



WARRINGTON

Borough Council

Air Quality Action Plan

In fulfilment of Part IV of the
Environment Act 1995
Local Air Quality Management

2017-2022

Warrington Borough Council

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Executive Summary

The Council recognises that air pollution is an important determinant of health and that it affects the most vulnerable in our society in particular. Warrington Borough Council is committed to reducing the exposure of people in Warrington to poor air quality in order to improve the health and wellbeing of our residents.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³.

This Air Quality Action Plan (AQAP) has been produced as part of the Council's statutory duties required by the Local Air Quality Management framework. It outlines the actions the Council will take to improve air quality in Warrington between 2017 and 2022.

This action plan replaces the previous action plan which ran from 2008 to 2017, although many of the actions remain in place and are on-going. Projects delivered through the past action plan include:

- Increase cycle way infrastructure
- Produce school, workplace and personal travel plans
- Cycle hire scheme at town centre train stations
- Eco Stars Fleet Recognition scheme
- Parking standards to require electric vehicle charging points at all new developments, including all residential with off road parking

While the AQAP covers the years 2017-22, initial actions will focus on a framework of policies and plans to improve air quality and to support wider action to promote health and wellbeing and tackle social injustice. The Council is mindful of the need for its growth, regeneration and transport plans to be sustainable. It is not the Council's intention to produce a simple policy statement, nor to produce a definitive list of actual measures at this stage. It is important instead to fully evaluate a wide range of options and to allow the plan to evolve accordingly.

The Council will continue to liaise and work with Highways England in relation to the motorway network, which forms an important part of regional and national transport

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

infrastructure. We will undertake further exploration of potential schemes to improve air quality and consult with local residents.

This AQAP outlines how the Council will plan to effectively tackle air quality issues within its control. There are a large number of air quality policy areas that are outside of the Council's influence (such as vehicle emissions standards agreed in Europe, national policy and control of the motorway network), therefore work with regional and central government on policies and issues will continue.

We have developed 17 initial actions that can be considered under three key delivery topics: policy; infrastructure; and additional measures. These are set out in more detail in Section 5.1, and summarised on page iii.

WARRINGTON AIR QUALITY ACTION PLAN MEASURES (SUMMARY)

POLICY ACTIONS

- 1** Local Plan review
- 2** Sustainable Transport Strategies (Local Transport Plan update)
 - Walking and Cycling
 - Public Transport
 - Cleaner Fuels
 - Smarter Choices
 - Taxis
- 3** Environmental Protection Supplementary Planning Document review
- 4** Council Procurement
- 5** Smoke Control Area review

Infrastructure Improvements

- 6** Highways England/TfN working group
- 7** Warrington Intelligent Transport System
- 8** Chester Road Cycle Way
- 9** Burtonwood to Omega Cycling/Walking Link
- 10** Warrington West Rail Station
- 11** Centre Park Link Road
- 12** Western Link Road

Additional Measures

- 13** Clean Air Zone Feasibility Study
- 14** School, Nursery, Care Home and Nursery Action Group
- 15** Temporary Play Streets
- 16** Air Quality Web Page update
- 17** PM2.5 Monitoring

Responsibilities and Commitment

This AQAP was prepared by the Environmental Protection Department of Warrington Borough Council with the support and agreement of the following officers and departments:

Transport for Warrington
Public Health
Planning Policy
Regulatory Services

The AQAP has been approved by:

- Executive Board
- Senior Management Team
- Director of Public Health
- Director of Economic Regeneration, Growth and Environment
- Portfolio Member for Environment and Public Protection
- Portfolio Member for Public Health and Wellbeing
- Portfolio Member for Highways, Transportation and Public Realm

This AQAP will be subject to an annual review, appraisal of progress and reporting to the Council's Air Quality Programme Board. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Warrington Borough Council, as part of our statutory Local Air Quality Management (LAQM) duties.

If you have any comments on this AQAP please send them to the Environmental Protection team at:

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1 Introduction

This report outlines the actions that Warrington Borough Council will deliver between 2017 and 2022 in order to reduce concentrations of nitrogen dioxide (NO₂) within the two designated Air Quality Management Areas (AQMA): Warrington AQMA; and the Motorway AQMA. These two AQMAs have been designated due to exceedances in the annual mean objective for NO₂ as set out in the national Air Quality Strategy (AQS) for England and Wales. Actions are also to be considered to reduce particulate concentrations, thereby positively impacting on the wider health and quality of life of residents and visitors to the Borough.

The AQAP has been developed in recognition of the legal requirement on the local authority to work towards AQS objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This AQAP is considered to be a “live” working document and will be reviewed annually. Progress on measures set out will be reported on annually within Warrington Borough Council’s ASR.

2 Summary of Current Air Quality in Warrington

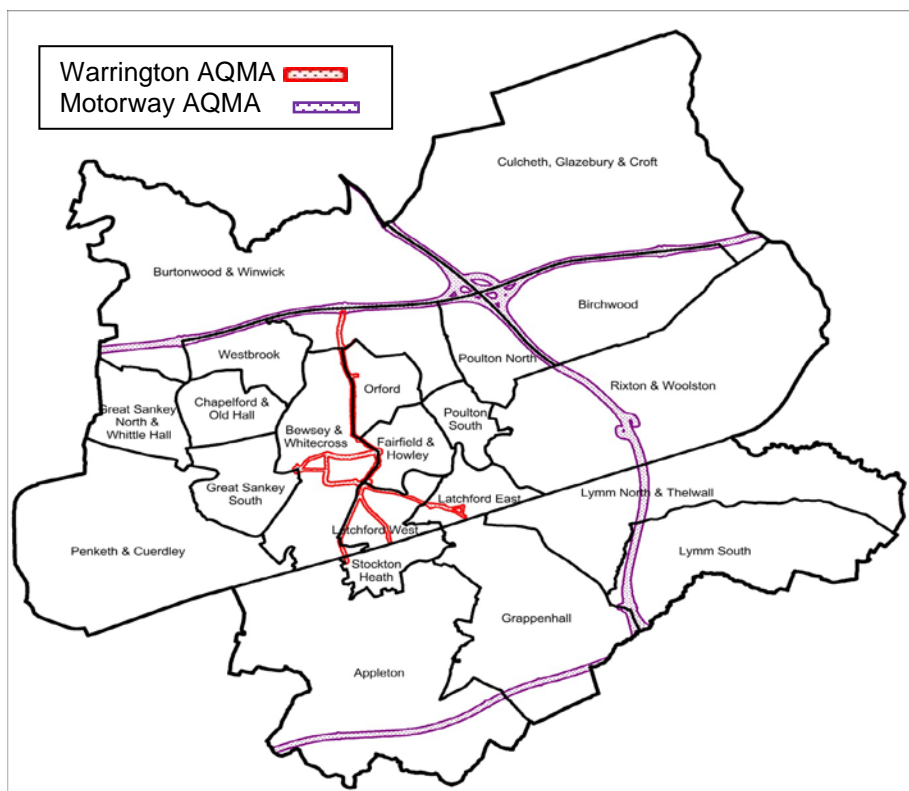
The majority of Warrington has good air quality. We have continued to review pollution levels and to designate Air Quality Management Areas (AQMAs) where necessary.

The latest plan of AQMAs is shown in figure 1. The original motorway related AQMA was designated in 2002. The Warrington AQMA, designated in 2016, follows the major arterial routes into and out of the town. The National UK Action Plan predicts that these routes may comply with the objectives by 2019. Our monitoring data, however, indicates that exceedances of the national nitrogen dioxide objective may still occur.

This plan has been introduced to target improvements in these AQMAs and where possible to deliver wider betterment in levels across the town. Whilst we have limited influence over emissions along the motorway, we will continue to liaise with Highways England and Transport for the North (TfN) with respect to the regional and national network.

Please refer to the latest ASR from Warrington Borough Council for full details of monitoring data.

Figure 1: Map of AQMAs



3 Warrington Borough Council's Air Quality Priorities

3.1 Public Health Context

According to the Committee on the Medical Effects of Air Pollutants (COMEAP), the evidence associating NO₂ with health effects has strengthened substantially over recent years. It is estimated that the effects of NO₂ on mortality are equivalent to 23,500 deaths in the UK annually. Many of the sources of NO₂ are also sources of particulate matter (PM). The impact of exposure to fine particulate matter pollution (PM_{2.5}) is estimated to have an effect on mortality equivalent to nearly 29,000 deaths in the UK and an estimated associated loss to the population of 340,000 life-years. The combined impact of these two pollutants represents a significant public health challenge. Air pollution affects mortality from cardiovascular and respiratory conditions, including lung cancer. On average poor air quality reduces the average persons' lifespan by 6 to 9 months, and as much as 10 years for people with existing health problems who live in poor air quality areas. In addition, exposure to poor air quality leads to restricted activity and increased GP and hospital admissions.

The Public Health Outcomes Framework (PHOF) is a Department of Health data tool for England, intended to focus public health action on increasing healthy life expectancy and reducing differences in life expectancy between communities. The tool uses indicators to assess improvements. Recognising the significant impact that poor air quality can have on health, the PHOF includes an indicator 3.01 relating to fine particulate matter (PM_{2.5}). This estimated that the fraction of mortality attributable to particulate air pollution (ages 30+) in Warrington for 2015 was 4% which equates to approximately 80 premature deaths due to PM_{2.5} exposure.

This AQAP will concentrate on reducing NO₂ levels but actions are expected to lead to additional improvements in PM_{2.5} exposure. Through improving air quality we can reduce both the short term and the long term effects on people's health. It will have benefits to those who may find their conditions are made worse through exposure to air pollution, for example people with heart or lung conditions or breathing problems.

PM_{2.5} levels though are not included within the national AQS objectives. Health data is also currently based on national assumptions. We are looking to refine our understanding of the local impact on health as part of an Air Quality and Health Chapter within the Joint Needs Strategic Assessment (JSNA).

3.2 Planning and Policy Context

Planning policy helps to ensure future development is sustainable, whilst ensuring that development within existing areas takes into account air quality as a material planning consideration.

The principle planning policy document is the current adopted Warrington Local Plan Core Strategy (2014). The Council has embarked upon a review of this plan and has published its Local Plan Preferred Development Option (LPPDO). The LPPDO has just completed a ten week consultation process and it is intended that a new draft Local Plan will be published in 2018. The LPPDO sets out future growth and employment plans for Warrington for the next 20 years. The LPPDO states that the Borough will require approximately 23,000 new homes and 381 ha of employment

land during that period. The new Local Plan will consider air quality and include measures to promote sustainable growth.

There are further supplementary planning documents (SPD) that set out actions that influence changes to air quality. The Environmental Protection SPD sets out standards for developers to consider air quality in their applications. The Parking Standards SPD sets out the parking standards for new developments including electric vehicle standards.

Due to the impact of road traffic on air quality, the Local Transport Plan (LTP) has been the key mechanism to deliver air quality improvements. The LTP is now being refreshed and will continue to contain the main actions relating to reducing transport emissions.

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Warrington Borough Council's area. A detailed source apportionment exercise was carried out by Warrington Borough Council in 2002. This identified that within the Motorway AQMA, the percentage source contributions for nitrogen oxides (NO_x) were as follows:

- Road traffic contributed to approximately 70% of annual mean concentrations
- HGVs and LGV were the dominant road traffic mode source estimated to contribute 49% of concentrations

The source apportionment also assessed primary roads within the borough in 2002 as follows:

- Road traffic contributed to approximately 40% to 50% of annual mean concentrations
- HGVs and LGVs contribute approximately 30% of annual mean concentrations
- Buses contributed approximately 3% of concentrations

This work confirmed that road transport emissions were the most significant source with industry assessed as contributing between 1 and 3.5%, and domestic sources 1 to 2% of concentrations.

The road transport component was further refined in 2013 as part of a Low Emissions Feasibility Study and used to inform the Detailed Assessment looking at the town centre and the main arterial roads. This work assisted in providing the evidence to designate the wider Warrington AQMA in 2016. The data shows that whilst diesel cars are the predominant source, HGV and buses contribute a disproportionate amount of NO_x compared to the distance driven. This showed that within the new Warrington AQMA, traffic mode sources could be apportioned for contribution above the background as follows:

- Petrol cars contribute approximately 11% and diesel cars 50% of NO_x, and account for 90% of distance driven
- HGVs and LGV contribute 20% of NO_x, yet account for only 9% of distance travelled.

- Buses contribute approximately 11% of NO_x yet account for only 1% of distance travelled

3.4 Required Reduction in Emissions

For the motorway AQMA, the 2002 source apportionment exercise estimated that emissions on the motorway would need to be reduced by 11µg/m³ to remove the AQMA designation. Using the calculations in line with Technical Guidance LAQM.TG16 (Chapter 7) based on 2016 data, the following percentage reductions in road NO_x are required to meet the national annual mean NO₂ AQS limit:

- Motorway AQMA: 43 % reduction in road NO_x
- Warrington AQMA: 41% reduction in road NO_x

These reductions are based on the locations with the highest exceedances. The geographical extent, and the number of receptors affected, can still be substantially reduced even if these estimated reductions are not fully realised.

While potential technical improvements in engine technology may lead to a reduction in emissions, and changes over time in industry within the borough could lead to further reductions, these have to be balanced against the predicted growth plans for Warrington. The potential improvements in industry and technology are not expected to improve air quality to an extent where the AQMA designations can be removed, and therefore additional actions for environmental protection and managing growth and transport are required.

3.5 Key Priorities

The key priorities for Warrington Borough Council are:

- Priority 1 – Reduce traffic volume and improve flows
- Priority 2 - Reduce emissions from HGVs and LGVs
- Priority 3 – Reduce emissions from bus and public transport including taxis
- Priority 4 – Reduce exposure for those who are most vulnerable
- Priority 5 – Ensure that future development is designed to reduce exposure and improve air quality.

4 Development and Implementation of Warrington Borough Council AQAP

4.1 Consultation and Stakeholder Engagement

In developing and updating this AQAP, we will work with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. In addition, we have undertaken a full public consultation on the AQAP. The response to our consultation stakeholder engagement is summarised in Appendix A. Following the consultation, it was decided at Executive Board level to remove the proposed draft action to Investigate a Workplace Charging Levy. All other proposed actions are included in the final AQAP. These actions will be progressed taking into account the consultation comments received for their delivery. Any actions deemed undeliverable following development will be logged in Appendix B.

Table 4.1 – Consultation Undertaken

Yes/No	Consultee
Yes	the Secretary of State/Defra
Yes	the Environment Agency
Yes	Highways England
Yes	all neighbouring local authorities
Yes	Public Health England
Yes	bodies representing local business interests and other organisations as appropriate
Yes	Residents and public

4.2 Steering Group

A Programme Board comprising of senior elected members and officers has been established to oversee the development and implementation of the AQAP. An initial meeting was held in March 2017 to agree the scope. Additional Programme Board meetings in July and September 2017 agreed the actions to be progressed. Under the Board, Delivery Teams have been tasked with implementing each action. The Executive Board approved consultation on the plan at their meeting on 13 November 2017. The consultation responses were reviewed by the Programme Board meeting in January where it was recommended to approve the draft AQAP. The AQAP was formally adopted following approval by the Senior Management Team and Executive Board in February 2018. The Programme Board will sit quarterly from March 2018 to review the progress of each action.

Membership of the Programme Board and Delivery teams can be expanded as and when required. The core members are:

Name	Role	Responsibilities
Dr Muna Abdel Aziz, Director of Public Health	Project Chair	Has the lead role to deliver the project and to oversee health interventions
Dave Watson, Public Protection Unit Manager	Delivery Manager	To ensure the Action Plan is delivered and submitted to Defra. Ongoing review and reporting.
Andy Farrall, Director of Economic Regeneration, Growth and Environment	Sustainable growth and planning	To oversee planning and growth policies
Dave Boyer, Assistant Director of Transport and Environment	Transport	To oversee transport policy
Dr Richard Jarvis	Public Health England	To provide health information and evidence, locally and regionally
Councillor Judith Guthrie	Portfolio Holder for Environment and Public Protection	To oversee environmental actions
Councillor Maureen McLaughlin	Portfolio Holder for Public Health and Wellbeing	To oversee public health actions
Councillor Hans Mundry	Portfolio Holder for Highways, Transportation and Public Realm	To oversee transport actions

The delivery teams are led by:

Team	Area	Responsibilities
Stephen Hunter	Transport	LTP and traffic policies
Michael Bell	Spatial Planning	Local Plan and Planning policies
Joann Mullally	Environmental Protection	Air quality data and report submissions to Defra
Dr Muna Abdel-Aziz	Public Health	Public Health actions

The Programme Board will meet quarterly to assess and review progress with the AQAP. Any amendments or revisions to the AQAP will be decided by the board. We will look at options to strengthen the public voice, as well as other stakeholders, within this process.

5 AQAP Measures

The information below, and in Table 5.1 at the end of the document, outline the Council's AQAP measures. It contains:

- a list of the actions that form part of the plan. These are arranged in order of policy actions, infrastructure improvements, and additional actions
- the responsible individual and departments/organisations who will deliver this action
- the estimated cost of implementing each action (overall cost and cost to the local authority). Actions are highlighted within the comments section of table 5.1 where funding or resources have yet to be allocated.
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

NB: Please see future ASRs for regular annual updates on implementation of these measures.

A list of existing on-going actions that contribute towards improving air quality is contained in Appendix C.

5.1 Policy Actions

Warrington was established as a New Town in 1968. This year is the 50th anniversary of the Town's designation as a New Town. Warrington has exceeded its New Town target population of 200,000 people. The New Town has also created one of the most economically successful places in the UK (Centre for Cities: Cities Outlook). However, the New Town did not complete its planned programme of infrastructure provision and the continuing issue of swing bridge movements over the Manchester ship Canal exacerbates congestion and causes poor network resilience.

This continued growth without the necessary infrastructure coupled with a New Town vision based upon the dominance on the car means that Warrington suffers from a combination of congestion, poor network resilience and poor air quality. The Council's development plans and transportation programmes need to create a step change in urban transportation over the next 20 years.

The Local Plan is the statutory development plan for the whole of the Borough and is used in the determination of planning applications. It is essential that the Council continues to have an up-to-date Local Plan in order to retain control over the type and location of development within the Borough, and so ensuring that development is 'Sustainable' and 'Plan' led. Alongside this, the Local Transport Plan will consider road infrastructure schemes to both address pollution and to 'un-lock' development sites.

The Local Plan is being developed by the Council's Planning Policy team with resource allocated. Air quality modelling and assessments, linked to traffic data, will be produced in order to allow a number of scenarios to be evaluated.

The Local Transport Plan is being developed in-house by officers from the Transport for Warrington service area. The staff resource to lead on the project is currently allocated and will be supported by other colleagues across the service area to provide specialist knowledge.

A review of all of the policies and procedures used by Warrington Borough Council is necessary to ensure that the effect on air quality is considered in all decisions that we make. For this action to be implemented the support of Senior Managers will be necessary. Staff resource from across the organisation would be required. The review of spatial planning and procurement policies will be the priority to encourage the use of non-car based modes and low emission vehicles.

5.1.1 Development Plan Context

The emerging Local Plan for Warrington is proposing around 23,000 new homes and 380 ha of employment land in the borough over the next 20 years (2017-2037). The Plan will set out a robust set of policies that will ensure that this growth is managed and delivered in a sustainable manner. The Local Plan is currently under consultation. The finalised Plan is expected to be formally adopted by the end of 2019.

The local plan will assess any air quality impact and air quality modelling will be carried out where appropriate. The Local Plan will include measures that contribute to improving air quality in Warrington, including:

- Reducing the need to travel
- Supporting the delivery of new strategic and local infrastructure
- Locating development in suitable locations through allocation of land and buffer zones to major roads.
- Creating high quality built environments
- Green infrastructure

The Local Plan will ensure that air quality is considered as a key part of development and provide updated and robust planning policies to improve air quality through a package of measures. When individual policies have been agreed on these, they will be added in revised and updated versions of the AQAP.

5.1.2 Sustainable Transport Strategies and Programmes

The Council has embarked on a major review and upgrade of its Local Transport Plan (LTP4). This will seek a step change in transportation within Warrington – with a focus on more sustainable transport – public transport, cycling and walking:

- *Walking and Cycling Strategies and Programme*

A Local Cycling and Walking Infrastructure Plan will be developed and adopted as a daughter document of LTP4. The strategies should consider the effect that increasing cycling and walking can have in areas close to schools and colleges. The Walking and Cycling strategies will be supported by a town centre access feasibility study considering key junctions in the town centre.

- *Public Transport Strategy and Programme*

A new Public Transport Strategy will be developed within LTP4 aimed at making public transport a more attractive choice for people in Warrington. The strategy will consider measures such as improving public transport information for passengers through further development of the Real Time Passenger Information system, and working with operators to improve the current fleet of buses and identifying relevant funding sources.

The strategy will develop an understanding into the reasons why bus patronage is dropping locally and consider measures to increase usage. It will consider actions to reduce the air quality impact from the bus fleet through measures such as alternative fuel sources for buses and a review of anti-idling legislation at the bus station.

The effects of public transport emissions close to schools and colleges will be included in the strategy. The strategy should also seek to increase the attractiveness of rail travel for journeys by setting out our aspirations for rail services in Warrington.

- *Cleaner Fuels Strategy and Programme*

As part of the programme to develop LTP4 we will develop a strategy focussing on encouraging the uptake and use of Electric Vehicles in Warrington. This will look at:

- The promotional materials and information available for people considering buying an Electric Vehicle
- The possible incentives available to encourage people to change
- Infrastructure improvements, such as the location of Electric Vehicle charging points
- The use of Electric Vehicles for car clubs in Warrington.

The strategy will also consider increasing the use of Natural Gas as a fuel source for heavier vehicles.

- *Smarter Choices Strategy and Programme*

Our Local Transport Plan contains our current strategies for improving smarter choices and the promotion of sustainable transport modes. As part of this programme we will be developing a new Smarter Choices Strategy, which will consider:

- Workplace travel plans
- School travel plans
- Website and social media
- Car clubs
- Warrington Intelligent Transport System
- Bus Real Time Passenger Information

It is vital that the Smarter Choices Strategy is complementary to other strategies such as Cycling, Walking, Cleaner Fuels, and Public Transport.

- ***Taxi Strategy and Programme***

Our Local Transport Plan contains our current strategies for managing taxis in Warrington.

As part of the review for LTP4 we will be developing a new Taxi Strategy that will seek to reduce emissions from taxis through:

- Promotion of Low Emission Vehicles for taxi operators
- A review of anti-idling enforcement at taxi ranks
- Requirements for taxis used for school-run contracts

5.1.3 Environmental Protection SPD

The current supplementary planning document (SPD) was produced in 2013 and requires updating to include new guidance. This is a principal document to advise developers on when and how to assess air quality within their applications. The document will be produced using current staff resources and no additional funding is expected to be required.

5.1.4 Council Procurement Policies

Warrington Borough Council's procurement policies will be reviewed to encourage and prioritise the use of Low Emission Vehicles. The two key strands to this action will be:

- Council fleet renewals to prioritise Low Emission Vehicles
- Council contracts to include additional weight for companies that use Low Emission Vehicles.

Staff resource would be needed for this action. Staff would be required from Environmental Health, Procurement, and Fleet Management.

5.1.5 Smoke Control Area review

The majority of Warrington is covered by Smoke Control Orders since the late 1960s, but excludes the Hatton and Stretton Wards in the south of the borough and across into the Motorway AQMA. Due to the growth proposals under the Local Plan close to these areas there is a risk of new housing being built that is not covered under the existing orders. We will need to review whether to introduce a new order for these areas or whether to designate a single borough wide order.

The action would be carried out using existing staff resource within Environmental Protection in conjunction with Legal Services within the Council.

5.2 Infrastructure improvements

5.2.1 Highways England / TfN Working Group

Actions to improve air quality by the Council within the Motorway AQMA are limited. Highways England is the agency responsible for the motorway network and the delivery body for transport improvements. Transport for the North (TfN) have also been established to lead on regional transportation strategy and actions. To encourage actions on this network it is proposed that a formal working group is set up between transport officers from the Council, Highways England and TfN to assess potential actions.

The group will capture existing actions, for example the managed motorway section of the M6/M60, to assess any potential air quality impacts. Any monitoring data collected by Highways England will be encouraged to be shared to increase local knowledge of concentrations within the Motorway AQMA. The working group is likely to deliver this work as an agenda item within existing transport meetings therefore no additional staff resource or finding is required.

5.2.2 Warrington Intelligent Transport System

Warrington was awarded c.£300k from Department for Transport to produce a pilot system which monitors journey time on key corridors. The next stage of this project is to develop strategies for improving journey times, and for developing a user-friendly smart phone app that can be used to access the data.

The app will be used for:

- Informing road users of traffic conditions;
- Providing a more flexible and cost effective method of distributing information than Variable Message Signs;
- Improving accessibility of information for all users;
- Giving more comprehensive and dynamic information to users; and
- Using GPS data from users to improve journey time estimation.

The goals of the project are to:

- Provide reliable journey time information to the public;
- Provide up to date and relevant traffic incident information;
- Inform people of expected (and actual) events such as swing bridge opening;
- Inform people of planned/emergency road works;
- Use data provided by the app to further enhance data quality; and
- Help reduce congestion through route choice optimization.

5.2.3 Chester Road Cycle Way

The Town Centre Southern Super Route scheme, funded through the Access Fund, will provide high quality cycling infrastructure along Chester Road within the Warrington AQMA. This will encourage more people to cycle into the town centre, reducing car usage along the Chester Road corridor.

The scheme will create a promenade route alongside the River Mersey and A5060 Chester Road Super Route, linking the Trans-Pennine Trail to Town Centre via Central Park.

The resources to deliver this scheme have been allocated through the Access Fund and scheme delivery will be managed by the Transport Planning team.

5.2.4 Burtonwood to Omega Cycling/Walking Link

The Burtonwood to Omega Link is a scheme funded through the Access Fund that will improve the walking and cycling infrastructure between Burtonwood and two key employment sites. This action is to encourage reduced car movements on this link directly through the Motorway AQMA

The scheme will provide a shared use path alongside Burtonwood Road/Clay Lane, and upgrade Barn Lane to provide link between Burtonwood and Omega/Gemini.

The resources to deliver this scheme have been allocated through the Access Fund and scheme delivery will be managed by the Transport Planning team.

5.2.5 Warrington West Rail Station

The development of a new rail station to serve the west of the Town is programmed to start in 2018. Funded by the Cheshire & Warrington LEP, developer contribution, Government (New Stations Fund) and the Council, this new station will support more sustainable commuting between Warrington and our city neighbours to reduce car usage within AQMAs. This complements the recent upgrade of Birchwood rail station.

5.2.6 City Centre Masterplan Highway Infrastructure Programme

The Council approved the City Centre Masterplan in December 2016. It outlines three new highway infrastructure projects aimed at tackling congestion, improving network resilience, improving air quality and enabling new homes and jobs in the heart of the town. Centre Park link Road and the Western Link Road are included as formal actions within table 5.1. The Bridgefoot Link Road and Road Space Reallocation proposals are included and will be fully integrated into the delivery of the Air Quality Action Plan at an appropriate later stage as and when discernible improvements in air quality can be modelled.

- **Centre Park Link Road**

The Centre Park Link Road is a major new piece of infrastructure that will provide a new link to Chester Road. The project proposes a bridge crossing across the River Mersey from Chester Road, just north of Gainsborough Road. This proposed crossing would join onto an extended Slutchers Lane

leading from Wilson Patten Street. A new signal controlled junction is to be constructed at each end of the new link on Chester Road and Wilson Patten Street. This will reduce through traffic in Warrington Town Centre and is predicted to significantly improve air quality within some parts of the Warrington AQMA. Funding for the project is in place and planning permission has been secured – through the Local Growth Fund, developer contributions and the Council.

- *Warrington Waterfront – Western Link Road*

The Council is working closely with Highways England and the Department for Transport to develop a Business Case for the Warrington Waterfront Western Link Road – a major new link road from Chester Road to Sankey Way. The Business Case production is being funded through DfT's Large Local Majors programme. The Business Case for this new road is based upon tackling congestion in the Town Centre, to enhance network resilience, improve air quality and to access land for development at Warrington Waterfront. Through extensive consultation a preferred route has been developed and the Business Case has been submitted to Government in December 2017. Funding is proposed to be via a combination of Government and monies generated and captured from new development unlocked. The Council will forward fund where necessary. By reducing town centre traffic the scheme is expected to improve air quality within the town centre Warrington AQMA, but care has to be taken that impacts are not displaced to other areas. This will be fully evaluated within a formal air quality assessment.

- *Bridgefoot Link Road*

The Bridgefoot Link Road from Brian Bevin Island to Bank Quay Rail Station will complete the 'ladder' of new road infrastructure to tackle congestion and improve air quality in the Town Centre. This project is still at an early stage of development. Future inclusion of this project into the action plan will be subject to further evaluation.

- *Town Centre – Road Space Reallocation Programme*

The above City Centre Masterplan infrastructure schemes, subject to further evaluation, will enable the reallocation of road space in the Town Centre to more sustainable transportation systems:

- Cycle lanes and routes
- Pedestrianised, footway widening and traffic calmed areas
- Bus and taxi lanes

5.3 Additional measures

5.3.1 Clean Air Zone Feasibility Study

Clean Air Zones are being considered at locations across the UK where there is an identified need to reduce the number of the most-polluting vehicles entering an area.

We will commission a study to inform a decision about implementing such a zone in Warrington. The study will consider:

- Potential benefits and any negative impacts
- Influences and attitudes to encourage behavioural change
- The geographical extent of any Clean Air Zone(s)
- The operational times of any Clean Air Zone(s)
- Compliance with Government legislation/guidance regarding Clean Air Zones
- Any potential charging for the most polluting vehicles
- Supporting measures such as freight consolidation centres and cargo bikes.

The study will inform any future decision regarding the implementation of a Clean Air Zone in Warrington. The commissioning of specialist support from an external consultant would be required to complete this study. A study that considers Demand Management Measures such as a Clean Air Zone is currently being undertaken that will inform LTP4. If a Clean Air Zone is shown to be a viable and effective option, more work will be undertaken to develop a scheme. This will include public consultation and consultation with local businesses. The estimated cost of commissioning such a study is anticipated to be in the region of £50k-£100k. The budget for the study has not been allocated; grants and other funding opportunities will be sought.

5.3.2 School, Nursery and Care Home Action group

There is growing concern on air quality impacts on the youngest and the oldest in the community. Whilst there are no Warrington schools directly within an AQMA, there are a number of primary and secondary schools adjacent to AQMA areas. To access the schools, routes are often though heavily trafficked roads with higher peak pollution levels. In addition there a number of children's nurseries and older peoples care homes located within the Warrington AQMA.

An action group is proposed to be set up to recommend specific actions aimed at reducing exposure. The group will be made up of officers from Public Health, Schools, Transport and Environmental Protection. The group will consider, but not be limited to:

- School transport policies to encourage use by low emission vehicles
- Anti-idling campaigns outside of schools
- Walking and cycling routes away from major roads
- Green infrastructure on new and existing buildings and surrounding areas
- Planning guidance for locations of new schools, nurseries and care homes to be sited away from main roads

5.3.3 Temporary Play Streets

Temporary play streets are resident-led, outdoor free street play activities for the purpose of children's play. It is independent from the council and requires parent/adult supervision to ensure children's safety. The road is temporarily closed and car access is restricted (but not stopped - residents take turns to 'steward' cars needing access to or from their properties). Suitable 'Play Streets' streets are preferably quiet residential roads or cul-de-sacs and should be closed until no later than sunset. Temporary play streets not only provide benefits around community cohesion, wellbeing and physical activity but there has also been links to show that having a temporary play street can impact on the air pollution levels within that area. <http://playingout.net/pollution-and-play-playing-out-to-improve-air-quality/>

There is no cost to setting up temporary play streets; however processes would have to be put in place by licensing to allow neighbourhoods and street to apply for temporary play streets. There are numerous examples of how this has worked in other local authorities and we would be able to replicate it in Warrington. There would need to be strong links with the neighbourhood team to work with local communities to set this up. A proposal would be to start this in Latchford East that has high levels of air pollution within the Warrington AQMA and where there is a proactive group, Big Local Partnerships, who are interested in air quality in their area.

5.3.4 Air Quality webpage

A replacement air quality web page is to be produced, aimed more towards providing public information. The webpage focus will be:

- Provide real time data with air quality forecasts alongside annual reports
- Advice on reducing individual emissions
- Links to useful websites, for example guides on electric vehicles
- Advice on Smoke Control Area requirements
- Advice for schools and to provide a learning resource
- Information for the public to calculate their own emissions profile.

The webpage will be produced using existing staff resources, no additional funding is expected to be required.

5.3.5 PM_{2.5} monitoring

Whilst the focus of the AQAP is to reduce NO₂ concentrations within AQMAs, there is strong evidence of the health impacts from PM_{2.5}. Currently there is one urban background monitoring site measuring PM_{2.5} within Warrington. There has been no assessment of any "hotspots" where concentrations could be raised. It is therefore proposed to gain evidence of roadside PM_{2.5} levels within the Warrington AQMA by locating an analyser at roadside. This is proposed to be carried out in the Latchford ward where there are high levels of sensitive receptors close to the roadside within

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the AQMA boundary as well as several schools adjacent to the AQMA. This area is also a major route into the town centre from the motorway and suffers high volumes of traffic and congestion. The evidence gained will assist health interventions and further actions within this area and across Warrington to reduce exposure to PM_{2.5}.

No resource has currently been allocated to this, which is expected to be in the region of £30k per monitoring site.

Table 5.1 – Air Quality Action Plan Measures

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
Policy actions											
1	5.1.1 Development Plan Context: Local Plan Review	Policy Guidance and Dev. Control	Other Policy	Planning Policy	2017	Dec 2019	Plan in place	N/A	Initial consultation has been carried out	Dec 2019	Resources have been allocated within the local plan budget for air quality modelling – estimated c.£50K
2	5.1.2 Sustainable Transport Strategies: Local Transport Plan (LTP4)	Policy Guidance and Dev. Control	Other Policy	Transport Planning	2017	Dec 2018	Produce document	N/A	Early work on LTP4 began in summer 2017	Dec 2018	Sustainable Transport Strategies & Programmes are being developed: <ul style="list-style-type: none"> • Walking and Cycling; • Public Transport; • Cleaner Fuels; • Smart Choices; • Taxis
3	5.1.3 Environmental Protection SPD	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Environmental Protection	April 2018	Dec 2018	Document produced	N/A	Draft in development	Dec 2019	Provide updated information to developers
4	5.1.4 Council Procurement Policies	Policy Guidance and Development Control	Other Policy	Transport Planning, Procurement, Fleet	April 2018	Dec 2018	Reviewed policies in place	N/A	Not started	Dec 2018	To ensure the Council takes a lead in social value in procurement with respect to active travel and air quality
5	5.1.5 Smoke Control Area review	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Environmental Protection/ Legal Services	April 2018	Dec 2018	Review completed	N/A	Not started	Dec 2018	Reduce PM2.5 and NOx from domestic burning within AQMAs and across the wider borough

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
Infrastructure Improvements											
6	5.2.1 Highways England / TfN Working Group	Policy Guidance and Development Control	Other Policy	Transport Planning	2018	Dec 2018	Highlight motorway improvement actions	N/A	Expand on current Highways England engagement	Dec 2018	To look into actions to improve emissions within the Motorway AQMA
7	5.2.2 Warrington Intelligent Transport System	Traffic Management	UTC, Congestion Management, Traffic Reduction	UTMC	2017	2018 - 2019	Journey times	<1 µg/m ³	Secured c.£300k from Department for Transport	2019	On major route within Warrington AQMA linking to Motorway AQMA
8	5.2.3 Chester Road Cycle Way	Transport Planning and Infrastructure	Cycle network	Transport Planning	2017 - 2018	2018-19	Number of users	<1 µg/m ³	Early design work is being undertaken	2019	Encourages modal change directly within Warrington AQMA
9	5.2.4 Burtonwood to Omega Cycling/ Walking Link	Transport Planning and Infrastructure	Cycle network	Transport Planning	2017 - 2018	2018-19	Number of users	<1 µg/m ³	Early design work is being undertaken	2019	Encourages modal change to reduce car journeys in the Motorway AQMA
10	5.2.5 Warrington West Rail Station	Transport Planning and Infrastructure	Other	Transport Planning	2017 - 2018	2018-19	Build of infrastructure	<1 µg/m ³	Design work complete, planning permission secured	2019	Funding and planning permission are in place for the scheme
11	5.2.6 Centre Park Link	Transport Planning and Infrastructure	Other	Transport Planning	2017	2017-2018	Build of infrastructure	6 µg/m ³ on Chester Road and 11 µg/m ³ on Wilson Patten Street monitoring points	Design work complete, planning permission secured	2019	As part of the City Centre Masterplan. Funding and planning permission are in place for the scheme
12	5.2.6 Western Link Road	Transport Planning and Infrastructure	Other	Transport Planning	2017-18	2020	Bid submission Full business case	Further transport modelling work with AQ assessment to be undertaken	Outline Business case submitted Dec 2017	2023-24	Other town centre opportunities for link road/ space allocation being explored

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
Additional Measures											
13	5.3.1 Clean Air Zone Feasibility Study	Policy Guidance and Development Control	Other Policy	Transport Planning	2017	2018	Commission Study	N/A	Coping exercise started	2019	If the scoping exercise recommends further investigation then funding will be required c. £50k
14	5.3.2 School, Nursery and Care Home Action group	Policy Guidance and Development Control	Other Policy	Environmental Protection/ Public Health	2017	April 2018	Steering group to be set up	N/A	Not started	Sept 2018	Funding may be required for any actions recommended by the group
15	5.3.3 Temporary Play Streets	Promoting Travel Alternatives	Intensive active travel campaign and infrastructure	Public Health	April 2018	August 2018	No of events	N/A	Not started	Dec 2018	Staff resource required to be allocated
16	5.3.4 Air Quality webpage	Public Information	Via the internet	Environmental Protection	2017	April 2018	Hits on page	N/A	Basic web pages on-line	Sept 2018	An update and overhaul of the current webpages
17	5.3.5 PM2.5 Monitoring	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Environmental Protection	2017	2018	Monitoring in place	N/A	Not started	Dec 2018	Funding and resource required c. £30k

Appendix A: Response to Consultation

Public and Statutory bodies have been consulted on the Air Quality Action Plan (AQAP).

Consultation was carried out in accordance with statutory guidance and included a public drop in event. The consultation was formally advertised in the local press and on social media.

A total of 308 completed public responses were received in addition to ones from the MP for Warrington South, Bewsey and White Cross Councillors, and two residents associations and contained almost 2000 comments.

Defra and Public Health England statutory consultation responses were received. Defra has appraised and formally approved the draft AQAP plan and confirmed that it meets their legal requirements.

Public responses were received from a broad age range and from across the borough. Respondents strongly advocated the need for air quality to be considered as part of the draft Local Plan and in the development of new infrastructure schemes. It should be noted that recent consultations on these plans had generated a significant amount of interest.

On the whole comments received were supportive of all the AQAP measures. The Investigation into a Workplace Charging Levy action received the least support; it was therefore decided at Executive Board level to remove this action from the final AQAP but the value of such a levy, if introduced by other authorities, will be monitored. In contrast the most supported action was for the Local Plan to include air quality measures to address concerns about future air quality. There was some support for additional measures, particularly in relation to the feasibility of trams, and these proposals will be incorporated within existing actions for more detailed evaluation.

A formal response to the consultation has been provided on the Council website.

The Council proposed that 17 actions be taken forward within the final plan, for evaluation and that appropriate performance measures be developed.

Appendix B: Reasons for Not Pursuing Action Plan Measures

Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)

Appendix C: Summary of current ongoing actions

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
1	Planning consultations	Policy Guidance and Development Control	Other Policy	WBC Env Protection	2010	2010	Number of applications assessed	N/A	Ongoing action	Ongoing	All relevant planning applications are considered for their air quality impact
2	Warrington Borough Council-Local Plan			Planning Policy	2014	2014	Development of Plan	N/A	Plan review underway	2027	The Local Plan is the Statutory Development Plan for the whole of the Borough and is used in the determination of planning applications. It is essential that the Council continues to have an up-to-date Local Plan in order to retain control over the type and location of development within the Borough, and so ensuring that development is 'Sustainable'.
3	Developing Local Transport Plan 4			Transport Planning	2017	2017	Development of Plan	N/A	Development of LTP4 in early stages	2018	Reviewing the policies that are included in LTP3 and developing new policies that will shape transport in Warrington in the future.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
4	Active Travel Programme			Transport Planning	This is an annual programme . Planning for each year takes place in Q1/2	Annual programme	Delivery of Programme	N/A	On average one medium size and several small schemes are delivered each year.	Annual programme	This is an element of the LTP capital programme valued at around £325k which delivers smaller scale cycle and pedestrians. For example, in 2017/18 new cycle schemes will be delivered at Gemini and new pedestrian facilities will be provided at 15 locations around the town. Also, feasibility work will be undertaken for future schemes in the 2018/19 programme. This programme is supplemented by s106 funds for site specific sustainable travel improvements associated with completed Developments.
5	LSTF top up programme			Transport Planning	This is an annual programme . Planning for each year takes place in Q1/2	Annual programme	Delivery of schemes	N/A	The Sankey Valley scheme is the first scheme to benefit from the fund.	Annual programme	Strategic improvements to cycle network not able to be funded by LTP Active Travel programme. Scheme still being developed but would include Sankey Way link between Hood Lane and Liverpool

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
											Road, New Cut to Woolston link and improved Town Centre access links.
6	Warrington East phase 2			Transport Planning	2016	May 2018	Junction improvement completed	N/A	Funding secured from the Cheshire and Warrington Growth Deal and our own Capital Investment Programme. Consultation on design proposals for four locations during May/June 2017	September 2019	Junction improvement scheme funded by Growth Deal on Birchwood Way valued at £13.5m.

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Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
7	Sustainable Travel (Access Fund) Project			Transport Planning	2016	April 2018	When two of the proposed schemes have been completed	N/A	Funding secured	Mar 2021	Two (and possibly three) projects delivering new cycle routes funded by Growth Deal LGF3 2018-2021. <ol style="list-style-type: none"> 1. Burtonwood to Omega shared use path 2. Chester Road Promenade from Gainsborough Road to Town Centre 3. TPT upgrade
8	Smarter Choices team as a Planning application consultee			Smarter Choices	Ongoing	Ongoing	None. Dependant on applications received	N/A	Will start recording progress from April 2017	Ongoing	Assessment, advice and approval of travel plans conditioned against planning applications.
9	Smarter Choices team as a Planning application consultee			Smarter Choices	Ongoing	Ongoing	None. Dependant on applications received	N/A	Will start recording progress from April 2017	Ongoing	Comment on sustainable travel infrastructure related to development sites

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Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
10	Smarter Choices engagement with Health agenda			Smarter Choices	Ongoing	Ongoing	No. This is an activity that depends on opportunities presented	N/A	Active members of Active Warrington strategy group and Change4Life group	Ongoing	Ensuring active travel is at the forefront of the health agenda
11	Wider travel choices advice			Smarter Choices	Ongoing	Ongoing	No. This is an activity that depends on opportunities presented	N/A	Consulted on Active Travel infrastructure programme, lead the production distribution and promotion of cycle map, attendance at community events, engagement with individuals and organisations to influence travel choices	Ongoing	Provide advice on sustainable travel choices and infrastructure across Warrington, to develop strategic walking and cycling networks.
12	Bikeability cycle training contract and delivery management			Smarter Choices	Ongoing	2007	Target is 85% of the delivery of the grant received from DfT.	N/A	Yes	2020	Delivery of the grant funded cycle training to school children

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
13	Adult cycle training scheme			Smarter Choices	Ongoing	2012	20 per annum (currently no formal budget for this)	N/A	Yes	Ongoing	Offer of free-to-user training to adult cyclists. Training courses available for beginners up to advanced commuter cyclists. Very high satisfaction rating but low take up.
14	Workplace travel advice			Smarter Choices	Ongoing	2012	Target 25 engagements per quarter	N/A	Yes	Ongoing	Advisory service to larger businesses including wraparound support from writing travel plans to delivering onsite events and monitoring. One full-time post. From 2012 - 2016 two full time posts were employed.
15	School travel advice			Smarter Choices	Ongoing	Ongoing	No. Formerly and LTP target but schools stopped carrying out travel to school surveys	N/A	Yes	Ongoing	Advisory service to schools including wraparound support travel plan development and delivery. One term-time part-time post.
16	Smarter Choices Team Community event support			Smarter Choices	Ongoing	2012	No. Activity that depends on opportunities presented	N/A	Yes		Raising awareness of sustainable travel opportunities at community events

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Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
17	Warrington West new Railway Station			Transport Planning	2016	2018	Build of new station	N/A	Planning application submitted April 2017	Opening Spring 2019	This project will deliver a new railway station on the Chapelford development. It will improve access to rail services for residents and businesses in west Warrington, with three trains per hour to Liverpool and Manchester. This will reduce traffic entering Warrington town centre.
18	Sustainable Travel Use (Bus)			Specialist Transport Services		Ongoing	Ongoing delivery	N/A	Ongoing	Ongoing	To maximise the use of local bus services, by maintaining Real Time Information, Publicity and Management of the Bus Interchange

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
19	UTMC National Productivity Investment Fund			UTMC	2017	Early 2018	Ongoing delivery	N/A	Funding secured for junction upgrade	Spring 2018	As well as the annual highways maintenance budget & integrated transport block, UTMC have been given an additional £425k as part of the National Productivity Investment Fund to upgrade two key junctions; junction 9 of the M62 & Delph Lane. During any upgrade UTMC take the opportunity to look at ways of improving the operational efficiency of sites as part of the upgrade.

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EU	European Union
JSNA	Joint Needs Strategic Assessment
LAQM	Local Air Quality Management
LTP	Local Transport Plan
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
SPD	Supplementary Planning Document
TfN	Transport for the North

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