awareness raising to ensure that effective action is taken to improve air quality for residents and visitors to Manchester.

Table 1: Manchester's Air Quality Actions – Local Transport Measures

GM LTP	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
AQ REF	modelie, uniger				
D7	Metrolink network development: including the full completion of Phase 3, - the cornerstone of Manchester's transport and air quality programmes encouraging modal shift away from the car. It is estimated that Metrolink 3a will save 5 million car journeys each year.	Greater Manchester Integrated Transport Authority (GMITA)	Full Phase 3 funding reinstated in 2005. Funding for 3b has been reconfirmed by Government in June following spending savings. £102m funding package for upgrading existing (Phases 1 and 2) system was approved July 2006. Phase 3 will be delivered through the following stages: Phase 3a extension to Chorlton will open Spring 2011; Droylsden will open Spring 2012, and conversion of the existing Oldham — Rochdale line; planned for completion by Spring 2012 Phase 3b 'Accelerated Elements': Chorlton to East Didsbury and Droylsden to Ashton funding secured Target completion date of 2014. A funding agreement is in place for the remaining Metrolink line to Manchester	Delivery of £102m investment programme commenced July 2007. Renewal of large sections of worn-out track on Bury and Altrincham lines was completed on time and to budget in September 2007. Upgrade work on Phases 1 and 2, including city centre track renewals was completed in November 2009 8 new trams introduced to relieve peak congestion and meet suppressed demand. Metrolink 3a construction contract awarded in summer 2008 and works are underway and progressing well.	The number of non-car trips to Regional Centre has increased to nearly 70 percent of all journeys. Percentage non-car trips in 2009 were 3.4 percentage points above target and 7.0 percentage points above base in 2002. Car trips decreased by 18% and bus trips decreased by 4%. Rail trips increased by 16%, Metrolink by 11%, walk by 19% and cycle trips more than doubled. Too early for data on Metrolink expansion, but forecasts are for an increase in Metrolink patronage from 18.2 million passengers (2009/10) to 21.07 million passengers in 2010/11

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
			Airport and spurs into Oldham and Rochdale Town Centres – timescales to be confirmed.		
	Rail: Continued improvement in local rail performance complemented by public/private sector investment in minor station improvement schemes		Ongoing improvements to rail infrastructure through GMITA Rail Stations Improvement Strategy and Government 'Access for All' programme.	Progress on delivery of rail station improvements including: investments to improve the safety and comfort of waiting facilities, installation of CCTV, improved passenger information.	16% rise in rail passengers travelling to the Regional Centre since the base year 2002. 4% increase in rail journeys to the Regional Centre between 2009 and 2010
	Bus: GMLTP investment in quality bus corridors and supporting marketing with bus operators		Ongoing improvements to bus network, including highway schemes to improve journey times, better waiting facilities and ticketing	£88m Quality Bus Corridor programme completed	Reversal of historical decline in bus patronage in recent years, but 4% fall in bus patronage from 2008/09, probably due to recession.
	Development of Bus Codes of Conduct to raise environmental performance of bus industry		Launch of codes in Autumn 2010 to drive forward a greening of bus fleets.	Obligations relating to idling vehicles and increased proportion of fleet with lower emission engines.	To early for data but targets will be set for reduction in carbon including the proportion of the bus fleet considered to be Low Carbon as defined by the DfT
	Improvements to Metroshuttle network (free city		Ongoing promotion of Metroshuttle services and ensuring reliable service.	Launched in 2002, the network has expanded to 3 routes. A review of the	Expected improvement in fuel consumption of approximately 30%, thus reduced emissions.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	centre bus service) and fleet			service was carried out and re-tendering of contracts has been progressed, part of which is procurement of new vehicles to a minimum of Euro 5 or 6 compliant engines. Metroshuttle currently operates with low-floor, easy access Optare Solos that use Euro 3 complaint engines. Routes reviewed to improve attractiveness.	Patronage levels are increasing reducing car dependency for city centre journeys. Patronage on Manchester Metroshuttle's showed an annual increase of 14% for the year ending March 2009.
	Introduction of cleaner vehicles: Delivering 'cleaner' vehicles through improved engine technology or alternative power.		Ongoing improvements in public transport bus services	The Greater Manchester Transport Executive (GMPTE), on behalf of the Greater Manchester Integrated Transport Authority (GMITA) has been awarded a grant of over £3m from DfT, covering 66 vehicles.	Tendering has been completed and an order for the supply of hybrid buses has been placed with Optare: • 20 new diesel /electric series hybrid vehicles for Manchester Metroshuttle will come into operation Autumn 2010. • 16 hybrid yellow school buses and 30 hybrid single deck buses (to be used subsidised services) will be phased in from January 2011.
	Development of GM infrastructure of Electric Vehicles	Association of Greater Manchester Authorities	Commitments within the Manchester Climate Change Action Plan to increase take up of electric cars.	Proposal to develop a business alliance to bid for Government Plugged in Places fund in	GM Consortium of investors formed and developing business plan

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
		(AGMA) Environment Commission		September 2010	
E15	City Council Transport Policies:	Manchester City Council			
	Delivering a highway network that is safe, sustainable and accessible for all.		Ongoing improvements to highway network through Local Transport Plan to address air quality objectives and promote cleaner, more sustainable modes of travel and improve efficiency of network.	Over £1m spend on Congestion Management schemes to be deliver 2010/11	7 % percentage point increase in non- car modal share of journeys to the Regional Centre since 2002. Car trips decreased by 18% since 2002. Congestion improved on 5 out of 6 measured routes.
	Promoting sustainable transport and cutting car use by placing Public Transport at the heart of the transport network whilst encouraging more cycling and walking.			Good progress; see below	
	Joined-up working with the health policy agenda to improve health through active			Creation of a walking strategy with NHS partners	Improved joint working with NHS public health partners. Have contributed to development of NICE guidance.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	travel.				
	Tackling Climate Change through reducing carbon emissions: Influencing the Local Development Framework to ensure land-use strategies reduce the need to travel and help deliver air quality policy objectives.		41% reduction in city emissions by 2020	Traffic Management interventions are being developed to discourage through traffic and redirect traffic via strategic network and more use of ring roads.	Work nearing completion on agreeing a measurement tool. Work to cut emissions ongoing. Transport considerations included in LDF; formal adoption forthcoming. A transport strategy will provide the framework for implementation of schemes that will directly contribute to air quality improvements
	Development of Transport Strategy for Manchester City Centre (TSfMCC) includes policies and schemes that will have positive outcomes on air quality by removing through traffic, prioritising bus routes and improving the public realm for		TSfMCC has been out to consultation and publication is anticipated in Autumn, 2010	Progress on implementing a zone parking strategy to reduce the impact of cars, whilst meeting demand and improving accessibility.	Signing to different zones and key destinations improved. Parking pricing policy is discouraging long stay parking in central area.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	pedestrians and cyclists Parking policies to		Ongoing	Delivered a city centre	7 % percentage point increase in non-
	discourage long stay commuter parking in city centre and efficiently direct vehicles into available parking			signing and Variable Messaging System to reduce the levels of circulating vehicles searching for parking relieving congestion and improving air quality.	car modal share of journeys to the Regional Centre since 2002.
E3	Activities by Manchester City Council Travel Change Team to increase journeys made by sustainable modes.	Manchester City Council	Travel Change Team (TCT) in place. Has worked with schools, businesses and communities in Manchester. Target of all schools to have a travel plan by March 2010.	Travel Change Team working on promotion of sustainable travel in Manchester with particular emphasis on Smarter Choices. JobCentrePlus travel	Good success in meeting target of March 2010; almost all LA schools have travel plans. This has delivered a fall in number of children going to school by car (more detail in School travel plans section below).
	TCT work includes: Linking workless residents with jobs Improving			adviser in place (June 2010) to show jobseekers in Wythenshawe how they can access a full range of	Over 80 workplaces have travel plans in place, helping deliver modal shift particularly in the city centre. Too early to quantify outcomes.
	residents' health through active travel Delivering MCC's staff travel plan (see below)			workplaces. Ongoing cycle training to 100 adults and children in Wythenshawe.	Too early to quantify outcomes, but data reports will become available
	 Promoting active travel to 				

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	schools and reducing school-run car use (see below) Travel plans, particularly for major traffic generators (e.g. large employers) (see below) Expansion of car club (see below) Cycling promotion events to promote sustainable travel Delivering cycle training				
E9	School Travel Plans: Every Manchester school to have a Travel Plan by March 2010. School travel plans to reduce the number of car trips to and from schools thereby improving	Manchester City Council	Target is for all Manchester schools to have a Travel Plan by March 31 2010.	 New schools being built under the academies programme have a travel plan forthcoming Continuation of the successful Green Miles Competition (sustainable 	 Almost all LA schools have a travel plan in place by target date Fall in travel to school by car delivered 76 schools took part in the Green Miles competition, which awards prizes to the schools that are most successful in encouraging pupils to travel to school by cycling or walking.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	local air quality (amongst other objectives).			transport competition for schools with travel plans) Database of schools maintained to target resources, recording travel plans, safety schemes and highway infrastructure Development of information service to schools, pupils and parents of sustainable modes of travel to school (website and printed information to starters). Development of pupil cycle allowance instead of bus pass	The winning school [St Catherines R C Primary] achieved a figure of 93% of pupils arriving by sustainable modes. The most improved school [St Edmunds R C Primary] saw an increase of 49% arriving by cycle or walking during the competition period. The following engineering measures implemented to make sustainable transport more attractive: 118 schools with 20 mph zones 61 schools with Safer Routes to School schemes 21 schools linked to the National Cycle network
E8	Workplace travel plans: Travel Change Team to continue to engage workplaces in travel planning and deliver modal shift to reduce car use and so improve local air quality.	Manchester City Council	Ongoing work with Manchester businesses to implement Travel Plans through the Planning process and voluntary arrangements.	Currently work with over 80 organisations to deliver their workplace travel plans. Corporate usage of the City Car Club a major part of this work programme. Membership currently standing at 531 corporate	 Quality travel plans in major employers including: Higher Education Precinct (universities & hospital) The Co-Operative headquarters complex Manchester Airport Wythenshawe & North Manchester hospitals Also Wythenshawe area travel plan

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
E8	Manchester City Council Travel Plan 'Get on Board'	Manchester City Council	Pilot scheme in operation since 1998, full launch in 2005. Ongoing work to deliver, improve and monitor the effectiveness of the Travel Plan.	members (plus 529 individual memberships). Delivery of a strong package of measures that has cut emissions. Get on Board re-branded in April 2009 to refresh profile. Refreshed marketing plan in place May 2010. Staff Business Travel policies to be adopted Autumn 2010. Launch of 'Bike to Work' salary sacrifice scheme May 2009. Car Sharing scheme relaunched June 2010. Targets set across departments to achieve 7% reduction (35% Single Vehicle Occupancy).	being developed and implemented. Fall in the number of city council staff driving to work (single occupancy) from 42% to 35%. Launch and promotion of walkit.com/Manchester, pedestrian journey planner, March 2009. User statistics growing and highest in Greater Manchester. Actions include: Discounted public transport tickets Interest free public transport loans Salary sacrifice 'bike to work' scheme Emergency ride home scheme Improvement of cycle facilities (showers, lockers and cycle stands, etc.) Pool Bikes at 3 council buildings Promotion of walkit.com, online pedestrian journey planner and 'Bike to Work' campaign Car Club, to be extended to districts Car sharing website service
E1	Bus Lane Enforcement Strategy:	Manchester City Council	Enforcement commenced in September 2006.	Measures introduced in September 2006 and supported by associated	Bus lane enforcement figures for 2009/10:

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	To undertake the civil enforcement of bus lanes in Manchester to provide more reliable bus journeys thus encouraging modal shift.			publicity. Currently undertaking a rolling programme of enforcement at 30 locations using 13 fixed cameras, 5 mobile cameras and 2 camera enabled smart cars. The 2 smart cars operate on a daily basis on a random rolling rota covering 17 locations	 Since 1st April 2008-today, over 82360 Penalty Charge Notices (PCNs) have been issued Currently issuing an average of 119 PCNs per day High recovery rate for fines around 74%
E16	Street lighting installations and associated lighting levels to comply with British Standard recommendations, to encourage pedestrian activity within the night time environment and thus encourage the use of public transport.	Manchester City Council	Responsibility for street lighting taken over by contractor Amey Highways (Manchester) Ltd in 2004, following the award of a 25 year PFI Contract. Works continue for the duration of the contract.	In January 2009 Amey completed their 'Initial Asset Replacement Programme'. Replacing 41,698 dilapidated lighting columns.	Amey continue to carry out planned and reactive maintenance on all the street lighting stock to ensure lighting levels are maintained and lights are kept working.
E7	Deliver a Wythenshawe Community Travel - Plan Demonstration Pilot with Workwise.	Manchester City Council	March 2010 for first phase, estimate a minimum of 12 months through to September 2010 with a view to roll-out to other areas if	Pilot has been developed in partnership with key agencies (Job Centre Plus, Wythenshawe Regeneration,	No outcome data available at this stage.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	1. Identification of local issues that act as a barrier to the community using sustainable modes of travel (Public Transport, Cycling and Walking) 2. Developing a range of transport solutions to tackle issues 3. Improving residents access to employment and training opportunities to tackle worklessness.		proven successful.	Manchester Airport) Formed stakeholder steering group Project plan being developed Appointment of company to undertake household survey to identify travel issues.	
E7	Increase in Cycling: The Greater Manchester (GM) Cycling Strategy and proposed Cycling Vision for Manchester will contribute to encouraging modal shift away from the car, reducing emissions.	Greater Manchester Integrated Transport Authority (GMITA)	The production of a revised GM Cycling Strategy was required to respond to changes within GMLTP2 2006/07.	The GM Cycling Strategy policies and principles are currently being introduced across the city. GM Cycling Strategy was updated in 2006 to reflect the LTP2 objectives. The GM Cycling Strategy includes the provision of	The proportion of journeys to the Regional Centre by cycle has increased by 4% between 2009-2010 and have more than doubled since a baseline of 2002.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
REF				cycleways and installation of secure cycle storage facilities, enhancing the opportunities for cycle use across utility, leisure and sport cycle activity and journeys. Implementation of automatic cycle monitoring of cycling routes in Manchester, especially on key commuter routes into the regional centre and leisure routes are showing steady growth in usage. Cyclegm website redesigned and relaunched, including online cycle maps Further distribution of popular free cycle maps Greater Manchester Cycle Journey Planner developed and beta version available on Transport Direct	

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
				Cycle route leaflets and 'On Yer Bike' Greater Manchester Magazine produced to encourage cycling in the city.	
				Promotion of national bike week	Pedal cycles formed a higher proportion of the total traffic in Manchester compared to Greater Manchester as a whole.
	Improving cycling infrastructure at Rail/Tram stations		Cycle storage at Piccadilly Station 2010/2011	Funding secured to open a Cycle Centre at Piccadilly Rail. Station, providing safe storage. Virgin Rail scheme to provide additional storage and bike hire.	Data will be available at end of project.
	Deliver Cycle Training		Ongoing Bikeability training in schools. 300 free adult cycle training places over 6 months 2010	Funding for adult training secured and contract let.	
E7	Walking – Delivery of Greater Manchester Walking Strategy and the Public Rights of Way Improvement Plan (PROWIP)	Greater Manchester Integrated Transport Authority (GMITA) & Manchester City Council	Ongoing work to deliver the Ongoing work to deliver the Greater Manchester Pedestrian Action Plan PROWIP was completed in November 2007 a programme of priories was developed in 2008 following interrogation of the definitive	In line with the GM Walking Strategy and the recently updated GM Action Plan, Manchester continues to identify and where appropriate enhance pedestrian accessibility to local services and centres.	Between 2006 and 2009 walking trips into the Regional Centre have increased by 19%.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
			rights of way map for the PROWIP to identify existing and potentially additional pedestrian networks and access for walking activity. Launched March 2009.	Some district centres have already been targeted: Northenden, Withington, Longsight, Rusholme, Cheetham, Wythenshawe and Gorton.	
				A further improvement programme of access to district centres has been developed and will be delivered by the end of 2009.	
				Walkit.com user statistics growing and highest in Greater Manchester.	
E15	Congestion Target Delivery Action Plan To out-perform the LTP2 congestion target.	Greater Manchester Integrated Transport Authority (GMITA)	Delivery during LTP2 period 2005/06 – 2010/11 Improve network journey times and reduce unnecessary standing traffic, which impacts on local air quality.	Delivery of a £1m Congestion Management Programme of interventions has been agreed for the 2010/11 including £500,000 funding for 5 new congestion schemes.	Most recent survey indicates that Manchester has improved journey times on 5 out of 6 of its congestion routes.
E13	Promotion of Car Club City Car Club Manchester	Manchester City Council	Launched in November 2006. Manchester City Council supports City Car Club with policy advice and on-street parking bays. The City Council is a corporate member. Work is in progress	Fastest expanding of any of the City Car Club cities. Average car usage of over 6 hours a day. Over 1,100 members,	Fleet of 24 low-emission vehicles, at 14 dedicated parking locations, with more planned, including expansion into areas outside of the city centre. Membership results in lower car ownership – every car club car replaces up to 23 private vehicles – equivalent to

AQ REF	completion	measure	
to in plan City to ar syste	nclude car club within the nning framework. y Car Club is contributing an integrated transport item and improving air ality in the city.	55% corporate members. Increase in number of locations and cars across the city, growth according to demand.	over 550 cars across Manchester. Members typically drive fewer miles over time, and significant behaviour change has been affectively demonstrated. Public transport usage is significantly higher among car club members than national average. Car club cars are typically 30% more efficient than the national average, and are well maintained, so emissions are lower. Residential members, companies etc reporting significant cost savings. One MCC department saving approx £5,000 per year. Recent emissions comparison completed for MCC mileage in direct comparison with taxi mileage. Estimated savings 198kg CO ₂ , 0.04 kg NO _X , 0.01 kg PM ₁₀ . Very conservative estimate, with savings growing over time. Corporate members typically replace rush hour journeys into the city centre in private vehicles with journeys by public transport based upon the car club service meeting their needs for business travel. Very significant

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
					created as result and travel by public transport is reinforced as the norm.
E5	Council fleet procurement policy. The City Council will move towards operating a 'green' fleet of vehicles, by ensuring City Council vehicles are Euro 4 or better. Plan submitted to include in the "green fleet policy" all vans purchased for MCC will be speed limited to 62mph reducing emissions and providing fuel savings.	Manchester City Council	Vehicle emissions are now part of the vehicle purchasing programme. All vehicles purchased by the Council must meet the latest European emission standards. Targets are under regular review to consider a timescale for moving to a Euro 5 fleet.	Currently the majority of Council vehicles are Euro 4 or better. The whole Council fleet now also runs on 5% bio diesel. Significant reductions in emissions have been achieved with the retirement of older, more polluting vehicles. As part of the Carbon Reduction plan 2010/11 and after successful trials, we have recommended the fitment of secondary fuel saving devices to the MCC fleet of vehicles reducing emissions and fuel usage by 10% and that all new vehicles are speed limited to 62mph reducing emissions by as much as 18% when measured against 70mph.	A number of Euro 5 vehicles are now in use and it is the intention to increase numbers of these at every opportunity. The Council fleet also includes a fully electric car, producing zero emissions, which is used in the city centre and other ward locations. An all electric coffin and personnel carrier for use in Blackley Cemetery and an electric powered push bike for use in Southern Cemetery. An electric petrol hybrid car has been procured for the Licensing enforcement unit for their work across the city. Work will continue to follow the development of electric vehicles until the cost of purchase and reliability becomes realistic on a working scale. Trials are being undertaken using all electric mopeds to see if they can be included in the fleet. The Fleet section continually researches developments in alternative fuel / vehicle technology and is keen to embrace those which show potential environmental advantages.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
E5	Diesel fuel additive emission trial	Manchester City Council	October 2009	A diesel fuel additive trial has commenced to investigate any differences in exhaust emissions and fuel economy using several Manchester City Council staff vehicles.	Eight weeks of monitoring has been completed and no significant improvement in exhaust emissions and fuel economy was observed.
E5 and A8	Pilot project to trial an electric vehicle and make the vehicle 'emission free' by offsetting emissions produced from the charging of the vehicle using solar power.	Manchester City Council	Pilot project to be operational by April 2008	Solar cells were installed in August 2008. The Smart electric vehicle was delivered in July 2008, and is being used by Environmental Health staff to travel around the city in the course of their duties.	The project aims to increase awareness of alternative methods of transport and electricity generation from renewable sources. Up to March 2010, the solar cells have generated over 1765 kWh of electricity, resulting in CO2 emissions savings of 1.53 tonnes. Even taking into account emissions from power station electricity generation, the Manchester City Council Smart has resulted in a CO ₂ emission saving of 0.26 tonnes.
E15 and E8	Airport ground travel emissions reduction schemes: Construction of a ground transport interchange Ongoing implementation and promotion of	Manchester Airport	The airport introduced a Ground Transport Strategy in 1997 and a travel plan in 1998 to reduce ground vehicle movements per air passenger to 1.35 by 2005, and increase staff bus usage to 10% by 2015. Construction of the third rail platform to be completed by	A Revised Ground Travel Plan was published in 2004. The new plan was part of Manchester Airport's Master Plan published in 2007. The Manchester Airport Master Plan was written and a public consultation was undertaken in 2006.	Outcomes: Ground Transport Interchange now open.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	staff travel plan Construction of a third rail platform		December 2008.	The Master Plan was published in 2007 along with 4 supporting policy documents: Environment Plan, Ground Transport Plan, Community Plan and Land Use Plan. The Environment Plan makes a commitment for Manchester Airport to be carbon neutral for energy use and vehicle fuel use by 2015. The third rail platform opened on time in December 2008.	 Introduced new direct train service to Glasgow and Edinburgh in 2008, enhanced in 2009, and followed by 3 services to N Wales and Chester in 2009 £200K was invested in bus services in 2009 to support off peak and weekend travel to encourage employee use of public transport. Implemented forecourt management plan to direct private car and taxi pick up into the short stay car parks to cut down on congestion. 2009 monitoring results: The vehicle trip per air passenger ratio 1.34 at end 2009 9% local bus and 4% rail use by staff walk & cycle 4% at end 2007 Car usage was down to 80%, drive alone 73% at end 2009
E4	Low emission taxi scheme by implementing age limits on vehicles through the Council's Licensing Unit.	Manchester City Council	To introduce a scheme to lower emissions from taxis by the end of 2007. Report produced in August 2005 on behalf of the GM Authorities and Warrington on the potential effectiveness of introducing an age limit vehicle licensing policy on controlling exhaust emissions from taxis.	Implementation of a 12- year maximum age limit policy on all hackney carriages, and 7-year age limit an all private hire vehicles. The policy was updated in February 2009 to close a loophole of vehicle proprietors purchasing Euro 3 compliant	Hackney carriages: With effect from 1st January 2008 no hackney carriage vehicle license will be issued or renewed for a vehicle: 1. more than 12 years since the date of its first registration in this or any other country. 2. more than 10 years since the date of its first registration in this or any other country, unless the vehicle has been manufactured to Euro 3 or higher specification or has fitted either a

REF	
A report was also produced by the City Council in June 2007 'Hackney carriage fares increase and age policy' that went to the licensing appeals committee for agreement on a 12 year maximum age limit. 12 year maximum age limit. 13 year maximum age limit. 14 year maximum age limit. 15 year maximum age limit. 16 year year maximum age limit. 17 year maximum age limit. 18 year maximum age limit. 19 year maximum age limit. 19 year maximum age limit. 10 year year year year year year year year	me, installed he Council, or the Council, or the Council such that the ssion not to be ary 2009, any nufactured of 3 or higher ed after 1 pen replaced Euro 3 to have an cion kit fitted. fitted by the hicle ary 2009, any anufactured of 1 or Euro 2 ped before 1 pen replaced ne, will not be oved emission aro 3 fitted ned the age of tits first

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
					With effect from 1st November 2006 the Council shall not renew the license of any vehicle if it is more than 7 years since the date of its first registration in this or any other country. This provision became fully implemented on 1st November 2007 so after this date there would be no private hire vehicle older than 7 years 11 months licensed by the Council.
					With effect from 16 February 2009, any vehicle that has been manufactured with a diesel engine that is Euro 3 or higher specification (manufactured after 1 January 2001) that has been fitted with a replacement engine will be required to have an approved emission reduction kit fitted. Any reduction kit must be fitted by the next routine scheduled vehicle inspection.
					There are currently 73 vehicles aged 5- 11 that have an emission reduction kit fitted. The vehicles that had been subject of an engine change would have remained undetected had it not been for the introduction of the emission reduction policy.
E3	Tree Planting: Tree planting will help to ameliorate air quality issues	Manchester City Council	The project started in 1995 when feasibility work was carried out to encourage	The Manchester Tree and Woodland Strategy was produced in July	In 2009/10 highlights included: 11,958 trees including hedge trees were planted as part of BBC Tree

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
			planting and establish more woodland in Manchester.	The City Council aim to plant 3600 trees per annum and 1000 hedgerow species. It is hoped that woodland management plans will be completed for all Manchester Woodland by 2010.	O'Clock event on 5th December 2009 In total, over 14000 trees and hedges trees have been planted in 2009 10 – over three times our target. 4 Community orchard/fruit tree groves planted Manchester has over 70 registered voluntary tree wardens. The Tree Warden network won the pride of Manchester group contribution to the Environment Award. Over 6000 People attended the tree-athlon and tree party at Heaton Park in October 2009. Long-term woodland Management Plans have been produced for Clayton Vale, Nan Nook wood SBI and park Wood Wythenshawe. An exec summary of the final tree audit report has been produced.
A9	Improvement and upgrading of Emissions Inventory for Greater Manchester Area (EMIGMA) database to be used as a tool to inform the air quality action plan, target priority emission sources	Greater Manchester Authorities in partnership with The Greater Manchester Transportation Unit (GMTU)	Development of best practice emissions database including CO ₂ and energy use (electricity) by June 2007. Annual updates of EMIGMA. Data for 2007 and 2008 is currently being collected to input into the database for dispersion modelling.	The Greater Manchester Transportation Unit (GMTU) has developed web-based access for industrial processes and large point source information. Dispersion modelling work across Greater Manchester to enable	EMIGMA 2006 was published in July 2009 with updated source apportionment information. Since 2005 the database has provided a measure of carbon dioxide including electricity consumption at point of use, to be used as a comparison with UK Kyoto targets. Collection of 2007 and 2008 emission inventory data is currently in progress.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	and quantify action plan emission reductions.			comparison with the national air quality objectives for NO ₂ and PM ₁₀ has been commissioned by the GM local authorities and is currently being undertaken by GMTU.	
E9	Sustainable Schools / Eco-Schools The Sustainable Schools Framework sets out challenging long-term aspirations for schools to mainstream learning about sustainable development issues and sustainable practices into everyday school life. Eco-Schools is an international award programme that guides schools on their sustainable journey, providing a framework to help embed these principles into the	Manchester City Council	Target for all Manchester schools to be Sustainable Schools by 2020	Sustainable Schools Working Group with membership of lead councillors and departmental representatives has carried out baseline audit of service provision to schools around sustainable issues. Annual Eco-Schools Forum event on theme of Sustainable Schools Encourage schools to complete School Travel Plans (Travel and Traffic doorway – Sustainable Schools / Eco Schools Transport theme.)	160 schools and children's centres taking part in Eco-Schools (80% of Manchester Schools) 59 schools and children's centres have achieved Bronze award 35 schools and children's centres have achieved Silver award 5 schools have achieved the highest level of award – the Eco Schools Green Flag 500 trees planted in schools and children's centres 30 schools participated in Green Day with day of activities around the environment and climate change 200 people attended Eco-Schools Forum with representatives from 45 different schools

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	heart of school life.			 Encourage schools to take part in Walk to School Week Encourage schools to take part in Bike Week activities Tree planting with schools, awareness raising on benefits of trees to contribute to (Buildings and Grounds doorway – Sustainable Schools / Eco-Schools Biodiversity theme) 	

Table 2: Manchester's Air Quality Actions - Energy Efficiency Measures

GM LTP	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
AQ REF					
NTA4	City Council 'Green' energy policy: The City Council is moving towards the use of electricity generated by renewable resources.	Manchester City Council	The switch to renewable electricity generation to take place by end of 2004.	Renewable energy contracts have been secured from certified renewable sources for 100% of all operational building electricity and 50% of all street lighting electricity. This gives an aggregated total in the region of 85% of the Council's electricity consumption coming from renewable sources. This has resulted in annual savings of 32,382 tonnes of CO ₂ . An additional annual saving of 3,010 tonnes has been made by including the AGMA wide Traffic Signals electricity use into the City Council's existing un-metered supply contract that is 50% supplied by renewables.	Green energy tariffs have been renewed for council contracts and have been extended to include GMUTC Traffic Signals load. Other operational building electricity contracts have been extended on the basis of 100% CCL exempt renewables. A new tariff for green energy is now offered to GM residents and a number of local businesses have switched to 100% renewable energy purchase.
NTA2	Home Energy Conservation Act (HECA) 1995 energy efficiency programme	Manchester City Council	In line with HECA 1995, the Housing Services Energy Team aims to improve the energy efficiency of housing stock across the city and collate information about improvements carried out by other housing providers. The	Delivering the Warm Homes Project that offers free and discounted insulation measures to homeowners throughout the city. In 2009/10, the outputs for the £1.5m	Since HECA reporting began in 1996, Manchester has reported the following: a percentage improvement of 25.75% up to 31st March 2008 Total tonnes of CO2 saved = 331,684

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
			target set by the Government was a 30% improvement by 2010.	scheme were: • 3,638 properties were improved with 5,301 measures. The lifetime saving of CO2 as a result of these measures being installed is 71,910 tonnes. • Energy saving improvements to Council owned housing stock and the newly formed Registered Social Landlords from the stock transfer process – the CO2 saved as a result of the measures installed by the above in 2009/10 is 6,884 tonnes. This is just for the year 2009/10, not lifetime savings. • Warm Front grants – 2,079 energy saving measures have been installed in 1,914 properties within Manchester at a cost of £4,136,540.	DEFRA has not requested information for 2008/09 or 2009/10 as they are due to repeal the HECA Act. Further planned work for 2010/11 includes: • continuation of the Warm Homes project; • energy saving improvements as part of the Bowes Street ecorenewal project; and • continuing with energy saving improvements made to Council owned housing stock by registered social landlords and arms length management organisations (ALMO).

GM LTP AQ	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
REF				Unfortunately we have not yet received the information from EAGA (the managing agents for the grants) about how much CO2 saving these measures equate to.	
NTA2	Energy Saving Trust Advice Centre (ESTac).	Manchester City Council	The ESTAC has been operational since April 2008. It is funded by the Energy Saving Trust and provides free and impartial information and advice to householders in Manchester and across the other 9 Greater Manchester Local Authorities. The advice service expanded into Energy Saving Trust Advice Centre from the old Energy Efficiency Advice Centre (EEAC).	The following services were delivered by the Energy Saving Trust advice centre to Manchester residents in 2009/10:	The assumed CO ₂ savings as a result of this ESTac activity is 348,278 tonnes.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
				Checks 10672 households received Transport Advice 9261 Measures were installed.	
NTA3	Environmental Business Pledge (now incorporating the City Centre Campaign): A joint venture between the City Council and Groundwork Manchester to promote and develop best practice for green travel, fleet management, and energy efficiency to reduce emissions and improve air quality across the cities business community.	Manchester City Council	Pilot scheme of volunteer companies in 2004. Campaign rolled out to businesses across the city centre since mid 2005. The scheme is now incorporated into the Manchester City Council Environmental Business Pledge (EBP) to provide a 'one stop shop' for green action across businesses in the city, in partnership with the Council.	The recent development of the Manchester – A Certain Future (A stakeholder climate change action plan for Manchester) has provided greater exposure for the scheme. The scheme is seen as a delivery mechanism for the Businesses to achieve environmental improvements in line with the Manchester – A certain Future. The scheme has seen significant outputs over the last 12 months, with increases in all monitored areas. The scheme has expanded to over 1450 registered businesses city wide with a greater focus on carbon reduction	Businesses of all sectors and sizes across the city are working on environmental improvements through structured criteria with a focus on measuring and reducing their Carbon Footprint by identifying and reducing areas of energy consumption throughout their business. To date out puts achieved are: CO ₂ savings of 4174 tonnes Water savings of 49,991m ³ 3700 tonnes of waste diverted from landfill
NTA4	Planning Policies: Development of policies and	Manchester City Council	Manchester City Council will continue to use Unitary Development Plan (UDP) policies and develop Local Development	Ongoing implementation of UDP policy E1.1 under the objective 'To Foster a Cleaner and Less	The Environmental Standards section within the Guide to Development in Manchester Supplementary Planning Document and Planning Guidance

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	supplementary guidance on reducing environmental impact for new developments to reduce emissions.		Framework Core Strategy policies to ensure air quality issues are considered in the planning process. The Core Strategy is timetabled to be adopted in December 2011.	Polluted City'. Draft Core Strategy policy approaches have been prepared that will require the reduction of CO ₂ emissions from new development and other emissions generated by the development and associated traffic. Draft Core Strategy policy approach En 14 seeks to improve the air quality within Air Quality Management Areas, by expecting developers to meet at least the minimum standards set out in the North West sustainability checklist and to take measures to help minimise and mitigate the local impact of emissions from traffic generated by the development, as well as emissions created by the use of the development itself. Policy approach En4 requires the cumulative impact of energy generation to be	(April 2007) sets out design principles to assist developers in achieving energy efficiency targets for new development and measures to increase the use of renewable energy in new developments. The statutory consultation on the final Core Strategy document is planned for November 2010.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
				taken into account when considering applications, including impact on local air quality.	
NTA3	Environmental Management System (EMS) project: A pilot project to engage with selected commercial organisations to assist them with implementing Phase 1 of the British Standard BS 8555 environmental management system guidance.	Manchester City Council	Financial year of 2010/11.	Defra funding was received through the air quality grant programme in August 2009. 2 organisations are now being engaged with, to progress the project: 1. Stormproofings Ltd - a Part B industrial process (a textile and fabric coating operation falling under PG note 6/8). 2. Arriva UK Bus - A major bus operator in the city.	Assistance has been given with meeting the requirements of stages 2,3 & \$ of Phase 1 of the standard, and a written report produced of findings. This project has raised awareness of their wider impact on air quality and begins to address changes in their operations that reduce emissions of key pollutants such as NO _X and PM ₁₀ . The project will continue in this financial year and it is intended that outcomes of the project will be publicised via a City Council internet page.

Table 3: Manchester's Air Quality Actions – Regulatory and Enforcement Measures

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
NTA4	Cleaner Vehicles Campaign: A campaign of voluntary and formal regulatory emissions testing of vehicles. Enforcement action taken against vehicles that fail to meet MOT test emission limits. Phase 2 of the CVC also includes educating drivers on fuel saving measures, leading to emission reductions from transport.	Manchester City Council	Phase 1 of the campaign began in 2003 and was completed in March 2009. Phase 2 of the campaign commenced in 2009 and is ongoing.	Phase 1 of the campaign focused on a regulatory approach and formal test days, and was completed in March 2009. A report was produced by GMTU in March 2009, which analysed the results of the roadside tests of vehicle emissions in Greater Manchester and Warrington from 2003-2009. Phase 2 of the campaign continues to include a regulated approach with formal roadside emission test days, but also encompasses targeting fuel saving and CO ₂ reduction through informal educational events for the general public and local authority staff in partnership with the Energy Savings Trust. In 2009/10, 27 vehicle emissions test days were completed across Greater	Annual vehicle pass / fail results have shown an overall decline in vehicles failing the test over the 7 years that Phase 1 of the campaign has been running. Nevertheless, it has identified that there is still a significant number of vehicles on the road that have polluting potential, particularly diesel engines. The progress of Phase 2 of the campaign was reviewed at the end of 2009 and is considered to have been successful. The ability to collate quantitative results is limited but, based on staff fuel usage prior to and following receiving training on techniques for saving fuel, a 6.5 percent improvement has been observed in fuel consumption and therefore vehicle emissions.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
NTA4	Dirty Diesel Campaign: Encouraging the public to report smoky, grossly polluting vehicles. Targeted to reduce PM ₁₀ but also reflecting badly tuned vehicles that have higher emissions of a range of pollutants.	Manchester City Council	Implemented in 2004/5 and ongoing.	Manchester, with 475 vehicles tested. 5 smarter driving days were completed in partnership with the Energy Savings Trust. Campaign began in November 2004 and is still publicised via the hotline and website: www.cleanervehicles.org. uk Leaflets are also handed out to drivers during the Cleaner Vehicles Campaign days to increase awareness.	Smoky vehicles are reported to City Council's Licensing Unit or VOSA for commercial vehicle operators for enforcement action. Private vehicles are investigated through the DVLA. Partnership working with GMPTE is also enabling us to deal with individual buses / companies that have excessive emissions. The total number of vehicles reported in Manchester during 2009/10 was 20.
NTA4	Idling Vehicles Campaign: Advice and enforcement (Fixed Penalty Notices) against drivers idling their vehicles unnecessarily.	Manchester City Council	Enforcement procedures developed and agreed with Council. The Campaign was launched in May 2005 as part of '100 Days to a Clean Manchester' Campaign.	Raising awareness of emissions and energy issues of idling vehicles. 383 Fixed Penalty Notices (FPN's) have been served since the launch of the campaign up to end of March 2010 (58 FPN's in 2009/10). Partnership working with	Initial indications showed a high level of compliance from commercial operators following publicity as part of the implementation of the scheme. In addition, Manchester City Council Street Management Team removed 1289 untaxed vehicles and 35 abandoned vehicles in the financial year 2009/10.

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
				the Street Crime Wardens has also enabled pro-active work to focus on idling vehicles during periods when air quality is moderate or worse.	
NTA4	Campaign against the Burning of Waste: Proactive policy to stop the burning of waste at domestic and commercial premises and resulting emissions to air.	Manchester City Council	Updated commercial and domestic bonfire leaflets were produced in February 2006 in partnership with the other 9 Greater Manchester Authorities. The leaflets are now used widely across Greater Manchester.	Domestic bonfire campaign operational throughout Greater Manchester. Commercial bonfire / trade waste leaflet produced and widely used in Manchester.	In 2009/10 there were 75 reported incidents of commercial bonfires and 161 domestic bonfires. There were also 21 reported incidents of commercial chimney smoke and 6 from domestic chimneys. In relation to this, 3 statutory notices were served in 2009/10.
NTA4	Campaign against the Burning of Waste (continued):	Manchester City Council		The Council is taking a proactive approach to encourage proper disposal of waste to reduce instances of burning. Street Environment Managers aim to educate local businesses of their responsibilities regarding waste disposal by informal means, providing literature and ongoing advice.	In accordance with the sections 34 and 47 of the Environmental Protection Act 1990: 106 notices have been issued to businesses in 2009/10 requiring them to provide written evidence of how they dispose of their waste 143 notices have been issued to businesses in 2009/10 instructing them on how to correctly store and dispose of their waste 5 businesses have been prosecuted Fewer notices were issued in 2009/10 resulting in fewer prosecutions indicating greater levels of compliance

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
NTA1	Regulation of industrial processes under the Environmental Permitting Programme to control emissions to air including particulates, heavy metals and hydrocarbons.	Manchester City Council	Timescale and emission standards prescribed in, and enforced through legislation and procedures set out by DEFRA.	All targets for regulatory inspections in 2009/10 have been met. Although there have been some minor excursions from compliance, these have been dealt with effectively with assistance from the process operators. No formal action has been necessary. All permitted activities were risk assessed during this period as required.	over time. Minimising industrial pollution by ensuring emission limits are met. Manchester City Council have currently permitted: 1 Part A2 industrial process 30 Part B industrial processes 48 petrol filling stations 23 dry cleaning premises
A8 and A9	Improvements to air quality information on Manchester City Council's website	Manchester City Council	Staged approach of annual programme of updates and improvements to the Council's website and Manchester Green City website: www.manchester.gov.uk/manchestergreencity Air quality work is also highlighted on several other websites such as www.greatairmanchester.org.uk and www.cleanervehicles.org.uk	Air quality sites have been updated with key reports and information. The focus for the future is on a more interactive site providing improved facilities and self-service for customers.	The GreatAir Manchester website is updated periodically with air quality news items and daily with air pollutant levels. Air quality work in Manchester, including both LAQM and action plan work, is now well documented on this site and will be further augmented subject to funding.
	Development of web-based user friendly guidelines on air quality for	Greater Manchester Authorities	Financial year of 2010/11.	Defra funding was received through the air quality grant programme in August 2009.	A website has been set up for the project (www.greatairconstruction.org.uk).

GM LTP AQ REF	Action plan measure / target	Lead Authority	Original timescale for completion	Progress with measure	Outcome to date
	construction and demolition sites across the Greater Manchester region - a partnership between Environmental Protection UK and the Greater Manchester Public Protection Partnership.			A stakeholder consultation event was held in February 2010 to consult on the possible content of guidelines that could be developed for the Greater Manchester area to minimise the air quality impacts of construction/ demolition sites.	Views of stakeholders from the consultation event have been collated into a report and are being considered as a way forward. Development of best practice guidelines is underway.

Appendix A: New Local Developments

Manchester City Council Planning Department have provided a list of major development schemes (a floorspace exceeding 500 m² or having a site area of over 0.25 hectares that have been given planning permission and were under construction in the financial year of 2009/10. Development schemes that have been considered include hotel, industrial, office, retail and leisure and biomass schemes. Each scheme may have the potential to change traffic flows and therefore may have an impact on local air quality. The list has been divided into two sections: Schemes in the city centre and Schemes outside of the city centre.

Schemes in the City Centre						
Address / location of the scheme	Description of the scheme	Manchester City Council planning ref No	Date planning permission granted			
Ducie Street/Store Street	Development of a mixed-use scheme following the demolition of existing structures on the site. The scheme includes a multi-storey tower and podium comprising of a 220 bedroom hotel, fitness and conference facilities and 430 residential apartments; a medium rise element with 267 residential apartments and associated car parking; a public multi-storey car park; A1, A2, A3, B1, D1 and D2 space totaling around 3,660 sq m; open spaces and a bridge link to Piccadilly railway station. The scheme is currently stopped on site.	074143/221a	17 March 2005			
54 Mosley Street/1 New York Street	Development of a 13- storey office building with retail uses at ground level and two levels of basement parking on the site of the former 45 Mosley Street. The floorspace involved is 367 sq m retail and 9,790 sq m (net) offices.	084274/4580	7 December 2007			
Chester Road/Deansgate	Development of a mixed-use scheme comprising residential apartments, 6,867 sq m B1 space and a multi-deck car park, with apartments on the upper floors.	092647/4496	19 March 2010			
Ducie Street/Store Street	Mixed-use scheme with a multi-storey tower and podium comprising a 220 bedroom hotel, fitness and conference facilities and 430 residential apartments; a medium rise element with 267 residential apartments and associated car parking; a public multi storey car park; A1, A2, A3, B1, D1 and D2 space totaling around 3,660 sq m; open spaces and a bridge link to Piccadilly railway station. Construction work has ceased and the site is in use as a public car park.	074143/221e	17 March 2005			

Schemes outside the City	Centre		
Address / location of the scheme	Description of the scheme	Manchester City Council planning reference number	Date planning permission granted
Land Adjacent to Runger Lane, Woodhouse Park	Work was completed in April 2009 on the erection of a 169 bedroom 3* hotel for Premier Travel Lodge. The hotel will include meeting room, 120-seat restaurant and bar facilities.	082694/4687	2 November 2007
Great Ancoats Street/Jersey Street, Ancoats and Clayton	Development comprising two residential buildings with mixed-uses at ground level. The building fronting Great Ancoats Street will have 1,100 square metres offices/retail uses at ground level, whilst that fronting Jersey Street will include 280 square metres retail uses. Work on site by the original developer has ceased. St Vincent Investments (Ancoats) Ltd have now submitted a part retrospective application under reference 092252 for the erection of 166 residential apartments and 887 square metres of A1/A2/A3 and D1 floorspace on the ground floor with associated car parking	068631/2943	18 September 2003
Ashton Old Road/Fairfield Street, Bradford	Work started on the first phase of the redevelopment of Higher Openshaw District Centre in November 2009. Dransfield Properties are erecting a 7,711 square metres foodstore (3,739 square metres internal sales area) to be operated by Morrisons, together with 6,987 square metres in Classes A1, A3 & A4 (max 465 square metres) and A5 (max 185 square metres). Around 4,980 square metres office space and a 2,090 square metres leisure unit are also proposed. The scheme includes 670 car parking spaces.	080930/4625	12 March 2007
Bury Old Road/Thomas Street, Cheetham	Redevelopment of Cheetham Hill District Centre to provide A1 retail (shops), Class A2 (offices), Class A3 (food and drink uses) Class B1, (offices) Class D1 (dentist), a memorial garden and associated parking, landscaping, recycling facilities and a public transport link. The scheme includes a 6,735 sq m Tesco store, together with up to A1/A2 units totalling 4,645 sq m. Office floorspace is set at 1,304 sq m.	072818/4310	8 December 2004
Pollard Street/Carruthers Street/Ashton Canal, Bradford	Development of a mixed-use scheme comprising 420 apartments, office space and retail space with associated car parking and landscaping following the demolition of the Carruthers Street Mill. Office floorspace for the scheme is set at 1,808 sq m and retail space at 587 sq m.	075171/3270	8 August 2006

Appendix B: New regulated industrial installations

Manchester City Council Environmental Protection Group provided a list of regulated industrial processes that were granted an Environmental Permit in the financial year of 2009/10.

Address / location of the installation	Description of the installation	Manchester City Council Environmental Permit ref No	Date Environmental Permit granted
Air Livery Ltd, Hangar 2, The Westside, Manchester Airport, Manchester, M90 5BA	Commercial aircraft re-sprayer falling under Defra process guidance note PG 6/40(04) - 'Coating and Recoating of Aircraft and Aircraft Components'	PPC/B/02/09/RM	22 July 2009
Cascade (UK) Ltd, 3 Kelbrook Road, Parkhouse Industrial Estate, Openshaw, Manchester, M11 2DD	Painting/ spraying of fork lift truck attachments falling under Defra process guidance note PG 6/23(04) - 'Coating of Metal and Plastic Processes'	PPC/B/01/09/RM	23 March 2009