

Exeter
City Council

Exeter City Council
Air Quality Action Plan
DRAFT for consultation

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

2018-2023

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Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we propose to take to improve air quality in Exeter between 2018 and 2023. This is a draft document, released for public consultation and engagement. The closing date for responses to the consultation is 11 April 2018. Please send all responses to:

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This action plan replaces the previous action plan which ran from 2011 to 2016.

Projects delivered during the last action plan period include:

- Exeter Low Emissions Strategy
- Newcourt station.
- Cranbrook station.
- Tithebarn link for new bus route to Cranbrook.
- Car clubs on new areas of development.
- Extensions and improvements to the cycling network.
- Personal exposure projects to highlight the beneficial effects of alternative travel modes, or travel routes on personal exposure to PM_{2.5}.
- Taxi emissions licensing standards.
- Reductions in Exeter City Council fleet fuel use and roll out of electric pool cars.
- 6 diesel vans in the ECC fleet have been replaced with electric.
- Bridge Road widening.
- Car club electric bike hire scheme.
- Devon-wide Ecostars scheme to reduce emissions from commercial vehicle fleets

Over the same period, nitrogen dioxide concentrations have generally reduced or remained stable in the city.

Although not aimed at reducing transport emissions, the Council and partners have also been successful in implementing district heating schemes in the city and East Devon. In 2016 the City Council won the Best Council Initiative category at the LGC Environment Awards for a novel project to install solar car ports on Council car parks.

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. Exeter City Council is committed to reducing the exposure of people in Exeter to poor air quality in order to improve health.

We have developed actions which aim to significantly reduce emissions of pollution, as well as exposure to air pollution. These are explained in greater detail in section 5 and are based on the available data on local sources and concentrations of pollution.

Exeter City Council has developed a vision for the city where emissions are reduced because:

- The private car is seldom used;
- Business travel and servicing is by Ultra Low Emission Vehicle (ULEV) and shared;
- Development creates sustainable car-free communities; and
- Internal combustion engines are discouraged in a vibrant centre, where active or by Ultra Low Emission Vehicle (ULEV) travel is the norm.

The exposure of people in the city to air pollution will also be reduced because:

- Decision makers have clear understanding of air pollution and its impacts;
- Residents, employers and visitors understand the impact of air pollution and the effect of their travel choices;

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

- Healthy and active travel options are promoted; and
- Everyone is more active.

This plan proposes actions that can be taken in the next five years to achieve this vision for the city. It is expected that measures will develop as the Greater Exeter Strategic Plan (GESP) and the Exeter Sustainable Urban Mobility plan (SUMP) emerge. Updates to the AQAP will be made as required.

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our direct influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Exeter City Council's direct influence.

Responsibilities and Commitment

This draft AQAP was prepared by Exeter City Council Environmental Health and Licensing with the support and agreement of the following officers and departments:

- City Development
- Sustainable Transport and Economic Development
- Corporate Property (Energy Manager)
- Waste Operations and Fleet

This draft AQAP will be reviewed by:

Exeter City Council Scrutiny Committee (Place), Executive and Council

This AQAP will be subject to an annual review, appraisal of progress and annual reports to Scrutiny Committee (Place). Progress each year will be reported in the Annual Status Reports (ASRs) produced by Exeter City Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Alex Bulleid at:

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1. Introduction

This report outlines the actions that Exeter City Council will deliver between 2018 and 2022 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to Exeter. It sets the scale of ambition and the vision for Exeter's air quality which the Council and partners will work towards in the next five years, and beyond.

It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (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 Plan will be comprehensively reviewed every five years and progress on measures set out within this plan will be reported on annually within Exeter City Council's air quality Annual Status Report (ASR). However it is expected that in the next two years significant new policy will be developed that will affect the measures in this action plan. These are the Greater Exeter Strategic Plan (GESP), the Exeter Sustainable Urban Mobility Plan (SUMP) and any recommendations of the new Transport Steering Group. These may necessitate changes to the AQAP, which will either be reported in the annual ASR, or included in an updated AQAP document as most appropriate.

2. Summary of Current Air Quality in Exeter

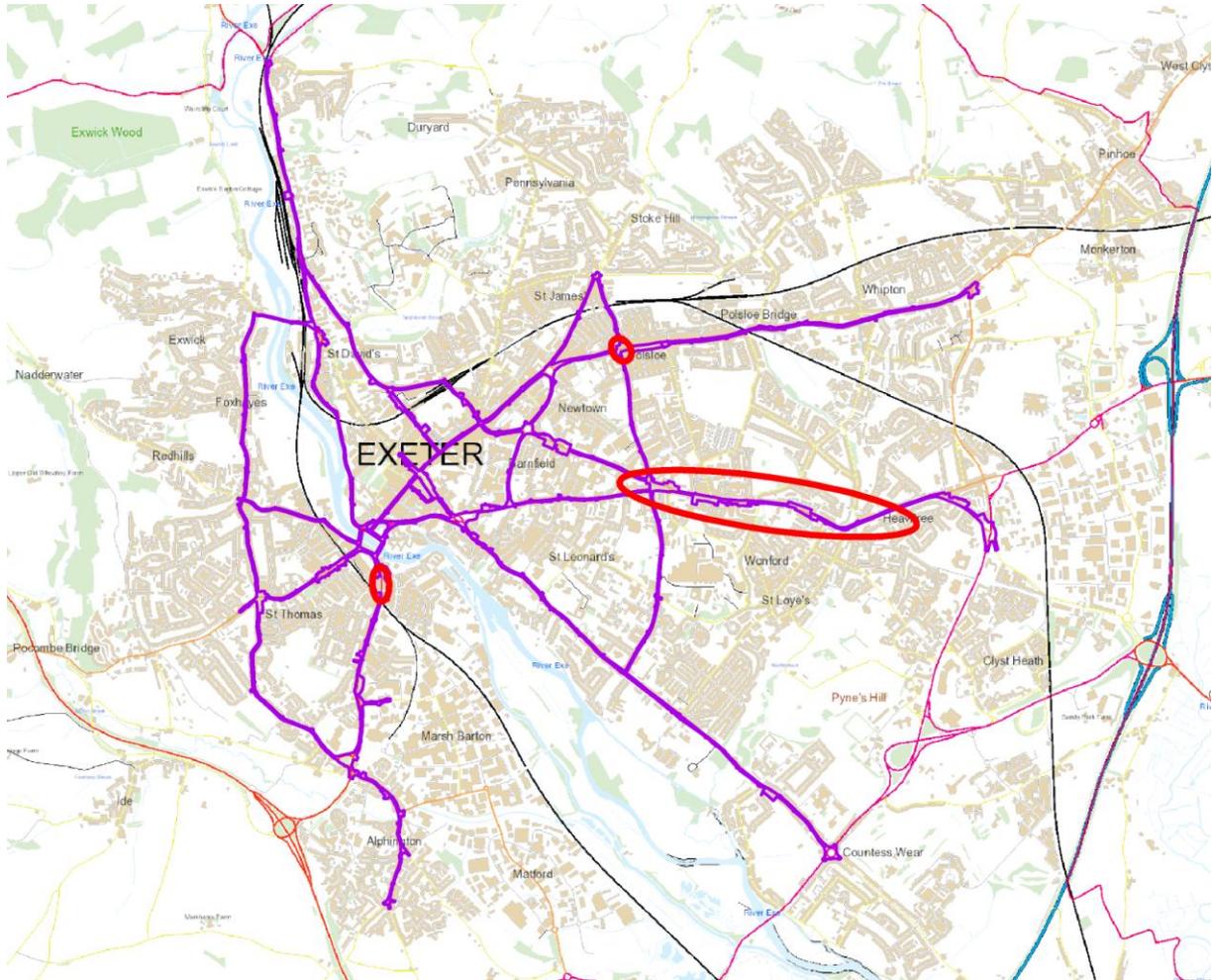
For full information, please refer to the latest ASR from Exeter City Council, which is available online at www.exeter.gov.uk/airpollution

Air quality in Exeter is mainly good, with just a small number of hot spots where levels of nitrogen dioxide are above government objectives. These are at Livery Dole junction, East Wonford Hill, Honiton Road, Alphington Street and the Blackboy Road/Pinhoe Road junction. All these are included within Exeter's Air Quality Management Area (Figure 2.1).

The monitoring that the Council has done shows that concentrations of nitrogen dioxide have been falling throughout the city since around 2009, despite significant housing and commercial development over the same period (figure 2.2). There were no exceedences of the hourly objective proxy in 2015 or 2016 and the long-term reduction in concentrations means that the Council hopes to remove exceedance of the hourly objective from the AQMA order soon. No new sources of pollution have been identified that are likely to cause new areas to exceed the objective levels for any form of air pollution.

Data from Devon County Council (2015) shows that over the period 2005 to 2015, there has been growth in traffic flows on the strategic road network outside the city. However within the city the radial routes have seen a reduction in flows of 3.1% and the main routes into the city have seen a 5.9% fall. Over the same period, use of the rail network leading to the city has grown by 77% and the stations inside the city have seen an increase in use of 98.7%. The strategic cycle network has a more variable, but still positive change in use, between +37% and +242% (figure 2.3).

Figure 2.1 Exeter's AQMA and the Locations where the NO₂ Objective was Exceeded in 2016



AQMA boundary: 

Area where some monitoring sites show levels above the objective: 

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Exeter City Council 10025345, 2017.

Detailed maps can be found in appendix D of the Annual Status Report found at <https://exeter.gov.uk/airpollution/>.

Figure 2.2 Trends in NO₂ at Long-Term Monitoring Sites in Exeter

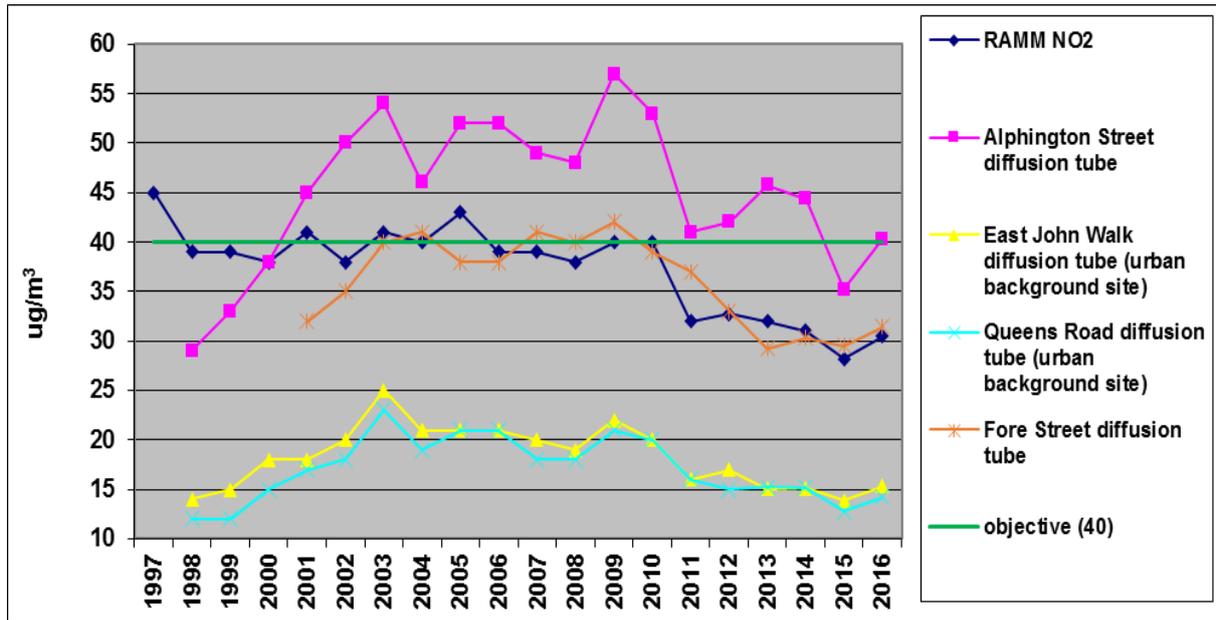
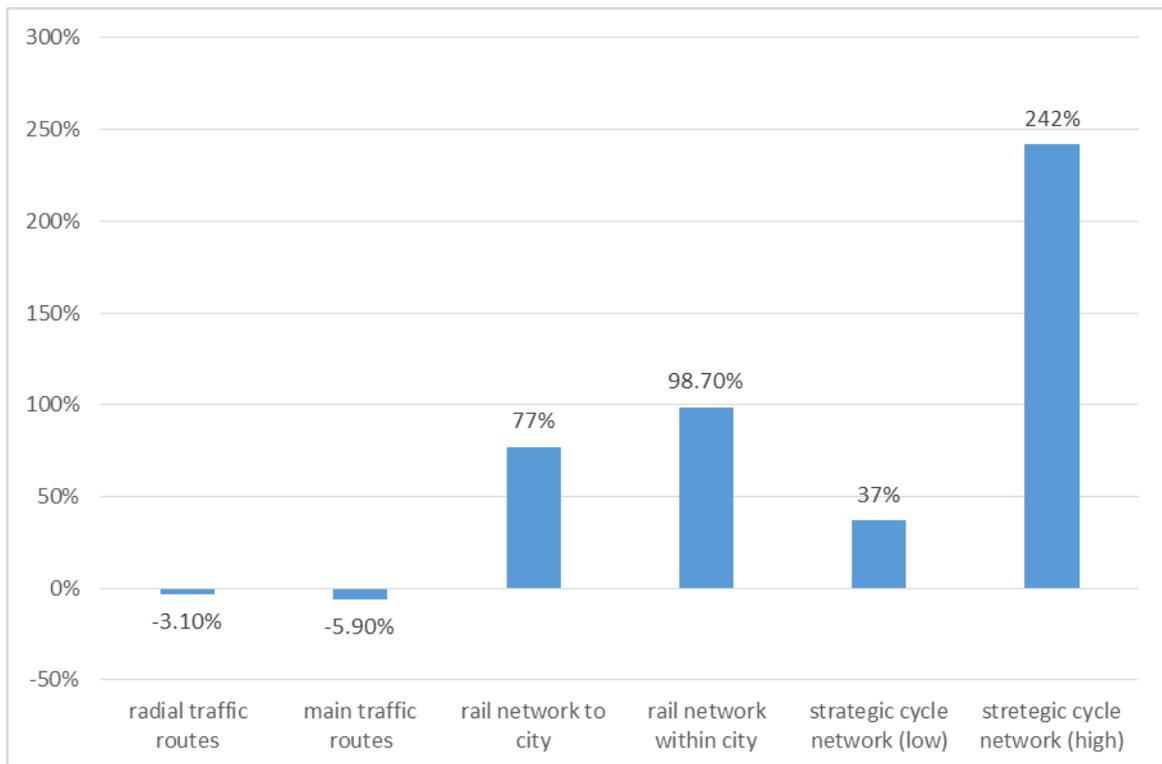


Figure 2.3 Trends in Use of the Strategic Transport Network 2005 to 2015



3. Exeter City Council's Air Quality Priorities

3.1 Public Health Context

Mounting scientific evidence shows the scale of the impact of poor air quality on health. In 2010, the Department of Health's Committee on the Medical Effects of Air Pollutants (COMEAP) reported that long-term exposure to outdoor air pollution caused the equivalent of approximately 29,000 deaths in 2008 in the UK. Within Exeter this equates to 42 deaths per year, or 438 associated life years lost (PHE 2014). More recent work by the COMEAP suggests that the effect might be even greater and new evidence emerges regularly on the health impacts of air pollution, for example researches have found that magnetite nanoparticles from inhaled air accumulate in the brain.

3.2 Planning and Policy Context

Exeter's Core Strategy concludes that 12,000 new homes, 60Ha of employment land and 40,000m² retail space will be required in the city by 2026. In addition, there are proposed:

- Expansions to Cranbrook new town (up to 7,500 homes);
- 4,000 new homes in urban extensions or a new community in East Devon;
- 2,000 new dwellings in an urban extension beyond Alphington in Teignbridge.
- 25 Ha employment land at the Science Park; and
- 40Ha employment land at the Sky Park.

This level of development is good news for the local economy, but will put considerable pressure on the highway network. Accommodating this growth and ensuring the transport system can cope with higher levels of traffic is recognised as a challenge (Devon County Council 2010).

Devon County Council's Third Round Local Transport Plan (2010) (LTP3) (<https://new.devon.gov.uk/roadsandtransport/traffic-information/transport-planning/devon-and-torbay-local-transport-plan-3-2011-2026/>) and the Exeter Core Strategy (<https://exeter.gov.uk/planning-services/planning-policy/local-plan/core-strategy-development-plan-document/>) describe how these pressures will be managed. They include policies which support improvements to local air quality

levels including through the provision of infrastructure, managing travel demand, and enhancing walking and cycling opportunities. The Strategic Environmental Assessment for the LTP3 concludes that it is expected to have a slight beneficial impact on air quality, although it is recognized that there is some uncertainty associated with this (DCC 2010). Similarly, the Core Strategy is expected to have a positive impact on air quality and health, although this has not been quantified.

In recognition of wider scale of development beyond the City Council's boundaries, and the need for the neighboring authorities to work together, a Greater Exeter Strategic Plan (GESP) is also being prepared. This sits above the individual Local Authority Core Strategies, to guide development across Exeter, Mid Devon, East Devon and Teignbridge. It is expected that a first draft will be published in 2019. In conjunction with this process a Sustainable Urban Mobility Plan (SUMP) for Exeter is being produced, that will update the LTP3 for the Exeter area.

In addition to these statutory policies and plans, Exeter also has an ambition to become congestion free by 2025 under the banner of Exeter City Futures (<https://www.exetercityfutures.com/>) and the most active city in England (<http://www.activedevon.org/page.asp?section=000100010066§ionTitle=Get+Active+Exeter> and <https://www.cranbrooktowncouncil.gov.uk/sport-england-bid-exeter-cranbrook-chosen-receive-funding/>).

Transport and emissions-related issues are a priority for Exeter's elected members. This has resulted in the recent creation of a Green Travel Plan and Planning Conditions Spotlight Review and the Exeter Transport Steering Group. The Transport Steering Group will meet for the first time in January 2018 and will be an advisory body and its purpose will be to form a collective view, where possible, on transport matters affecting the Exeter travel to work area.

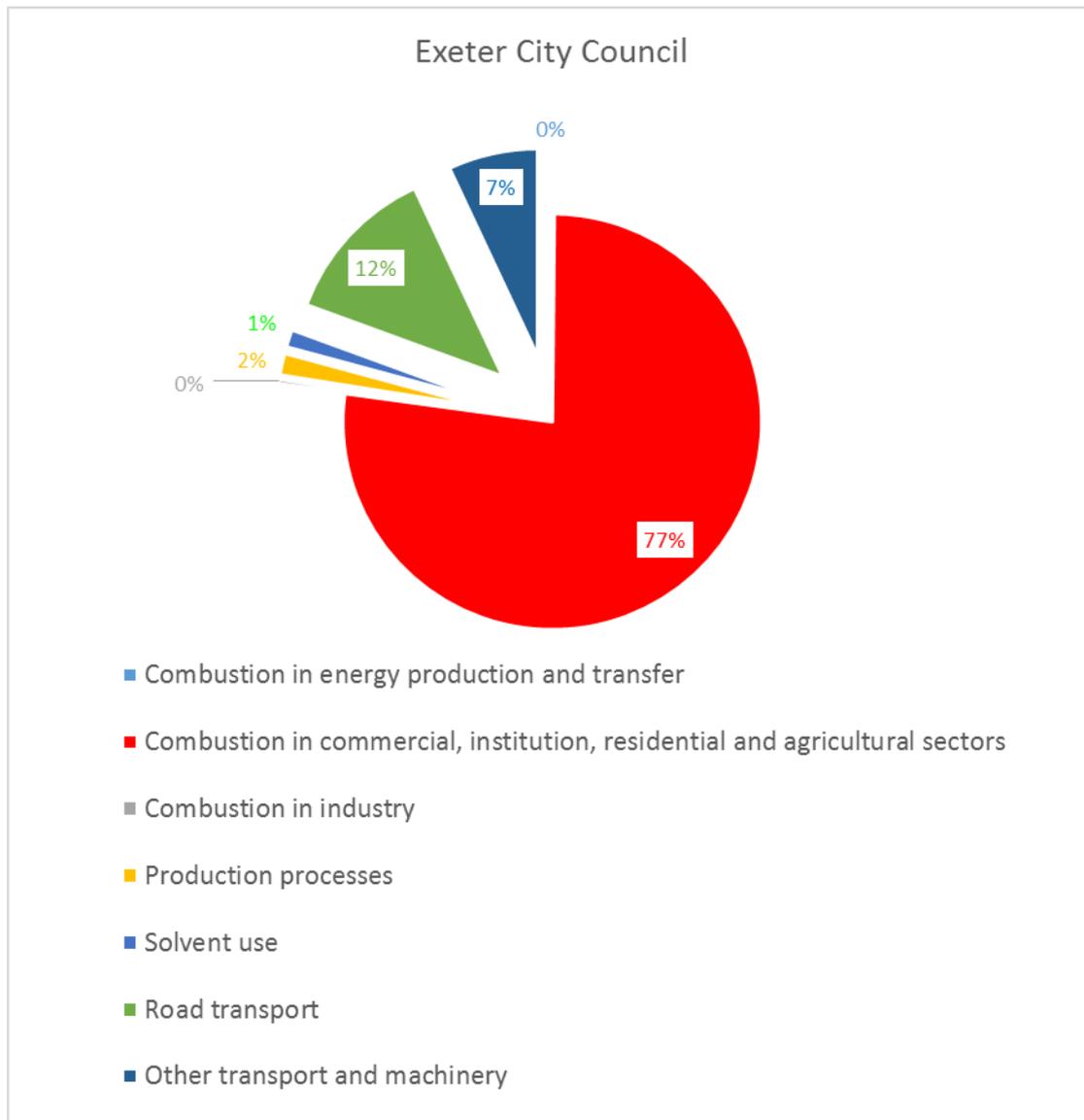
The City Council has also made a clear commitment to air quality by agreeing a budget to replace the existing continuous monitoring stations, and upgrade the Council's measurement suite to include PM_{2.5}.

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Exeter. For nitrogen dioxide (NO₂), this is road traffic. But for PM_{2.5} the main source is combustion (77%), followed by road

transport (12%) (Figure 3.3, from NAEI data <http://naei.defra.gov.uk/>). However it should also be noted that the Air Quality Expert Group's modelling shows the contribution of natural, national and international sources of PM_{2.5} are significantly greater than the local sources over which Exeter City Council have any control (AQEG 2012).

Figure 3.1 Breakdown of PM_{2.5} Emissions from Sources within Exeter



A detailed source apportionment exercise for NO₂ was carried out by Exeter City Council in 2007 when the AQMA was originally declared. More recent evidence on the relative contributions of different vehicles types is available from the Exeter Low Emission Strategy 2016. This identified that within the AQMA in 2015, emission rates and the percentage source contributions were as shown in figures 3.2 and 3.3.

Figure 3.2 NOx Emission Rates for Major Routes into Exeter

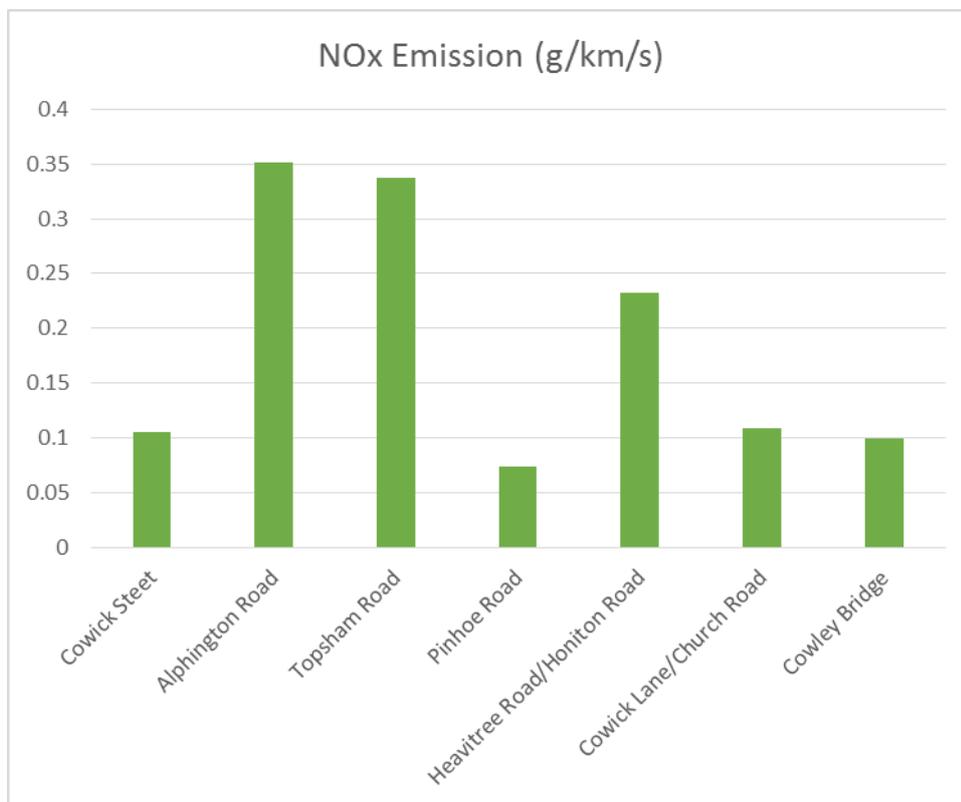
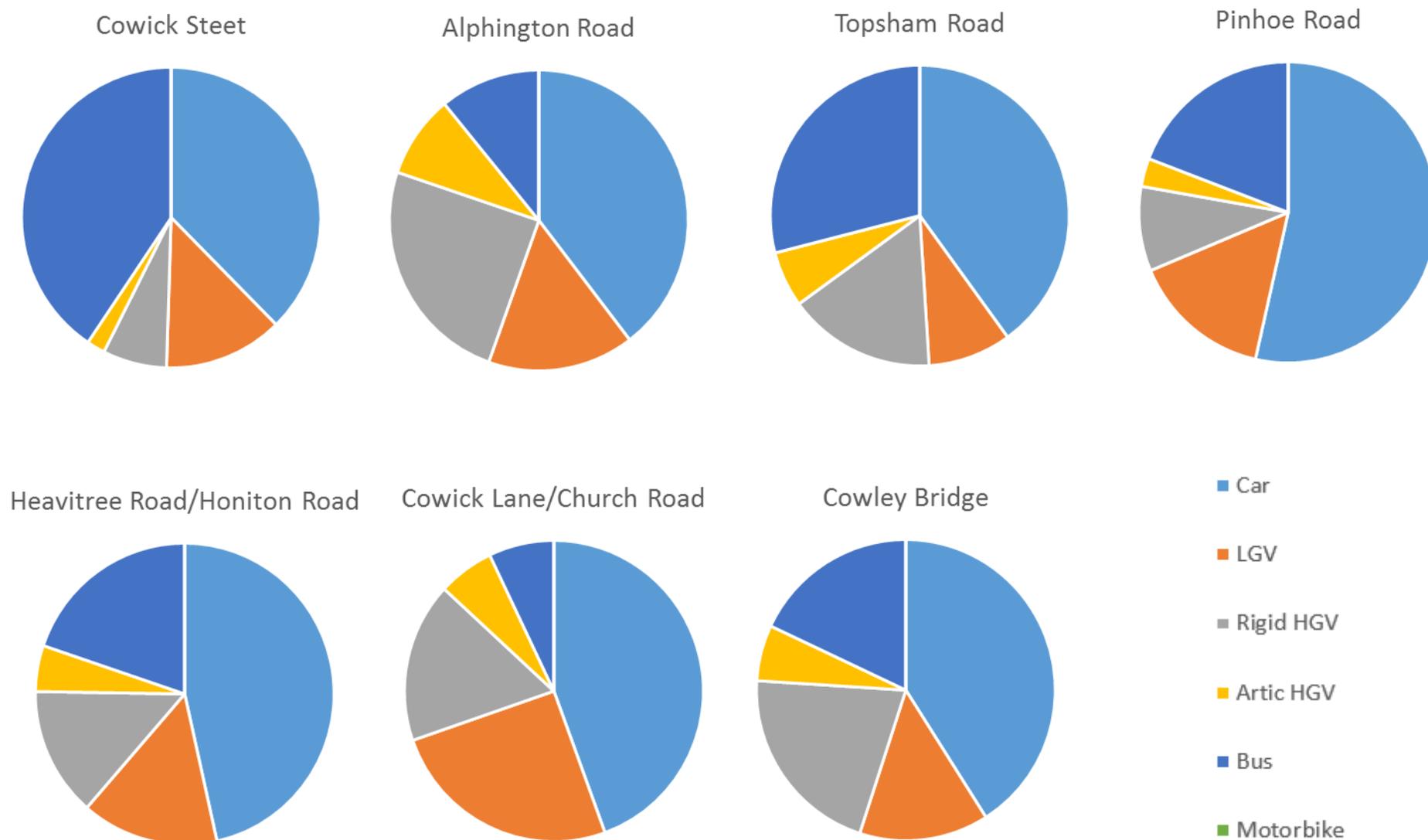


Figure 3.2 shows that emission rates are highest on Alphington Road and Topsham Road, although these roads do not have the highest measured concentrations (ASR 2017). The highest measured levels are found on the Heavitree Road/Honiton Road corridor, which suggests that local factors such as street canyons are having a significant impact on dispersion of pollutants here.

Figure 3.3 shows that cars are a very significant source of emissions at all sites, but there are variations in the relative contributions of bus and HGV. It is clear that action to reduce emissions from buses would be effective on Cowick Street and Topsham Road, but at the other sites it would be more sensible to focus on HGVs. Taken on a city-wide basis actions should focus on all parts of the fleet to be effective and avoid unduly penalising one group.

Figure 3.3 Breakdown of Emissions Sources of NOx for Major Roads in Exeter (2015)



3.4 Required Reduction in Emissions

Table 3.1 below shows the required reduction in NO₂ concentrations and Road NO_x emissions, based on the 2016 measured levels at those monitoring locations where the objective was exceeded.

Table 3.1 The Required Reduction in Road NO_x Emissions to meet the NO₂ Annual Average Objective

Location	NO ₂ concentrations (µg/m ³)		Road NO _x Emissions
	2016 measured concentration	Required Reduction	Percentage Reduction Required
East Wonford Hill	58	18	75%
Salutary Mount (Heavitree) (Nb objective is not exceeded at nearest relevant location)	50	10	41%
Honiton Road (Heavitree) (Nb objective is not exceeded at nearest relevant location)	50	10	40%
Livery Dole (Heavitree)	47	7	27%
Pinhoe Road/Blackboy Road	42	2	8%
Alphington Street	40	0	1%

A high proportion of the PM_{2.5} measured in Exeter comes from sources outside the city, and even outside the UK (AQEG 2012). This makes it hard to set a target reduction for PM_{2.5} concentrations. For example even if the Council achieved an ambitious 10% reduction in local emissions during the period of this AQAP, this might

not be possible to identify in measured concentrations. Instead the City Council has committed to upgrade its fixed air quality monitoring equipment at both sites to measure PM_{2.5}, and will monitor trends over the period of this AQAP.

3.5 Key Priorities

Based on the available data on local sources and concentrations of pollution, Exeter City Council has developed a vision for the city where emissions are reduced because:

- The private car is seldom used for journeys within the city;
- Business travel and servicing is by ULEV and shared;
- Development creates sustainable car-free communities; and
- Internal combustion engines are discouraged in a vibrant centre, where active or ULEV travel is the norm.

The exposure of people in the city to air pollution will also be reduced because:

- Decision makers have clear understanding of air pollution and its impacts;
- Residents, employers and visitors understand the impact of air pollution and the effect of their travel choices;
- Healthy and active travel options are promoted; and
- Everyone is more active.

In order to achieve this vision, key areas of work have been identified. These are set out in table 3.2. The areas of work are divided further sub-divided into those which will be implemented by Exeter City Council, and those where we will seek to work with Devon County Council and the Greater Exeter Strategic Plan (GESP) partners. Section 5 proposes actions that can be taken in the five year period covered by this AQAP to achieve the vision for Exeter.

Table 3.2 Identified Areas of Work Required to Deliver the Vision for Air Quality in the City

Emissions	Cars	Business	Planning	City Centre
	The private car is seldom used for journeys within the city	Business travel and servicing is by ULEV and shared	Development creates sustainable car-free communities	Internal combustion engines are discouraged in a vibrant centre, where active or ULEV travel is the norm
Exeter City Council polices and incentives	Anti-idling campaign	Workplace Parking Levy	Require developers to demonstrate a financial contribution to mitigation which matches the harm caused	Changes to parking charges to discourage car travel in peak times.
	Promote Car Clubs & Co-Bikes	Business support and accreditation schemes using levy income	Policies deliver development where car travel is not needed	More things to see and do are developed in the City Centre to encourage longer stays
Policies and incentives where we will seek to work with Devon County Council and Greater Exeter Strategic Partners	Design and implement a new and enhanced public transport network and seamless multi-modal travel	Support businesses with sustainability advice, possibly through the LEP	Connections to new transport network mean it is easier, more attractive and more cost effective for those living outside the city to access the city by public and active travel	New and enhanced transport network means it is easier, more attractive and more cost effective for those living in the city to travel by public and active modes
	Design and implement a filtered permeability plan and corridor improvements	Access restrictions/charging	Planning policy means it is hard for those living in new development outside the city to access the city entirely by private car	Access restrictions/charging
Exposure	Data analytics underpinning decision making	Awareness	Public Spaces	Activity
	Decision makers have clear understanding of air pollution and its impacts	Residents, employers and visitors understand the impact of air pollution and the effect of their travel choices	Promote healthy and active travel options	Everyone is more active
Policies and incentives where we will seek to work with partners including Devon County Council and Greater Exeter Strategic Partners	Seek and publish public health data which provides estimate of impact of transport emissions on the population of Exeter alongside data on benefits of active lifestyles.	Through Wellbeing Exeter and Sport England Local Delivery Partner Pilot promote community monitoring projects, car free events and active travel.	Through Wellbeing Exeter and Sport England Local Delivery Partner Pilot target social prescribing and community building for those most likely to benefit from getting and staying active	Offer high quality destination parks, play areas, sport and leisure facilities across the City. Promote and encourage Parklife activities and active lifestyles.
	Devise & Implement Communication & Engagement Plan			

4. Development and Implementation of Exeter City Council AQAP

4.1 Consultation and Stakeholder Engagement

Exeter City Council is not the Highways Authority for the city, these functions are performed by Devon County Council. Action to reduce vehicle emissions relies on commitment by a coalition of partners, both public and private sector. Therefore whilst this AQAP has been published by Exeter City Council, there are a significant number of collaborative projects that will have to be taken forward in collaboration with others. Some of these projects will be independently run, by their own project boards and groups, and may undertake their own specific consultation or stakeholder engagement. For this reason, the consultation described below will not be the only consultation which will be undertaken on the measures.

Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. As part of the consultation process on this draft AQAP we will seek views from all these bodies. In addition, we will undertake the following stakeholder engagement as a minimum (a detailed consultation plan will be developed with support from the Director of Communications and Marketing):

- Website
- Articles in the Express and Echo
- Item on Radio Exe

The response to our consultation stakeholder engagement will be set out in the Appendix A of the final AQAP.

Table 4.1 – Consultation Undertaken

Yes/No	Consultee
Under way	the Secretary of State
Under way	the Environment Agency
Under way	the highways authority
Under way	all neighbouring local authorities
Under way	other public authorities as appropriate, such as Public Health officials
Under way	bodies representing local business interests and other organisations as appropriate

4.2 Steering Group

In writing this plan Environmental Health and Licensing have identified a large number of partners with a key interest in air quality. These are:

- Public Health (Public Health England and Public Health Devon)
- Devon County Council Highways
- Neighbouring Districts (Teignbridge, East Devon and Mid Devon)
- Exeter City Council colleagues (Communities Engagement, Sustainable Transport and Economic Development, City Development, Fleet and the Energy Manager)
- Exeter and East Devon Low Carbon Task Force
- European Centre for Environment and Health (Peninsular Medical School / Exeter University)
- Exeter University (Greenpeace laboratories)
- Met Office
- Exeter City Futures
- Exeter Chamber of Commerce

All these partners have met and agreed that there is a clear need and desire to take forward innovative measures to reduce vehicle emissions and exposure in the city. This process has informed the vision described in this AQAP and this group forms the wider Steering Group for the AQAP.

In order to produce the suggested measures that are included in this plan officers have taken input from interested parties and groups, and will continue to do so as measures develop.

It should also be noted that many of the measures in the plan will be independently run, by their own project boards and groups and not led by Environmental Health and Licensing. For example:

- Exeter Health and Wellbeing Board
- Devon Health and Wellbeing Board

- Public Health South West Air Quality Network
- Greater Exeter Strategic Plan Board
- Exeter City Council Licensing Committee and Exeter taxi forum
- Devon Public Health Air Quality Board (all Devon district councils and Public Health Devon)
- Heavitree Congestion & Environment Group (ECC Environmental Health, ECC Communities, Exeter University, Heavitree residents representatives and Exeter City Futures)
- Low Carbon Task Force – ULEV Group
- Exeter City Council Green Travel Plans and Planning Conditions Spotlight Review Group

The new Transport Steering Group will have its first meeting in January 2018. This and subsequent meetings of the group will contribute to the formation of the final AQAP.

It reflects the local importance given to air quality and sustainability that the groups listed above would meet and take actions forward in the absence of the AQAP. However the AQAP gives an opportunity to present all these projects together, introduce some others and focus on compliance with the air quality objectives.

5. AQAP Measures

Table 5.1 summarises the Exeter City Council AQAP measures. It contains:

- a list of the actions that are proposed to form part of the plan
- suggested responsible individuals and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction (predicted using the DEFRA emission factors toolkit (<https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html>))
- proposed timescale for implementation
- how progress will be monitored

As can be seen from Table 5.1, some of the proposed measures are beyond the remit of Exeter City Council to deliver or to deliver alone. In undertaking this consultation process, the City Council recognises the significant involvement that will be required from partners, and welcomes their assistance with the development of the final Action Plan.

NB: Please see future ASRs for regular annual updates on implementation of these measures. It is expected that publication of the GESP and SUMP will necessitate changes to the plan, as will the work of the Transport Steering Group.

Table 5.2 shows greater detail on each measure.

Table 5.1 – Air Quality Action Plan Measures Summary

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
The private car is seldom used for journeys within the city										
1	Anti-Idling Campaign	Traffic Management	Anti-Idling	ECC	2018	2019 – 2022	Program developed and campaign undertaken according to program	Not possible to quantify	Heavitree area identified as first priority location for activity	2022
2	Promote Car Clubs and Co-Bikes	Alternatives to private vehicle use	Car Clubs	ECC	N/A	2018 – 2022	Car Clubs to be introduced in all new major development areas And Funding obtained for installation of identified bike hire points	5g NOx per diesel car journey replaced by car club EV (based on average journey length of 8 km and speed of 30 km/h)	Car Clubs established at Newcourt and Rougemont Park And Bike hire points installed at five locations	Ongoing
3	Design and implement a new and enhanced public transport network and seamless multi-modal travel	Alternatives to private vehicle use	Other	Lead to be agreed	2018 - 2020	2020 – 2022	Plan developed for a new public transport network and services, which serves the travel needs of greater Exeter best	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Initial discussions with consultants about what a predictive analytics approach can deliver	2022
4	Design and implement a filtered permeability plan and corridor improvements	Traffic Management	Other	Lead to be agreed	2018 - 2020	2020 - 2022	Plan developed for filtered permeability and cycle / pedestrian priority which discourages use of private car for short journeys. Initial work in Heavitree area.	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Initial discussions with consultants about what a predictive analytics approach can deliver	2022

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
Business travel and servicing is by ULEV and shared										
5	Workplace Parking Levy	Traffic Management	Workplace Parking Levy	ECC	2018 - 2019	2019 - 2022	Levy implemented	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Initial discussions with Councillors and relevant officers	Ongoing
6	Business support and accreditation schemes using levy income	Promoting Low Emission Transport	Other	ECC	2018 – 2019	2019 - 2022	Scheme set up and operating. Targets for number of businesses accessing the service will be set.	Not quantified as dependent on which businesses become involved	Initial discussions with Councillors and relevant officers	Ongoing
7	Support businesses with sustainability advice	Promoting Low Emission Transport	Other	Lead to be agreed	2018 – 2019	2019 - 2022	Scheme set up and operating. Targets for number of businesses accessing the service will be set.	Not quantified as dependent on which businesses become involved		Ongoing
8	Access restrictions/ charging	Freight and Delivery Management	Other	Lead to be agreed	2018 – 2019	2020 - 2022	Scheme developed and implemented (focussing on goods transport)	Not quantified as scheme not yet defined		Ongoing

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
Development creates sustainable car-free communities										
9	Require developers to demonstrate a financial contribution to mitigation which matches the harm caused	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	ECC	2018 – 2019	2019 - 2022	Policy developed and implemented	3g NOx per internal combustion car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Potential policies identified	Ongoing
10	Policies deliver development where car travel is not needed	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	ECC	2018 – 2019	2020 - 2022	Policy developed and implemented	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)		Ongoing
11	Connections to new transport network mean it is easier, more attractive and more cost effective for those living outside the city to access the city by public and active travel	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Lead to be agreed	2018 – 2020	2021 - 2022	Policy developed and implemented And New public transport networks operational	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	GESP evidence base And Report of Green Travel Plans and Planning Conditions Spotlight Review Group presented to Scrutiny Committee	Ongoing
12	Planning policy means it is hard for those living in new development outside the city to access the city entirely by private car	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Lead to be agreed	2018 – 2020	2021 - 2022	Policy developed and implemented And New public transport networks operational	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	GESP evidence base And Report of Green Travel Plans and Planning Conditions Spotlight Review Group presented to Scrutiny	Ongoing

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
Internal combustion engines are discouraged in a vibrant centre, where active or ULEV travel is the norm										
13	Changes to parking charges to discourage car travel in peak times.	Traffic Management	Other	ECC	2018	2019 - 2022	Changes made to charging scheme	Not quantified as scheme not yet defined	Initial discussions with Councillors and relevant officers	Ongoing
14	More things to see and do are developed in the City Centre to encourage longer stays	Traffic Management	Other	ECC	Ongoing	2018 - 2022	Plan for city centre developed, and implemented	Not quantified	Plans for city centre under development	Ongoing
15	New and enhanced transport network means it is easier, more attractive and more cost effective for those living in the city to travel public and actively	Alternatives to private vehicle use	Other	Lead to be agreed	2018 – 2019	2020 - 2022	New public transport networks operational	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)		Ongoing
16	Access restrictions/ charging	Traffic Management	Other	Lead to be agreed	2018 – 2019	2020 - 2022	Scheme developed and implemented (focussing on PSV and HGV in the city centre)	Not quantified as scheme not yet defined		Ongoing

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
Exposure Reduction Vision										
17	Public health data provides estimate of impact of transport emissions alongside data on benefits of active lifestyles.	Policy Guidance and Development Control	Other	ECC + Public Health Devon	2018 – 2019	2019 - 2022	Request to Public Health Devon for data And Data published	Not Quantified		2022
18	Promote community monitoring projects, car free events and active travel.	Public Information	Other	Wellbeing Exeter and Sport England Local Delivery Partner Pilot	Ongoing	2018 - 2022	Projects undertaken according to program	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Initial projects identified in the Heavitree area	Ongoing
19	Target social prescribing and community building for those most likely to benefit for getting and staying active	Promoting Travel Alternatives	Other	Wellbeing Exeter and Sport England Local Delivery Partner Pilot	Ongoing	2018 - 2022	Projects undertaken according to program	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Initial projects identified	Ongoing
20	High quality destination parks, play areas, sport and leisure facilities across the City. Promote and encourage Parklife activities and active lifestyles.	Promoting Travel Alternatives	Other	ECC + partners	Ongoing	2018 - 2022	Projects undertaken according to program	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	Initial projects identified	Ongoing
21	Communication & Engagement Plan	Public Information	Other	ECC + partners	2018	2019 - 2022	Campaign undertaken according to program	Not possible to quantify	Heavitree area identified as first priority location for activity	Ongoing

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
Devon County Council										
22	Access Fund	Promoting Travel Alternatives	Other	DCC	N/A	2018	£1.5million over 3yrs of revenue funds to increase walking and cycling (working with large employers, schools to improve skills and activity)	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	DCC implementing program	2022
23	InnovaSUMP	Traffic Management	Other	DCC	2018	2019 - 2022	A standalone transport plan for Exeter of low carbon transport options to improve sustainable mobility alongside the major growth plans	3g NOx per car journey replaced (based on average journey length of 8 km and speed of 30 km/h)	DCC undertaking planning phase	2022
24	Maximise efficiency of existing highway network	Traffic Management	Other	DCC	2018	2019 - 2022	Use technological advancements to better understand the operation of the network and adapt its control to manage traffic effectively	To be confirmed once details finalised		2022

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
Monitoring										
25	Monitoring	Public Information	Other	ECC	2018	2018 – 2022	Continuous analysers replaced, including capacity for PM2.5 monitoring at two locations in the city	N/A	Tenders invited	2018

Table 5.2 – Air Quality Action Plan Measures Detail

Measure No.	Measure	Detail
The private car is seldom used for journeys within the city		
1	Anti-Idling Campaign	Program of anti-idling education, and consideration of enforcement in the future
2	Promote Car Clubs and Co-Bikes	Support significant expansion of car clubs and electric bike hire network, potentially as part of changes to planning policies and seamless multi-modal travel
3	Design and implement a new and enhanced public transport network and seamless multi-modal travel	Support significant upgrade to public transport provision, including single ticketing platform where possible, new routes and an enhanced passenger experience Consider ULEV PSVs where appropriate
4	Design and implement a filtered permeability plan and corridor improvements	Develop a plan which is most likely to deliver defined outcomes of emissions reduction, in conjunction with improved public transport. Initial work to focus on the Heavitree corridor and surrounding areas.
Business travel and servicing is by ULEV and shared		
5	Workplace Parking Levy	Incentivise employers to adopt best practice and encourage use of private car, whilst generating income to support delivery of other aspects of the AQAP. ECC to lead by example by providing EV pool cars
6	Business support and accreditation schemes using levy income	Provide advice and support to companies to change their travel habits and reduce emissions, showing the link to increased profitability and productivity. Expansion of Eco Stars, subject to funding ECC to lead by example, replacing diesel vehicles with ULEV where this can be cost effective. Investigate possibility of setting emission standards for private hire vehicles.
7	Support businesses with sustainability advice, possibly through the LEP	Further phase of support, with accreditation or award schemes to highlight good performance, in conjunction with partners and covering a wider geographic area. DCC, University and hospital to convert diesel vehicles to ULEV as part of work by the Low Carbon Task Force ULEV group, and work towards a Devon-wide EV charging network.
8	Access restrictions/charging	Restrictions on what vehicles can enter certain parts of the city at certain times of day, potentially with a charge for vehicles that do not meet the relevant criteria (focusing on goods vehicles)
Development creates sustainable car-free communities		

9	Require developers to demonstrate a financial contribution to mitigation which matches the harm caused	Require developers to predict the health costs of vehicle emissions and match this cost with spending on mitigation Update local planning validation checklist to reflect the information we expect to see in an application
10	Policies deliver development where car travel is not needed	Develop planning guidance as part of Core Strategy or in annex to AQAP which sets out how we want development to be as car-free as possible. Work to ensure that the GESP is as robust as possible about allocating development in sustainable locations and mitigating air quality impacts. Review options for making green travel plans more effective, especially in the longer term (Green Travel Plans and Planning Conditions Spotlight Review Group)
11	Connections to new transport network mean it is easier, more attractive and more cost effective for those living outside the city to access the city by public and active travel	Implement new network of transport routes and infrastructure, connected to new development areas. Consider recommendations of Green Travel Plans and Planning Conditions Spotlight Review Group
12	Planning policy means it is hard for those living in new development outside the city to access the city entirely by private car	Develop park and ride and new public transport routes. Consider the use of traffic management or access restrictions which make park and ride, public transport or active travel more attractive than driving into the city centre. Consider recommendations of Green Travel Plans and Planning Conditions Spotlight Review Group
Internal combustion engines are discouraged in a vibrant centre, where active or ULEV travel is the norm		
13	Changes to parking charges to discourage car travel in peak times.	Ensure that parking policy discourages travel at peak times, and encourages visitors to stay into the evening. Consider recommendations of Green Travel Plans and Planning Conditions Spotlight Review Group.
14	More things to see and do are developed in the City Centre to encourage longer stays	Increase the attractiveness of the city centre, and the length of time people spend in the city centre, for example changes in the South Street area, Corn Exchange and the bus station redevelopment
15	New and enhanced transport network means it is easier, more attractive and more cost effective for those living in the city to travel public and actively	Support significant upgrade to public transport provision, including single ticketing platform where possible, new routes and an enhanced passenger experience Consider ULEV PSVs where appropriate

16	Access restrictions/ charging	Restrictions on what vehicles can enter certain parts of the city at certain times of day, potentially with a charge for vehicles that do not meet the relevant criteria Focussing on PSV and HGV in the city centre
Exposure Reduction Vision		
17	Public health data provides estimate of impact of transport emissions alongside data on benefits of active lifestyles.	Request that Public Health Devon undertake an evidence review to provide estimate of impact of traffic emissions on the population of Exeter (including noise) Brief ECC members and senior managers as part of Communications and Engagement Plan
18	Promote community monitoring projects, car free events and active travel.	Through Wellbeing Exeter and Sport England Local Delivery Partner Pilot promote community monitoring projects, car free events and active travel. Continue to work with Sustrans in local schools Support research by Exeter University into sustainable travel and behavioural change Further improve the air quality data available on ECC's website
19	Target social prescribing and community building for those most likely to benefit for getting and staying active	Through Wellbeing Exeter and Sport England Local Delivery Partner Pilot develop and implement programs which increase active lifestyles, and active travel.
20	High quality destination parks, play areas, sport and leisure facilities across the City. Promote and encourage Parklife activities and active lifestyles.	Ensure that parks and public open space are attractive places to spend time, encourage active lifestyles and active travel, and maximise wider natural capital benefits. Support local groups which are based around shared public space.
21	Communication & Engagement Plan	Develop a formal communications plan for air quality.
Devon County Council		
22	Access Fund and cycle/walking network	Promotional activities to increase walking and cycling (working with large employers, schools to improve skills and activity). Planned improvements in the strategic walking and cycling networks.
23	InnovaSUMP	Develop a standalone transport plan for Exeter of low carbon transport options to improve sustainable mobility alongside the major growth plans. Will connect to the GESP and provide an update to the LTP3 for the Greater Exeter area.

24	Maximise efficiency of existing highway network	Network review to optimise junctions and signals Utilise real-time technology and new forms of network control to smooth flow and provide information to travellers
Monitoring		
25	Monitoring	Monitoring in parks and on cycle routes to demonstrate the exposure reduction benefits of avoiding congested routes. Installation of replacement continuous monitoring equipment, at RAMM and Alphington Street, including PM2.5 analysers.

Appendix A: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
		This table will be updated in the final AQAP, showing responses to the consultation on this draft

Appendix B: Reasons for Not Pursuing Action Plan Measures

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

This table will be updated in the final AQAP, following amendments made to this draft AQAP after consultation, and responding to any possible actions suggested by consultees which have not been taken forward.

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Alternatives to private vehicle use	Tram	No tram network is planned currently, as improvements to the bus network are proposed and the two modes would compete. This will be kept under review.
Traffic Management	Clean Air Zone	The measures in the Clean Air Zone Framework have all been considered, but it is not considered appropriate at this stage to adopt a branded CAZ. This will be kept under review. Readers should also be aware that apart from taxi and private hire emission standards, any access restrictions or charging would be for DCC to implement.
Traffic Management	Congestion charge, LEZ	Options for access restrictions and/or charging are included in the plan, but are expected to be targeted to certain types of vehicle and/or location. Readers should also be aware that any access restrictions or charging would be for DCC to implement.
Alternatives	Cycle/pedestrian priority at all junctions	Dedicated pedestrian and cycle routes will be improved, but these road users will not (at this stage) be given priority at all junctions.
Alternatives to private vehicle use	ULEV PSV	Discussions with Stagecoach suggest that technology is not yet available to replace the Exeter bus fleet with ULEV, but this will be kept under review.

Freight and Delivery Management	Freight consolidation centre	Previous work on behalf of DCC suggested that this was not viable, but it will be kept under review
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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
DCC	Devon County Council
ECC	Exeter City Council
GESP	Greater Exeter Strategic Plan
EU	European Union
LAQM	Local Air Quality Management
LTP3	Third Round 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
SUMP	Sustainable Urban Mobility Plan

References

Exeter Air Quality Action Plan 2008

Devon County Council Third Round Local Transport Plan 2010

Exeter Second Air Quality Action Plan 2011-2016

Exeter City Council Core Strategy 2012

PHE-CRCE-010: Estimating local mortality burdens associated with particulate air pollution 2014

COMEAP 2015 Nitrogen Dioxide: interim view on long-term average concentrations and mortality

Devon County Council Transport Infrastructure Plan 2015

Exeter Low Emissions Strategy 2016

Exeter City Council Annual Status Report 2017