



# Canterbury City Council Air Quality Action Plan

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

Adopted November 2018

Canterbury City Council Air Quality Action Plan 2018 - 2023

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## Executive summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duty under the Local Air Quality Management (LAQM) framework. It outlines the actions we will take to improve air quality in Canterbury city and Herne over the period 2018-2023. In addition, some actions will have benefits for the wider district.

In Canterbury city, in line with the national picture, road traffic emissions producing nitrogen dioxide (NO<sub>2</sub>) along major roads are the main source of the issues identified by the city council in relation to compliance with air quality standards. The city centre roads are subject to frequent congestion in peak hours due to the high volume of vehicle movements linked to business, school runs, shoppers, university students and tourists into a historic layout of roads. In addition, there is an air quality 'hotspot' at the mini roundabout in Herne, again as a result of traffic volumes giving rise to emissions of NO<sub>2</sub> and due to the close proximity of the residential properties to the roadside at this specific location.

The primary focus of this air quality action plan is to put measures in place which will ensure levels of NO<sub>2</sub> across the district, and hot spots, are consistently below the objective annual mean of 40µg/m<sup>3</sup>.

Under the LAQM framework, the council has a legal requirement to declare an Air Quality Management Area (AQMA) when there is, or is likely to be, an exceedance of an air quality objective. The council has been fulfilling its reporting obligations under the LAQM regime since its inception which resulted in the original AQMA being declared in April 2006 along parts of the A28 at Broad Street/Military Road, Canterbury. This AQMA was extended in 2011 to also include two small additional areas of Broad Street and Wincheap as a result of further monitoring and assessment work.

Using the latest available evidence (such as the LAQM Emissions Factor Toolkit version 8.0.1 assessment tool) to analyse the 2017 air quality data and the Department of Transport traffic data, Canterbury City Council varied the existing AQMA and declared, on 9 April 2018, a AQMA Canterbury No.3 area which adds small areas of Old Dover Rd, New Dover Road, Lower Chantry Lane, Military Road and Rheims Way to the existing area.

Using the same process we identified a hotspot at the mini roundabout in Herne and declared an AQMA Herne No1 on the 9 April 2018.

Some of the projects we have already been working on to reduce emissions as a result of the original AQMA are:

- Improving traffic management by working with partners at Kent County Council and Highways England to make improvements to traffic flow through the city centre
- Development of a new A2 slip road at Wincheap eastbound from London
- Enhanced park and ride provision
- Introduction of the Park and Pedal scheme at Wincheap Park and Ride car park, which allows users to store their bike in a secure cycle locker and park for free, so that they can cycle in to the city centre
- Providing new and improved cycle routes including Stour Valley Way, Oyster Bay Trail and the Crab and Winkle line to help encourage fewer car journeys
- Working with the Quality Bus Partnership to improve the local public transport network and get the cleanest fleet in terms of emissions

- Canterbury adopted a new Local Plan for 2011-2031 and a new Transport Strategy in 2017, which put a strong emphasis on reducing vehicle traffic and promoting walking and cycling to help in reducing emissions attributed to private vehicle use
- Mitigation measures to reduce air pollution are considered for new developments with reference to the Kent and Medway Air Quality Partnership guidance for developments which may have an impact on the AQMA
- An education and awareness raising campaign on anti-idling with St Thomas' and St John's primary schools in Canterbury. The children's posters were displayed at the Beaney Museum in the Season for Change - Breathing Canterbury exhibition from 21 July to 30 September 2018.
- The provision of EV charging points both on-street and in our car parks

Canterbury City Council is committed to achieving the annual mean NO<sub>2</sub> air quality standard in the AQMAs and reducing the exposure of people in the Canterbury district to poor air quality.

## The case for improving air quality

Research into the impact of air pollution has increased understanding of its effects considerably in the last decade. Air pollution is associated with a number of adverse health impacts and is also known to affect sensitive ecosystems and crop yields, and lead to accelerated deterioration of materials and historic buildings. We now know air pollution is not just associated with respiratory illness but is also linked to heart conditions<sup>1</sup>. 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

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<sup>1</sup> <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

poorer air quality are also often the less affluent areas<sup>2,3</sup>. It had been thought that the links between air pollution and poor health in Britain had been solved by the implementation of the Clean Air Acts of 1956 and 1968. But it is now estimated air pollution contributes to 40,000 excess deaths each year and costs the economy around £27 billion annually<sup>4</sup>. A recent Parliamentary Briefing stated central government considers air quality to be ‘the largest environmental risk to public health in the UK’<sup>5</sup>.

## The development of the AQAP

The actions needed to improve air quality are diverse and require all of us to work together to deliver improvement. Working in partnership is fundamental to the plan. This AQAP was developed in partnership with stakeholders. To ensure ongoing input we are linking air quality to the existing Sustainable Transport Forum. Financial pressures on local authorities are challenging and so, where appropriate, we will work with partners to actively seek external funding to support the air quality action plan.

Our air quality priorities are:

- Public health
- Transport management
- Planning and strategic development
- Strategic approach

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<sup>2</sup> Environmental equity, air quality, socioeconomic status and respiratory health, 2010

<sup>3</sup> Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

<sup>4</sup> Annual Report of the Chief Medical Officer March 2018

<sup>5</sup> Brexit and air quality - Parliamentary Briefing March 2018

The priorities link to the 11 European Union (EU) categories<sup>6</sup> in order to strengthen the links with efforts at the national level: (i) alternatives to private vehicle use; (ii) environmental licences; (iii) freight and delivery management; (iv) policy guidance and development control; (v) promoting low-emission plants; (vi) promoting low-emission transport; (vii) promoting travel alternatives; (viii) public information; (ix) transport planning and infrastructure; (x) traffic management and (xi) vehicle fleet efficiency.

Specific actions for Canterbury are set out in Table 5.1 and for Herne Table 5.1a

In Canterbury, the major source of air pollution comes from road vehicles although other sources include industry, agriculture and wood burning stoves. This AQAP focuses on air quality issues within the control of the council and its partners. We work in partnership with neighbouring local authorities on the Kent and Medway Air Quality Partnership group (KMAQP) and are represented on the Kent Low Emission Strategy group, which is drafting the Countywide Energy and Low Emissions Strategy in 2018. We also recognise there are air quality policy areas we may influence by working with regional and central government.

## **Responsibilities and commitment**

This AQAP was prepared by the Environmental Health Team at Canterbury City Council, reporting to the Director of Community Services. The work was supported by a steering group of officers from across council services, input from partner organisations such as neighbouring local authorities and the Environment Agency, and with technical support provided by an external air quality specialist Bureau Veritas.

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<sup>6</sup> EU Directive 2008/50/EU <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:en:PDF>

Production of this AQAP involved engagement with local agencies, stakeholders and partner organisations. On the 18 April 2018 it was approved by Canterbury City Council Policy and Resources Committee for public consultation and consultation with statutory consultees Kent County Council including its Strategy, Highways and Public Health teams alongside neighbouring authorities and the Environment Agency.

This version has been revised as a result of the consultation and was adopted by Canterbury City Council in November 2018. The final AQAP will be implemented subject to:

- Oversight by the Steering Group
- An annual review
- Appraisals of key progress reported to the Policy and Resources Committee as part of the Corporate Annual Report

Annual Status Reports (ASRs) produced by Canterbury City Council, as part of its statutory Local Air Quality Management duties.

## **What will the plan achieve in respect of improvements in NO<sub>2</sub>?**

Over the five-year duration of this plan, a number of existing and new initiatives will be implemented to achieve a modal shift target of 5.7% away from private car use for workplace travel across the district and the city to increased use of more sustainable transport including walking, cycling and enhanced bus and Park & Ride provisions. This target has been adopted from the council's Transport Strategy (2014- 2031) which seeks to achieve a 23% reduction in car and van use over its lifetime.

In addition to the overall achievement of modal shift, this plan seeks to encourage faster uptake of less-polluting vehicles through provision of electrical charging points and incentives to adopt cleaner vehicle technologies through vehicle licensing arrangements. Regionally and nationally it is anticipated that actions in the National Roadside NO<sub>2</sub> plan and in the 2018 Clean Air Strategy will lead to an improvement in the levels of background NO<sub>2</sub> across the district including the two AQMAs.

A modelling appraisal has been undertaken of the action plan. This projects compliance to be achieved in 2023 (the final year of the plan) in the majority of the AQMA in Canterbury city and wholly achieve compliance in the Herne AQMA. There remains a risk that levels of NO<sub>2</sub> – while reduced – do not fall below the annual mean objective of 40 µg/m<sup>3</sup> in the Wincheap area, but this is only marginally above the threshold. The provision of a new A2 slip road will provide for further air quality benefits in the area due to the physical changes in traffic flow, so further improvements in air quality are likely to take place, achieving levels below the annual mean of 40 µg/m<sup>3</sup>.

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# 1 Introduction

Air pollution continues to have an adverse impact on our environment and our health. From the latest medical evidence, it is estimated some 40,000 deaths across the UK as a whole can be attributed to air pollution. Moreover, evidence now shows the impact on health is not solely limited to impaired lung function, but is also now linked to a wide variety of medical outcomes, as evidenced in the Royal College of Physicians analysis reported in 2017<sup>7</sup>, which provides an overarching summary.

Air pollution also affects our wider environment through contribution to nitrogen and acid deposition, leading to accelerated changes in our sensitive habitats and reducing crop yields.

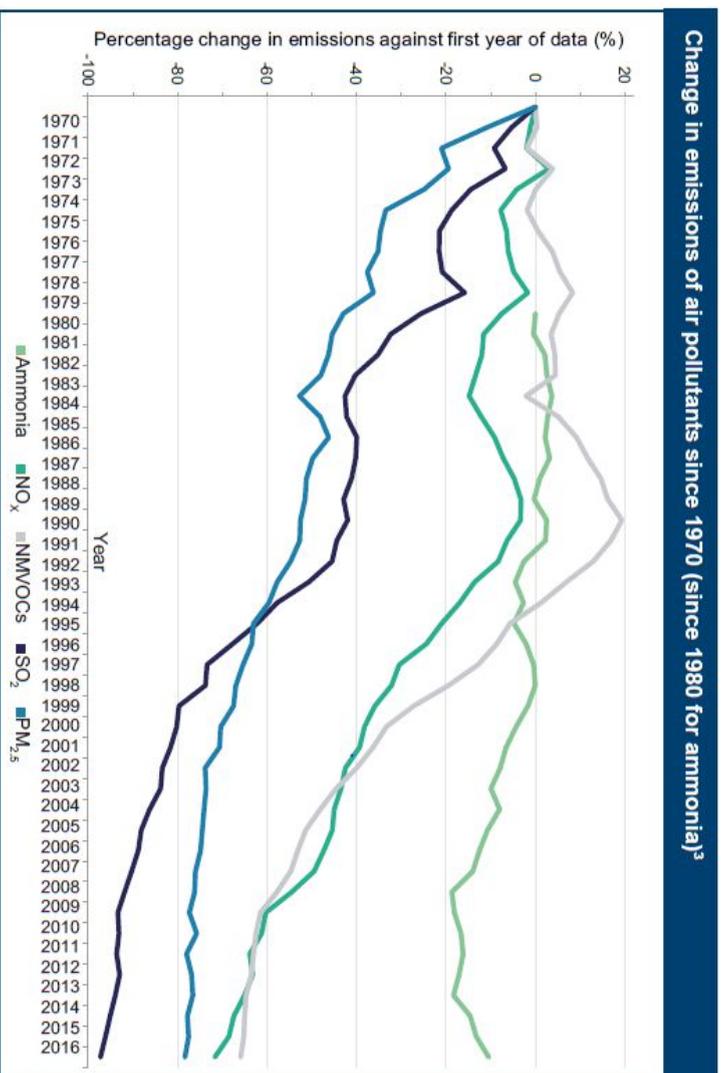
The extent to which we as individuals are impacted by air pollution is dependent upon the level of pollution and our presence and duration at specific locations which experience levels of pollution above those recommended to be safe.

In the UK, road transport has been identified as a key source of pollution. As such, those that live on busy roads tend to be at a higher level of risk than those that live some distance from roads. This is the case for NO<sub>2</sub> but not all pollutants. For ozone (O<sub>3</sub>) elevated levels tend to arise in rural areas. As such, our individual interactions with pollution are dynamic and continually change according to the environments we live and work in.

Reducing levels of pollution in the atmosphere is therefore essential for the purposes of improving our environment and creating a better world for us all to live in. Much has been achieved over the last few decades which has seen a reduction in emissions in almost all pollutants of concern (shown below):

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<sup>7</sup> <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>



Despite this achievement, recent trends have shown a levelling for some pollutants such that further action is required. At the national level, the UK government has adopted tighter national emissions limits under the EU auspices of the National Emissions Ceiling Directive. A new Clean Air Strategy 2018<sup>8</sup> has recently been consulted on and is due to be published in

<sup>8</sup> <https://consult.defra.gov.uk/environmental-quality/clean-air-strategy-consultation/>  
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due course. This plan complements the existing National Plan for Roadside Nitrogen Dioxide (NO<sub>2</sub>)<sup>9</sup>, which seeks to introduce Clean Air Zones (CAZ) into a number of cities across the UK where levels of NO<sub>2</sub> are shown to be in breach of the EU Limit Value for compliance with the Ambient Air Quality Directive (2008/50/EC). Canterbury is not included in this list, but the horizon of this plan mirrors, broadly, the overall timescales to which the Clean Air Zone City Framework will be working.

As a result of these efforts, it is widely anticipated two key aspects of air pollution management will take effect in the coming years:

- Concentrations of widely diffused sources of pollution (ie background levels) will reduce
- The net contribution to pollution levels from engines will reduce as a result of the adoption and uptake of more stringent vehicle emissions standards.

This Air Quality Action Plan (AQAP) outlines the actions that Canterbury City Council will deliver between 2018 and 2023 in order to reduce concentrations of nitrogen dioxide (NO<sub>2</sub>) and exposure to air pollution.

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

The AQAP will be comprehensively reviewed at least every five years. Progress on measures set out within this AQAP will be reported annually within Canterbury City Council's air quality Annual Status Report (ASR) and the annual Corporate Report.

At the time of drafting this AQAP, national air quality policy is being challenged. Any changes in national policy deemed to influence our approach to improving air quality through this AQAP within the five year period will be considered and any changes in national policy that the steering group think will help improve delivery of our agreed AQAP or improve local air quality within the five-year period will be considered. If necessary, measures will be updated and reported as necessary in such an event.

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<sup>9</sup> <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

## Summary of current air quality in the Canterbury City Council area

The Canterbury district is diverse in character and includes the historic city of Canterbury which encompasses a third of the district's population. The coastal towns of Whitstable and Herne Bay are to the north of the city and are also significant centres of population. The majority of the remaining areas covered by the Canterbury district are rural in character and comprised of villages.

Air pollution within the district is characterised through a number of different methods and scales. These include:

- National – the UK air quality compliance network operated by the UK government is the Automatic Urban and Rural Network (AURN)<sup>10</sup>. An AURN monitoring station is located within the district as part of the national assessment within the South East Zone at Chaucer School. This national site monitors levels of two pollutants – nitrogen dioxide (NO<sub>2</sub>) and ozone. The site location is determined by the requirements of the Ambient Air Quality Directive (2008/50/EC) and provides useful context to some of the council's own work on air quality. The site provides background data for the national assessment of compliance against the directive. Ozone falls outside of the duties of the council under the LAQM regime due to control largely through national and international agreements for reductions on ozone precursor emissions.
- In Canterbury city we have an additional continuous NO<sub>2</sub> air quality monitoring station in Military Road. This monitors NO<sub>2</sub> levels and provides the council with further information on air quality in the AQMA. Levels of data capture are good (>90%) and have shown that levels of NO<sub>2</sub> in 2016 were around 33 µg/m<sup>3</sup> as an annual mean.

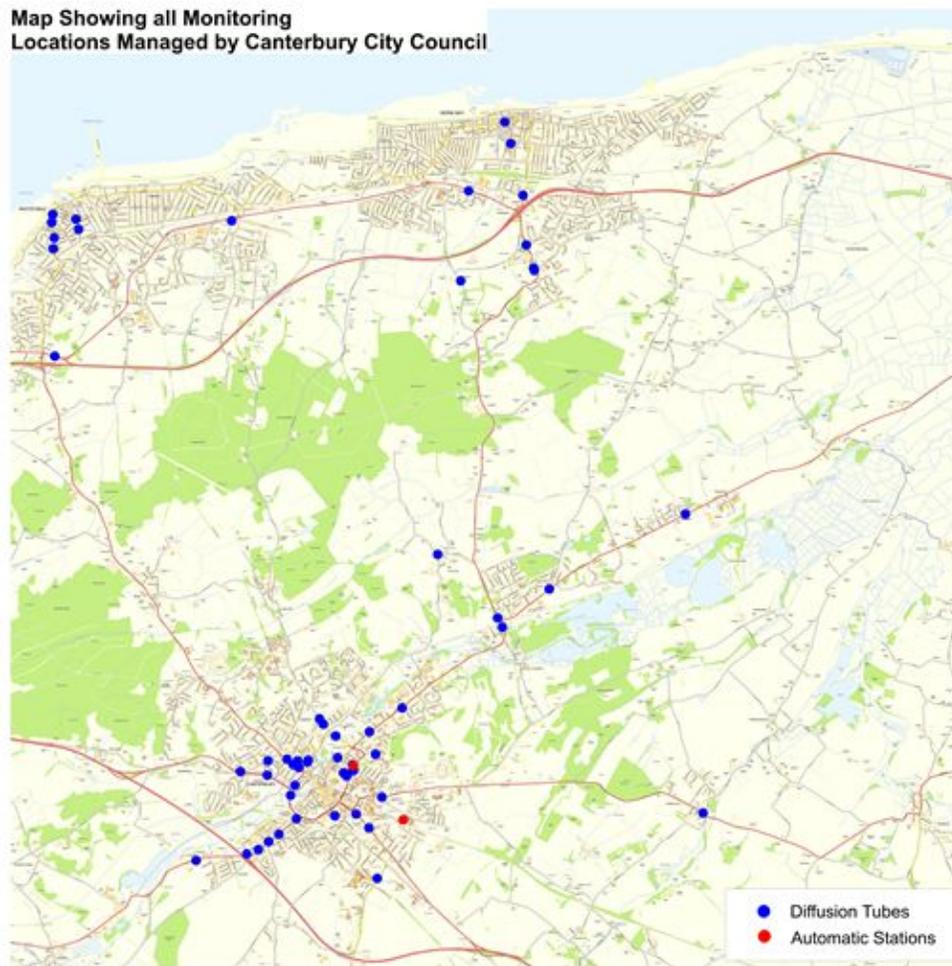
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<sup>10</sup> <https://uk-air.defra.gov.uk/networks/network-info?view=aurn>

The assessment of air pollution levels by continuous monitoring alone is expensive and restrictive as the measurements made are very site specific. In order to evaluate the levels of NO<sub>2</sub> across the city and wider district we also use passive diffusion tubes which are a low-cost, flexible method of monitoring. These tubes are less accurate than the continuous monitoring methods but comparisons between the two – running side by side – provide reassurance on the results through application of “bias adjustment factors”.

Diffusion tubes are deployed across the city, Herne and wider district to provide results on the levels of NO<sub>2</sub> alongside the main roads as shown in Figure 1, below. They are a useful method for characterising gradients in NO<sub>2</sub> occurrence through locating tubes alongside the kerb (< 1m of the kerbside); roadside (2 – 10m) from the kerbside or background (>200m from the kerbside). In 2017 an additional 10 diffusion tube sites were added at new locations and an additional 14 in 2018:

- close to schools in Canterbury’s AQMA, and on major roads in Whitstable and Herne Bay
- close to proposed major developments in Thanington, Sturry, Whitstable and Herne
- close to railway level crossings across the district



**Figure 1 - Map of monitoring locations**

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The final method of assessment of air quality is through the use of mathematical models to predict the levels of NO<sub>2</sub> across the city. Dispersion modelling provides a means by which predictions on the levels of NO<sub>2</sub> can be made and then verified against the monitored levels to provide an assessment of uncertainty in predictions. A model of the city is constructed through parameterisation of the volume of traffic and its composition (eg cars, lorries, light duty vehicles, motorbikes, buses, and so on) and speed. Processing of the dispersion of the emissions arising from the traffic is undertaken using representative weather data for the area, taking account of the influences of buildings, gradients etc.

The most up-to-date information on levels of NO<sub>2</sub> in the city led to the 2011 Air Quality Management Area No.2 being varied - see **Figure 2**, below. The “hatched areas” are the original 2011 AQMA No2, the varied 2018 AQMA No 3 is the “hatched areas” plus the “dotted areas” combined. The AQMA is a linear area of exceedance along major roads. This reflects the narrow band of impact created by emissions from road traffic in respect of compliance against the national air quality objective for NO<sub>2</sub>.

**Figure 2 Air quality management area - Canterbury No.3 map**



Right [2018]

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The variation to the Canterbury AQMA was identified and changed in line with statutory requirements in April 2018. Modelling undertaken and verified with 2017 monitoring data showed possible exceedances in areas at the ends of the main roads on the current linear AQMA. Data from the Department for Transport demonstrates levels of traffic movement have remained consistent since 2000. The reason for the slight increase in the AQMA area, which at present is largely confined to within the road boundaries, is subject to further investigation but more than likely attributed to the higher emissions of NO<sub>x</sub>/NO<sub>2</sub> from certain vehicle classes under real-world driving conditions.

The same modelling work applied across the district identified the traffic 'hotspot' at the Herne mini roundabout on the A291 and School Lane. Therefore on the 9 April 2018 we declared a new AQMA - Herne No1 see **figure 3**.

**Figure 3: Air quality management area - Herne No1**



## 2 Canterbury City Council's air quality priorities

### 3.1 Public health context

Mounting scientific evidence shows the scale of the impact of poor ambient air quality on health. Although air quality is not a direct cause of death, it is considered to be a significant contributory factor. In 2010, the Department of Health's Committee on the Medical Effects of Air Pollutants (COMEAP) reported long-term exposure to outdoor air pollution contributed to the equivalent of approximately 29,000 deaths in 2008 in the UK. A further report by the Royal College of Physicians reported in 2016 it contributed to the equivalent of 40,000 deaths in 2015. When equated to the Canterbury area, this meant ambient air pollution was a contributory factor in an estimated 81 deaths or a total 748 years reduction in life expectancy. Those most at risk from air pollution are the young and elderly and those with predisposed medical conditions, which may be exacerbated by elevated levels of air pollution. The extent to which exposure takes place is dependent upon time and duration of exposure and air quality standards are set to reflect both the short-term (acute) impacts on health of elevated levels that may arise during pollution episodes, and those that are more relevant to longer term (chronic) exposure over longer periods, which typically cover a year.

In addition to attributable deaths, the health burden of air pollution incurs costs through healthcare and loss of productivity to UK Gross Domestic Product (GDP). Using a recent tool developed by Public Health England<sup>11</sup> an estimate of the healthcare savings for a cohort of the population (male and female) over the age of 18 living in conditions of poor air quality (where exposure to NO<sub>2</sub> alone is considered) gives rise to a cumulative cost saving of approximately £95,000 over the lifetime of this plan (ie five years). This value includes those costs attributed to GP's, community health, hospitals, specialists and medicine costs and is illustrated to be cost savings on a per 100,000 head of population.

Ongoing medical research increases our awareness of the links between air pollution and health risks. A number of air pollutants may contribute to poorer health. In the Canterbury district NO<sub>2</sub> levels exceeding the objective have been identified as the main

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<sup>11</sup> <https://www.gov.uk/government/publications/air-pollution-a-tool-to-estimate-healthcare-costs>

problem. Particulate Matter (in the fractions of 10 microns and 2.5 micron diameters – PM<sub>10</sub> and PM<sub>2.5</sub>, respectively) – are invisible to the eye and are also known to affect health. Levels of PM<sub>10</sub> in the district currently comply with air quality standards and the AQMA does not therefore include consideration to this pollutant. For PM<sub>2.5</sub> evidence continues to show that there is no real safe threshold for this pollutant and UK government should achieve reductions in levels of PM<sub>2.5</sub> as low as reasonably practicable below the current air quality standard. The council is not under an obligation to monitor PM<sub>2.5</sub>, which is a focus at national level, but anticipates some of the measures implemented within this action plan for the achievement of reductions in NO<sub>2</sub>, will have benefits in additionally reducing concentrations of particulate matter.

### 3.2 Planning and policy context

Canterbury City Council's Corporate Plan 2016-2020 includes Principle 8: "We will be as sensitive as possible about our own environmental impact and work with others to do the same."

With regard to air quality, the main source of air pollution is road traffic. Traffic congestion is a major concern for residents in the district and the perception is it is getting worse, although evidence from Department for Transport indicates that volumes of traffic have been fairly level in the city since 2000.

The council's 2016 residents' survey asked people to tell us which services they felt were most important in making Canterbury a good place to live and which services most needed improving. The level of traffic congestion was ranked as the area most in need of improvement and seventh most important in making somewhere a good place to live. Air quality was ranked as the 17th most important factor in making somewhere a good place to live and the 21st most in need of improvement.

The extent to which national media attention on air quality has influenced the view of residents in recent years relative to these views held in 2016 is not known but needless to say congestion and poor air quality feature high on residents' concerns.

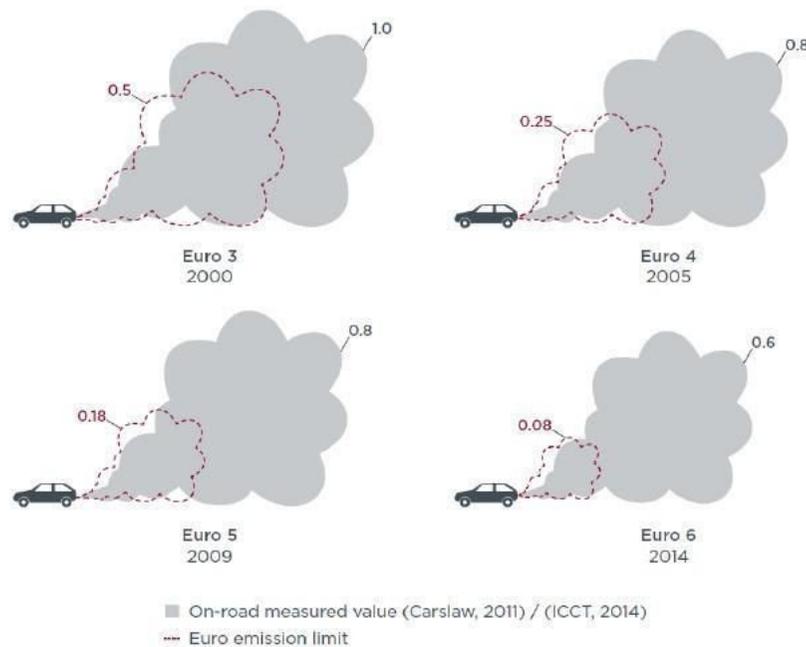
Volumes of traffic in Canterbury have remained fairly stable since the year 2000 at approximately 100,000 movements per day through the AQMA. This is despite the district population having grown by approximately 27,000 people between 2001 and 2016 plus a more vibrant city centre with the addition of the new Marlowe Theatre and Whitefriars shopping centre.

It is possible air quality is shown to be deteriorating as a consequence of the emissions of certain vehicle classes being worse than anticipated through the implementation of the Euro vehicle standards which are agreed at European level. **Figure 4** below provides a summary of the findings of research which show the actual emissions of certain vehicle standards compared to laboratory tests.

The disconnect between emissions tests under laboratory test conditions - implemented for standardisation on certification for carbon dioxide emissions - and the emissions arising from real-world driving conditions is now well recognised and tighter emissions standards under Euro 6 vehicle classes have been agreed at European level.

Figure 4: Actual emissions compared to laboratory tests<sup>12</sup>

## DIESEL CARS



<sup>12</sup> [1] The International Council on Clean Transportation. (2016). European vehicle market statistics. Pocketbook 2015/2016. (P. Mock, Ed.). Berlin, Germany. Retrieved from <http://eupocketbook.theicct.org>

The Canterbury District Local Plan 2011-2031 was adopted in July 2017. The Local Plan Inspector's summing up regarding the air quality policies was that 'overall, the Local Plan has given appropriate consideration to air quality matters and achieving compliance with limit values and national targets for pollutants'.

The Quality of Life chapter of the Local Plan includes a section on air quality and the following policy:

**Policy QL 11 Air Quality**

Development that could directly or indirectly result in material additional air pollutants and worsening levels of air quality within the area surrounding the development site or impact on the existing Air Quality Management Area will not be permitted unless acceptable measures to offset or mitigate any potential impacts have been agreed as part of the proposal. An air quality assessment will be required if the proposal is likely to have significant effect taking account of the cumulative effects on individual sites

The Local Plan 2011-2031 sets out the council's strategic approach to the location of development in which the urban areas continue to be the principal focus for development with particular emphasis on Canterbury together with development at the rural service centres.

In the Local Plan there are proposals to improve the road infrastructure such as at Wincheap where the aim is to develop a new road layout including new and improved A2 slip roads, with the combined aim of improving the flow of traffic and thus improve the air quality in the area. Improvements in air quality attributed to this scheme are discussed in detail later.

The Local Plan includes a Herne relief road that is to be funded by local developments. The relief road will help to reduce the volume of traffic passing through Herne village thereby leading to improvements in air quality.

The Canterbury District Transport Strategy was adopted alongside the Local Plan 2011-2031 in July 2017. It recognises air pollution is a key challenge and it has a range of actions that link into the Air Quality Action Plan: electric charging points; road network infrastructure projects; an increase in active travel network and promotion of cycling and walking. During the lifetime of the Transport Strategy a target for achieving an overall 23% reduction in car and van use for work travel has been set. The AQAP seeks to assess the impact of achieving a contribution over the five-year horizon of this plan to car and van reduction aligned to the wider horizon target of 2031.

### 3.3 Source apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within the AQMA. In AQMAs where road transport is identified as the principal source of emissions, the relative contributions from different vehicle types (e.g. cars, Heavy Goods Vehicles (HGVs), Light Goods Vehicles (LGVs), and buses) can be determined to identify which vehicle type represents the most significant source of pollution.

A source apportionment exercise was undertaken using an air dispersion model to assess the overall emissions profile of vehicles moving through the AQMA. It should be noted that emission sources of NO<sub>2</sub> are dominated by a combination of direct NO<sub>2</sub> (f-NO<sub>2</sub>) and oxides of nitrogen (NO<sub>x</sub>), the latter of which is chemically unstable and rapidly oxidised upon release to form NO<sub>2</sub>. Reducing levels of NO<sub>x</sub> emissions therefore reduces levels of NO<sub>2</sub>. As a consequence, the source apportionment study has considered the emissions of NO<sub>x</sub> which are assumed to be representative of the main sources of NO<sub>2</sub>.

The following, **Figure 4**, provides for a breakdown in NO<sub>x</sub> according to vehicle class within the AQMA according to the following criteria:

- Contributions based on average NO<sub>x</sub> levels across all modelled locations
- Contributions based on NO<sub>x</sub> levels across modelled locations where NO<sub>2</sub> concentrations exceed 40 µg/m<sup>3</sup>
- Contributions based on NO<sub>x</sub> levels at the highest NO<sub>2</sub> concentration (in the Wincheap area) in the AQMA

**Figure 4– Source Apportionment Results**

Results	All Vehicles	Car	LGV	HGV	Bus	Motorcycle	Background
<b>Average across all modelled receptors</b>							
<b>NO<sub>x</sub> Concentration (µg/m<sup>3</sup>)</b>	28.0	13.8	6.5	2.6	5.0	0.1	16.9
<b>Percentage</b>	62.3%	30.7%	14.5%	5.8%	11.2%	0.1%	37.7%
<b>Percentage Road Contribution</b>	100.0%	49.3%	23.2%	9.4%	17.9%	0.2%	-
<b>Average across all receptors with NO<sub>2</sub> Concentration greater than 40µg/m<sup>3</sup></b>							
<b>NO<sub>x</sub> Concentration (µg/m<sup>3</sup>)</b>	70.4	31.8	15.1	8.1	15.3	0.1	17.0
<b>Percentage</b>	80.5%	36.4%	17.3%	9.2%	17.5%	0.1%	19.5%
<b>Percentage Road Contribution</b>	100.0%	45.1%	21.4%	11.5%	21.8%	0.2%	-
<b>At Receptor with maximum road NO<sub>x</sub> Concentration (Wincheap Area)</b>							
<b>NO<sub>x</sub> Concentration (µg/m<sup>3</sup>)</b>	106.7	59.6	26.2	13.4	7.3	0.2	13.9
<b>Percentage</b>	88.5%	49.4%	21.8%	11.1%	6.1%	0.1%	11.5%
<b>Percentage Road Contribution</b>	100.0%	55.9%	24.6%	12.5%	6.9%	0.2%	-

Analysis of the results has shown that at locations where NO<sub>2</sub> exceeds 40 µg/m<sup>3</sup>, average NO<sub>x</sub> emissions from cars contribute the largest proportions (45.1% of all NO<sub>x</sub> vehicle emissions). Furthermore, the receptor with the maximum road NO<sub>x</sub> concentration estimated that over 50% of total NO<sub>x</sub> vehicle emissions at this location were derived from cars. The worst case receptor is located

on Wincheap, which is within the AQMA and is considered an area of concern. The results therefore indicate that cars are the largest contributor to NOx emissions within the Canterbury AQMA.

Both LGVs and buses are estimated to contribute approximately 21% of the total road NOx emissions when assessing the average breakdown across all receptors with NO<sub>2</sub> concentrations greater than 40 µg/m<sup>3</sup>. However, at the worst case receptor in the Wincheap area. LGVs were contributing 24.6% of the total road NOx emissions compared to 6.9% contribution from buses. The results emphasise the variability in NOx emissions from buses. The average NOx contribution across all receptors from buses and LGVs is very similar, however at individual receptors the NOx emissions derived from buses varies significantly and is less uniform in comparison to LGVs. As a result, the impact from buses will be causing greater problems at specific locations across the AQMA and therefore measures to reduce emissions from buses are considered to be important in order to deliver improvements.

Heavy Goods Vehicles (HGVs) are shown to be fairly constant in their contribution to levels of NOx within the AQMA at ~ 12%.

### 3.4 Required reduction in emissions

In order to understand the scale of the challenge in achieving compliance with the annual mean NO standard within the AQMA, analysis of the highest roadside increment NOx can inform this. Source apportionment has shown Wincheap experiences the highest roadside increment for NOx and NO<sub>2</sub> concentrations associated with road traffic sources within the AMQA. However, due to variability in background concentrations across the modelled area, St Peter's Roundabout is predicted to have the highest total NO<sub>2</sub> concentration (roadside increment + background = total concentration).

To reduce NO<sub>2</sub> concentrations, reductions in emissions from the source are required. For NO<sub>2</sub>, the relationship between emissions of NOx relative to the formation of NO<sub>2</sub> is not linear. That is, a reduction in NOx of 10% does not lead to a reduction in NO<sub>2</sub> of 10%. For this reason, reductions in emissions to achieve compliance with the annual mean NO<sub>2</sub> standard are best considered in terms of the extent of NOx reduction.

The reduction in NOx required to achieve compliance with the annual mean NO<sub>2</sub> of 40 µg/m<sup>3</sup> at the location reporting the highest total NO<sub>2</sub> concentration (in the vicinity of St Peter's Roundabout) is 48.9%. When looking at the context of the average reduction in

NOx across all locations > 40 µg/m3 the reduction in NOx required is 18.3%, which would lead to improvements in general but not achieve the compliance needed at the worse-case location. Therefore this suggests any reductions of NOx by between 18% and 49% will have improvements to the NO<sub>2</sub> concentrations across the AQMA.

Nonetheless a more targeted approach is required for certain road links where it is known that buses/HGVs are contributing substantially to the overall NO<sub>2</sub> concentrations. The table below summarises the predicted NOx and NO<sub>2</sub> concentrations at the location with the highest **road** NOx and NO<sub>2</sub> (Wincheap) and the location with the highest **total** NOx and NO<sub>2</sub> (St Peters Roundabout) for 2017 and 2023.

It can be seen that background concentrations, which cannot be directly influenced by local measures, influence the total concentrations across the years. In 2023 it is currently anticipated that achievement of the annual mean NO<sub>2</sub> concentration of 40 µg/m3 is likely to be achieved in both these areas.

**Maximum NOx and NO<sub>2</sub> concentrations at Wincheap and St Peters Roundabout 2017 and 2023 according to roadside contribution, background contribution and total (roadside + background)**

Receptor	2017		2023	
	NOx	NO2	NOx	NO2

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Road Contribution (µg/m3)				
Wincheap	106.7	47.1	67.0	31.7
St Peter's roundabout	104.4	45.7	60.4	28.7
Background (µg/m3)				
Wincheap	13.9	10.4	10.9	8.3
St Peter's Roundabout	18.5	13.5	14.1	10.6
Total (µg/m3)				
Wincheap	120.5	57.5	77.9	40.0
St Peter's Roundabout	122.8	59.3	74.5	39.3

### 3.5 Key priorities

#### A Public health (behaviour change/modal shift, health promotion)

The impact of air pollution on public health is the major reason for seeking to improve air quality. This can only be achieved by a sea change in attitude and behaviour by all of us. As a council we have a role to play in encouraging and facilitating this change and our overarching approach is through education and awareness with a number of health projects that sit alongside this Air Quality Action Plan some of which are identified below. We have already worked with the Beaney House of Art and Knowledge to promote air quality issues via an artist's commission for a project to run from April to September 2018 including content generated by the

community and the organisation of an exhibition from July to September 2018 in the Front Room Gallery. It is part of the Happy Museums<sup>13</sup> movement and the international Season for Change project. New projects include:

- A pilot health project with St Thomas' and St John's primary schools which seeks to reduce cars idling in the area surrounding the schools. We will be working with the children on education and supporting them to design promotional material. A campaign with parent and guardians will raise awareness and educate people to reduce idling cars and thus improve air quality in those areas.
- The Defra-funded Breathing Streets project, where air quality monitoring and mapping will be used to promote clean air routes throughout Canterbury and the village of Herne.
- A programme to promote increased use of footpaths and cycle routes to support the modal shift from the car to a more active mode of transport. This will have a major benefit to health as well as reducing the number of vehicles on the road emitting pollution.
- A 'pay-per-use' car club will allow members of the Canterbury City Car club to book a car on an hourly basis and pick it up from a convenient location close to their home or work.
- Idling emissions of vehicles when vehicles are parked can lead to local 'hot spots' of poor air quality. As highlighted above, we are working on raising awareness of the issue and undertaking some educational campaigns with local schools. Efforts to increase the awareness of the effects of idling for taxi and private hire vehicle drivers and coach drivers will also be undertaken. Our approach is to first raise awareness of the issue before using enforcement powers. However, adopting district-wide enforcement powers through the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 sends a clear message to the public and gives us another method of tackling this problem.

## **B Transport (licensing, parking, public transport, procurement)**

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<sup>13</sup> Happy Museums project <http://happymuseumproject.org/>

Influencing transport emissions through the measures contained within the action plan is a key priority. Our approach is to focus on areas of influence under the council's direct control such as the issuing of taxi licences, our work with the Quality Bus Partnership and facilitating electric charging points. Work with partners such as KCC will also be vital.

An analysis of the taxis and private hire vehicles licences issued in January 2018 by the council illustrates the use of older diesel vehicles when compared to the national fleet, see **figure 5, below**.

**Figure 5 Composition of Canterbury taxi and private hire vehicle fleet (as at 2018)**

<b>Taxis - 280</b>	<b>Number</b>	<b>Percentage</b>	<b>National diesel fleet</b>
Diesel = less than Euro 6 rating <sup>14</sup>	258	92%	64%
Diesel = Euro 6 rating or higher	21	7%	36%
Petrol hybrid	1	1%	NA
<b>Private Vehicle Hire - 233</b>	<b>Number</b>	<b>Percentage</b>	<b>National diesel fleet</b>
Diesel = less than Euro 6 rating	175	75%	64%
Diesel = Euro 6 rating or higher	35	15%	36%
Petrol = less than Euro 6	7	3%	Na
Petrol hybrid	5	2%	Na

<sup>14</sup> Euro 6 standard is the current agreed acceptable standard for vehicle emissions

A high proportion of taxis and private hire vehicles operate in the city centre and drive through the AQMA. It will be a priority to work with drivers and operators to develop strategies to move to lower emission vehicles by 2023 through a mixture of incentives on fees, education, awareness raising and the installation of electric charging points at taxi ranks. We will start by reviewing fees for April 2019 to incentivise change and will subsequently work on a renewed Taxi Policy in 2020 which will consider licensing measures to support this. In the longer term, by 2023, the council would wish to be in a partnership strategy with the trade to have replaced 90% of diesel with Euro 6 rating with petrol, petrol hybrid and electric vehicles. A recent government announcement that zero emission taxis will be exempt from the Vehicle Excise Duty charge plus the plug in Taxi Grant will support this approach.

We are currently looking at the feasibility of modelling the impact of a measure to move towards low emission taxi/private vehicle hire fleet to low emissions/Euro 6 rating or higher by 2023 so that we can quantify the potential improvements on the AQMA area.

The city of Canterbury is a vibrant, economic centre and tourist attraction which attracts a large number of buses and coaches. Traffic data indicates that bus and coach movements vary in the city, for instance 1.9% of the total traffic flow on the Rheims Way and 5.7% of total traffic flow on Upper Bridge Street.

Modal shift from private car to public transport is part of our transport strategy. The local bus company Stagecoach is part of the Quality Bus Partnership, together with the city and county councils. Buses are part of the solution in addressing air pollution as a bus can carry up to 100 passengers which can remove up to 60 cars from the road network thus reducing congestion and air pollution.

The makeup of the Stagecoach bus fleet in March 2018 is set out in **figure 6** below.

**Figure 6 Vehicle type composition of Stagecoach bus fleet in Canterbury district (March 2018)**

<b>National bus fleet (all operators)</b>				
<b>Euro 5 or below</b>	<b>Euro 6</b>	<b>Hybrid</b>	<b>Fully electric</b>	<b>Hydrogen gas</b>
60%	39%	1%	0%	0%
<b>Buses district (Stagecoach) - buses city centre routes- total vehicles allocated CCC = 59</b>				
30%	70%	0%	0%	0%
<b>Park and Ride buses - total buses =</b>				
100%	0%	0%	0%	0%

The scheduled bus service in the city is largely a commercial venture, apart from a few supported services run by Regent Coaches. The Park and Ride service is contracted by Canterbury City Council to Stagecoach. A priority for the Quality Bus Partnership is to work with Stagecoach to move the bus fleet that works through the city to be 100% Euro 6 or better by 2023. A retender of the park and ride contract will also allow us to seek the use of low-emission vehicles. We are working with the Quality Bus Partnership to review traffic counts and known schedule bus movements so we can model the impact of this priority action on the AQMA.

The focus is working with all local bus companies to raise awareness of air pollution and driver education on how to drive more efficiently thus reducing cost, while also reducing air pollution. We will also work with visiting coach operators on education and awareness, such as anti-idling and driver education for efficient driving. In addition, we will be enforcing against visiting coaches idling in the coach park.

## **C Planning and infrastructure**

As the local planning authority our objectives are:

- To strengthen and broaden the local economy
- To provide sufficient housing to meet local housing need and support economic growth
- To protect the built and natural environment
- To develop sustainable communities, and seek to ensure adapt community facilities are provided

With that in mind we are seeking all housing development sites to actively promote the introduction and use of electric charging points, so that these sites support the drive towards low emission vehicles. (The council's Policy and Resources Committee resolved in October 2018 that measures to increase the use of solar panels and electric charging points be specifically highlighted within pre-planning advice.)

In respect of controlling construction / demolition impacts on air quality this should also be mentioned in a planning context rather than explicitly in the AQAP (the main focus of which is NO2 compliance). Where development proposals give rise to concerns on as a result of construction/demolition the Council will place a condition on the site to draw up and development a Dust Management Plan as part of a wider Construction Environmental Management Plan, which in itself considers emissions from non-road mobile machinery and contractor vehicle movements. The Dust Management Plan will ensure that appropriate mitigation measures are provided for so as to ensure that no detriment to air quality arises during these key activities in the development construction process.

The general national move towards electric/hybrid vehicles is illustrated in **figure 7, below**.

**Figure 7 Number of registered electric and hybrid vehicles**

	2016		2015		2014	
	Number	Percentage	Number	Percentage	Number	Percentage
<b>Canterbury</b>	140	0.20%	83	0.12%	48	0.07%
<b>Kent</b>	1,474	0.19%	914	0.12%	373	0.05%
<b>South east</b>	16,854	0.33%	9,450	0.19%	3,902	0.08%

The registration of electric/hybrid vehicles in the Canterbury district is on a par with other Kent authorities but is lagging behind the south east generally. There are surprisingly few electric/hybrid vehicles registered in Canterbury. However the number of electric vehicles is projected to increase in the near future.

We aim to facilitate a shift towards electric/hybrid vehicles by seeking to install electric charging points (ECP) in all of our car parks, where appropriate. The Park and Ride sites at New Dover Road, Sturry and Wincheap and the city council offices already have electric charging points. A successful bid has been made to Defra to install charging points in three city centre off-street car parks. We are installing ECP into Whitstable Harbour and investigating installing ECP at taxi ranks. We will be providing ECP for 18 cars in on-street parking bays in residential streets across the district. In addition we are liaising with large employers with publicly accessible parking - such as supermarkets and universities - to increase the availability of electric charging points in the area.

The strategic development sites identified within the Local Plan will support the enhancement of the walking and cycling network to help facilitate the move towards modal shift, away from cars towards active travel and use of public transport.

The Local Plan 2011-2031 has a number of road network infrastructure projects. One of the key projects in the road network improvements is the new A2 Wincheap slip road. The proposals are for the construction of an A2 coastbound slip road; associated reconfiguration of both Ten Perch Road and the Ten Perch Road/A28 junction; modified footpaths/cycle routes; works to existing surface water drainage; lighting and landscaping. The Wincheap Traffic Management Scheme, including the new slip road is identified in Policy T11 of the Canterbury District Local Plan 2017.

The council received an Environmental Report in January 2018 to support a planning application for this development (ref: CA1800235FUL). While the impact assessment focused on 2026 as the latest opening year, it is understood that the proposals could become operational by 2021 due to the funding principles in place. Impacts of the scheme are shown to vary and reflect the changes in traffic flows that are anticipated to take place. Of note, and most relevant to the AQAP is the benefit to annual mean NO<sub>2</sub> levels in Wincheap, where it is expected that reductions in annual mean of ~ 2 – 3% (relative to the without development scenario) are predicted to arise. Elsewhere, increases in annual mean NO<sub>2</sub> levels are less than 0.5%.

5. Canterbury West Station - consultation feedback indicated the desire to create a sustainable transport hub at the station. Improvement works were carried out in 2013, which aimed to create an integrated transport hub and quality 'gateway' into the city. These included a wide pedestrian concourse outside the station with seating and trees; a direct raised pedestrian route from the station entrance to a new bus stop; passenger drop-off bays and an increased number of taxi bays - enabling all transport modes (train, bus, taxi, car, cycle, on foot) to be accommodated.

The new car park will provide an opportunity to further enhance this with:

- additional cycle racks in a covered secure enclosure
- cycle hire docking stations
- widened footway to St Dunstons

- electric charging points

The new car park also provides a potential opportunity to release the Network Rail surface car park for increased taxi, cycle storage, bus improvements and enhanced passenger/ticketing facilities. We will be pursuing this as the scheme progresses.

Stagecoach currently only runs one service directly to the station and the council will set a priority action for them, through the Quality Bus Partnership, to 'investigate better bus links to Canterbury West Station and through ticketing'.

We will also pursue opportunities to extend the footbridge to the Roper Road side of the station when Network Rail's essential control equipment has been relocated, to reduce pedestrian, taxi and vehicle movements across the level crossing. This is likely to take place after the lifetime of this plan.

This enables us to reduce the number of smaller car parks around the city, thereby reducing the number of vehicle journeys made within the city whilst drivers otherwise move from one car park to another trying to find a space.

#### **D Strategic approach and reporting**

We are working with partners and stakeholders to embed air quality in all our strategies and policies. Currently we are part of the Kent and Medway Air Quality Partnership (KMAQP) and will be working with neighbouring authorities to update guidance for planners and developers. We are also supporting the county council and agencies in drafting a Countywide Energy and Low Emissions Strategy.

As a local authority we are a significant purchaser and our procurement guidance for our own services and contracted services is important. As of 2018 our procurement guidance is that air quality issues must be considered at the research/drafting a specification stage and where possible included in contract documents. This is especially true of services and contracts which include vehicle usage such as bin collections, cleaning services, recycling, etc.

When it comes to governance, the officer group will continue to work with partners and report via the Director of Community Services to the relevant council committee as required. We will include an air quality section in the annual Corporate Report and

continue to report air quality in the Annual Status Report to Defra in June each year. We will continue to engage stakeholders via the Sustainable Transport Forum.

While awareness of the issues the district is facing in terms of air quality and their causes is relatively high and are often subject to intense political debate, some of the practical steps many of us can take to improve the situation are less well known.

The aim of our communications plan will be to outline the issue in a way people can understand and explain how they can be a part of the solution with the aim of changing behaviour.

This includes individuals and a whole host of organisations because this issue cannot be dealt with by the city council alone.

We will use all of the channels at our disposal, namely:

- Marketing collateral such as posters at key sites, leaflets and flyers
- Press releases
- Social media - Facebook and Twitter
- Our newsroom website - [news.canterbury.gov.uk](https://news.canterbury.gov.uk)
- Our magazine that is posted to every household - District Life
- Our staff e-newsletter - Cascade
- Our e-newsletter to elected members - Councillor News
- Useful information on our corporate website - [canterbury.gov.uk](https://canterbury.gov.uk)

As well as promoting the air quality action plan itself, we will link in with national campaigns as and when they take place.

A number of opportunities to raise awareness have already presented themselves. These include:

- Promoting the steps being taken as a result of this action plan
- Promotion of the Kent Air website

- Working on an anti-idling project with St Thomas' and St John's schools in Canterbury
- Working with public transport providers to promote their services
- Promoting the correct use of wood-burning stoves

### 3.6 What will the plan achieve in relation to NO<sub>2</sub> reductions?

An air quality modelling assessment has been undertaken to determine the impacts of the plan in respect of the target for modal shift to be achieved through the implementation of the measures within this plan. Taken in the context of the overarching target of 23% modal shift (ie reduction) in car and van use across the district, it is anticipated that over five years the plan will achieve a reduction in car and van use of 5.7%.

We have taken a cautionary approach to the outcomes of the plan, applying a reduction of 5.7% to only cars. Vans are more polluting than cars and van drivers are likely to be more reluctant to shift to alternative forms of transport due to the nature of their work.

The modelling assessment included anticipated reductions in future background levels of NO<sub>2</sub> and improved vehicle fleet projections with tighter emissions standards/alternative fuelled vehicles being in place. Modelling was undertaken for more than 1,900 individual receptors (locations) within the city AQMA. The results of the assessment for 2023 are provided below regarding the number of locations anticipated in 2023 to be above 40 µg/m<sup>3</sup>: A marginal exceedance remains in Wincheap area - it is anticipated the A2 slip road will provide additional benefits which reduce levels of NO<sub>2</sub> further than those indicated in the assessment.

Modelled NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	Number of Receptors		Reference to the Objective
	2023 Base	2023 w/ 5.7% reduction in cars	
>44	0	0	Above 40 µg/m <sup>3</sup> AQS Objective
40 - 44	1	0	

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36 - 40	9	8	Below	AQS Objective
32 - 36	18	15		
<32	1901	1906		

It can be seen that at the end of the lifetime of the 5 year plan, all locations will achieve compliance with the annual mean objective of 40µg/m<sup>3</sup>.

### Addressing PM2.5 in the AQAP

It is anticipated many of the measures implemented within this action plan will lead to reductions in particulate matter – PM10 and PM2.5 levels – albeit these will be weighted to a smaller percentage of the overall population as a result of the focus of measures in the AQMA.

Notwithstanding this, focus on improving the health of the population as a whole through wider reductions in particulate matter form a focus in this action plan through measures on the control of domestic wood burning and the local promotion of the national Ready To Burn campaign.

While there remains a scarcity of data in the south east of the UK measuring background concentrations of PM2.5 – sites at Thurrock, Eastbourne, Oxford, Portsmouth, Reading and Southampton – the extent of variation in concentrations at background sites is very little. Regional levels of PM2.5 typically remain consistent across a wide area of up to 130km in distance. In 2017 the annual mean PM2.5 concentration at the Thurrock site was 11 µg/m<sup>3</sup>. This value compares reasonably with the modelled mapped concentration of 9.3 g/m<sup>3</sup> in 2017 through the national background maps and compares to the anticipated adoption of the World Health Organisation (WHO) standard for PM2.5 in 2025 of 10 g/m<sup>3</sup>.

Continued appraisal of the regional PM2.5 estimates and mapped background levels of PM2.5 in Canterbury can be made such as future trends in PM2.5 can reasonably be established. Moreover, further estimation of PM2.5 levels can be achieved through ratio analysis of co-located PM10 and PM2.5 monitors reducing the immediate need for any enhanced monitoring.

A recent report on mitigation measures for PM2.5 reductions<sup>15</sup> has shown that reducing primary emissions of PM2.5 and ammonia, a key pollutant in the formation of the secondary inorganic aerosol component of PM2.5, are key aspects to reducing population weighted exposure to

<sup>15</sup> [https://uk-air.defra.gov.uk/assets/documents/reports/cat11/1508060903\\_DEF-PB14161\\_Mitigation\\_of\\_UK\\_PM25.pdf](https://uk-air.defra.gov.uk/assets/documents/reports/cat11/1508060903_DEF-PB14161_Mitigation_of_UK_PM25.pdf)  
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PM2.5. With this in mind, we propose to promote the effective ammonia controls for the farming industry as advocated by the Department of the Environment, Food and Rural Affairs<sup>16</sup>.

### **Government's Time Extension Notice (TEN) for EU Limit Value compliance on NO2.**

Canterbury City Council's AQMAs and this revised and updated action plan invariably complement national endeavours to improve on NO2 exposure in future years. Previously, reference to measures being implemented or considered by Canterbury have been made in the UK Government's Time Extension Notice (TEN) for EU Limit Value compliance on NO2. This updated and revised local air quality action plan continues the implementation of a number of the themes of the previous measures considered in the TEN for NO2. However, the following measures - which at the time were considered to be investigative with consideration to feasibility only - are now considered impractical to implement on cost effective grounds:

- Roadside emissions testing
- Development of a A28/A257 road link
- Provision of AirText - an alert system which can be subscribed to directly rather than advocated via the City Council

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<sup>16</sup> <https://www.gov.uk/government/news/new-guide-for-farmers-to-help-reduce-air-pollution-from-ammonia>

## 3 Development and implementation of Canterbury City Council AQAP

### 3.1 Consultation and stakeholder engagement

In developing this AQAP we have worked with KCC, other local authorities, agencies, businesses and the local community groups. In addition, we organised an air quality stakeholder partnership meeting on the 11 December 2017 which included the local universities, business, community stakeholders, cycle groups and local green activists. This meeting sought input from stakeholders who could contribute to the action plan. The notes from the meeting are available in **appendix C. 2**. Since then we have continued to engage them in developing various aspects whilst drafting the action plan prior to formal consultation.

Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. The consultation on the draft Air Quality Action Plan included:

- Eight-week public consultation from 30 April - 22 June 2018
- Online questionnaire
- Social media campaign
- Articles in local newspaper
- Hard copy of this plan and questionnaires in Canterbury, Herne Bay, Sturry and Whitstable libraries plus Herne Parish Council office and the council office reception at Military Road
- Public drop-in event
- Consultation with the bodies listed in Table 4.1.

A total of 195 responses were received. A consultation summary report is included in appendix 4

#### Table 4.1 – Consultation undertaken

Yes	the Secretary of State for the Environment (DEFRA)
Yes	the Environment Agency
Yes	the highways authority
Yes	all neighbouring local authorities
Yes	other public authorities as appropriate, such as Public Health officials
Yes	bodies representing local business interests and other organisations as appropriate

A summary of the responses to our public consultation is given in **Table A.1**.

We have made a number of key additions to the action plan as a direct result of the consultation, including:

- exploring opportunities presented by the new car park to enhance the integrated transport hub at Canterbury West Station
- research the opportunity of Park and Ride bus to train stations in new contract for 2020
- promote travel alternatives by adding Kent Connect to CCC web page with directions to the various CCC offices
- promote awareness of cyclists to drivers to improve road safety and promote cycling
- investigate cycle hire options and seek to introduce them to Canterbury

There have also been a range of measures which have not been included in the AQAP. **Table A.2** sets out the list of actions not included and the reason why.

## 3.2 Steering group

Canterbury City Council set up a steering group in summer 2017, chaired by the Director of Community Services. Terms of reference for the group are set out in **appendix C.3**

Within Canterbury City Council the steering group includes officers from: environmental health, transport and environment, planning, legal, regeneration, neighbourhood services, digital transformation and policy and communications.

## 4 AQAP measures

**Table 5.1** shows the AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible departments/organisations who will deliver this action
- expected benefit in terms of pollutant emission and/or concentration reduction through professional judgment or quantification through dispersion modelling
- the timescale for implementation
- how progress will be monitored

**NB:** Please see future Annual Status Reports for regular annual updates on implementation of these measures.

Estimated costs of implementing each action are included where available

In addition to the new actions added as a result of the consultation, the first draft included the following key actions:

- Working with local bus companies to improve the efficiency of the bus fleet and reduce air pollution
- Working with taxi/private hire vehicle operators to improve emissions standards
- Developing road infrastructure projects, notably the new A2 slip road and Wincheap relief road to improve traffic flow
- Introduce an intelligent traffic system to improve traffic flow
- Enhance the existing walking and cycling network
- Air quality research projects with academics at the local universities.

Although Canterbury City Council is the ‘owner’ of the AQAP, it will be delivered in partnership and it falls on all of us to change our behaviour to try and improve air quality and this is reflected in the actions within this AQAP and why the overarching theme is “increasing awareness and education”.

Some of the best ways for members of the public to help improve air quality in Canterbury is to adjust their normal travel patterns to be more sustainable. The following are suggested alternatives to private travel that we could all do to contribute to improving the air quality within the city:

- Use public transport where available – this reduces the number of private vehicles in operation reducing pollutant concentration through the number of vehicles and reducing congestion
- Walk or cycle if your journey allows – from choosing to walk or cycle for your journey the number of vehicles is reduced and also there is the added benefit of keeping fit and healthy;
- Car/lift sharing – where a number of individuals are making similar journeys, such as travelling to work or to school car sharing reduces the number of vehicles on the road and therefore the amount of emissions being released. This can be promoted via travel plans through the workplace and within schools
- Alternative fuel / more efficient vehicles – choosing a vehicle that meets the specific needs of the owner, fully electric, hybrid fuel and more fuel efficient cars are available and all have different levels benefits by reducing the amount of emissions being released

**Table 5.1 – Air quality action plan measures**

Canterbury Air Quality Action Plan measures										
No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
<b>A Public Health – Good Behaviours and Awareness</b>										
1	Adopt district wide anti-idling enforcement powers plus anti-idling education campaigns: <ul style="list-style-type: none"> <li>in our coach park</li> <li>on streets, especially around schools</li> <li>with taxi and private vehicle hire operators</li> </ul>	Traffic management	Anti-idling enforcement	CCC	Adopt district wide anti-idling enforcement powers June 2020  Undertake education prior to enforcement April -June 2020	Number of Warnings and Fixed Penalty Notices issued will be monitored retrospectively.	NO2	2019	Summer 2020	TBC
2	Breathing Streets initiative to promote good air quality routes and raise awareness of areas of poor air quality	Promote travel alternatives	Active travel	CCC	Use air quality monitoring data to map air quality by July 2019 Develop clean air maps by July 2019 Promotion campaign August to October 2019	Number of Breathing Streets events	NO2	2018	Ongoing	£17k Defra air quality grant
3	Promote travel alternatives, such as <ul style="list-style-type: none"> <li>Walking and cycling</li> <li>Car share</li> <li>Park and pedal</li> <li>Canterbury car club</li> <li>cycle hire options</li> </ul>	Promote travel alternatives	Active travel	KCC	Promote link on CCC website & via social media / District Life by October 2018	Take up of part and pedal  Canterbury Car club usage  Cycle hire usage	NO2	2018	Ongoing	£0

No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
4	Support improvement in broadband infrastructure across the district enabling more home working and reducing vehicle movement into Canterbury.  95% of premises have access to superfast broadband, others to receive basic broadband	Promote travel alternatives	Encourage and facilitate Home working	KCC	Upgrade in broadband infrastructure due by 2020/21 through the KCC Making Kent Quicker project.	Annual update from KCC	NO2	2019	2021	KCC COST TBC?
5	Review use of wood burning stoves and promote Defra Ready to Burn guide about using the right fuel	Promote low emission plant	Regulations for fuel quality	CCC	Evaluate data October 2019 Identify suppliers November 2019 Promotion campaign December 2019 onwards	Number of promotion events	PM <sub>10</sub> and PM <sub>2.5</sub>	2018	Ongoing	£0
6	Work with event venues to restrict use of generators / equipment using solid fuel, diesel or petrol	Environmental permits	Permits based on environmental criteria	CCC	Ongoing process of review and improve April 2019	No petrol / diesel generators in use	NO2	April 2018	Ongoing	£0
7	Review, promote and implement CCC staff travel plan including: staff pool electric bikes, car share, charging regime	Promote travel alternative	Workplace travel plans	CCC	Internal promotion Autumn 18  Annual staff surveys	Reduction in number of staff driving to work	NO2	2018	Ongoing	Cost to be redefined when plan reviewed
8	Continue to enforce industrial pollution control and nuisance legislation	Environmental permits	Permits based on environmental criteria	CCC	Statutory inspections, frequency based, implement improvements / enforcement	100% statutory inspections completed	NO2	2018	Ongoing	£0A
9	Explore expansion of smoke control area	Promote low emission	Regulations for fuel quality	CCC	Consider viability Oct 2019 Committee decision December 2019	TBC	NO2	2018	2020	TBC

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No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
<b>B Transport</b>										
1	Explore feasibility of introducing a low emission zone in Canterbury City Centre  (A LEZ prohibits vehicles in lower emissions classes from entering a geographic area)	Traffic management	Other	CCC/ KCC	Explore feasibility and report to committee autumn 2019		NO2	2018	2020	£25k source TBC
2	Explore opportunities to enhance sustainable transport hub at Canterbury West station - as a result of new multi-storey	Traffic management		Network Rail / CCC as partner	Discussions between CCC, Network Rail and the Train Operating Company are ongoing to see if enhancements can be carried out following the construction of the new multi-storey car park in 2020		NO2	2018	TBC	TBC
3	Review Taxi/Private Hire Vehicle Policy licence fees in 2019. Promote low emission vehicles by ranking charges based on emission levels.	Environmental permits	Permits as economic instrument	CCC	Consult on taxi /PHV licence fees by December 2018  Implement new fees 2019  Review taxi policy 2020	Increase in number of taxis in cleaner emissions classes	NO2	2018	2020	Change of income TBC

No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
4	<p>Work with Quality Bus Partnership to</p> <ul style="list-style-type: none"> <li>Review bus routes and links to train stations</li> <li>Introduce low emission buses and technology</li> <li>Supporting socially necessary bus routes</li> <li>Contactless tickets for public transport network</li> <li>Improve technology and bus infrastructure such as boarders/shelters/signage</li> </ul>	Traffic management	Strategic highway improvements	KCC-led partnership with Bus operators	<p>Stagecoach is undertaking a review of its routes, and is considering how to incorporate low emission vehicles. Timescale TBC by Stagecoach</p> <p>Improvements to bus stop infrastructure are ongoing</p> <p>CCC is active partner</p>	Bus patronage on routes through the AQMA	NO2	2018	Park and Ride contract 2020	Cost of new park and ride contract to be confirmed
5	Implement intelligent transport system such as: linking traffic signals, interactive car parking signs and variable message signs to give motorists up-to-date information	Traffic management	Congestion management	KCC/CCC	<p>Existing interactive car park signs to be reconfigured in 2018/19 linked to real time car park usage data.</p> <p>Provide clean air behaviour change messages. using variable message signs from 2018</p>	Number of real time car parking signs giving accurate parking information	NO2	2018	2029	£50k from CCC ANPR budget
6	Incentivise park and ride parking fees to reduce city centre car parking	Traffic management	Congestion management	CCC	<p>Complete research June 2019</p> <p>Review parking strategy by November 2019</p> <p>Consult on fee changes and implement April 2020</p>	Increase in park and ride take-up	NO2	2018	April 2020	TBC

**Canterbury City Council Air Quality Action Plan 2018 - 2023**

No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
7	Promote strategic routes for freight - link from CCC website to <a href="http://www.freightjourneyplanner.co.uk/">http://www.freightjourneyplanner.co.uk/</a>	Freight and delivery management	Route management plans	KCC	Create link on CCC air quality website page September 2018  Promotional campaign Autumn 2018	Reduction on HGVs using inappropriate routes	NO2	2018	ongoing	N/A
8	Work with local freight companies and visiting coaches to promote driver education, training and engine cleaning to reduce emissions	Freight and delivery management  Traffic management	Other	KCC	Promote initiative to local hauliers  CCC promotion campaign to visiting coaches Summer 2020	Number of local freight companies engaged	NO2	2019	Ongoing	N/A
9	Promote the reporting of "dirty" freight vehicles to DfT ( <a href="https://www.gov.uk/report-smoky-vehicle">https://www.gov.uk/report-smoky-vehicle</a> )	Freight and delivery management	Other	CCC	Promote initiative Autumn 2018	DfT data on number of reports	NO2	2018	Ongoing	N/A
10	Review of Park and Ride bus contract to include consideration of air quality issues - low emission buses, routes to train stations etc	Alternative to private vehicle use	Park and Ride	CCC	New contract awarded to include low emission buses April 2020	Number of low emission buses operating within contract	NO2	2019	Late 2020	N/A

### Canterbury City Council Air Quality Action Plan 2018 - 2023

## C Planning and infrastructure

No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
1	Promote all development sites to have electric charging points for electric/hybrid vehicles Develop and implement an agreed framework of mitigation measures, including ECP's, to be used in assessing planning applications	Promote low emission transport	Low emission infrastructure	CCC	Ongoing work by Development Management Team & Env Health Team.  This is ongoing and is requested by KCC in every major planning application.	Number of new ECPs installed per year	NO2	2018	Ongoing	Cost to developers
2	Undertake a programme of facilitating electric charging points:  A. Upgrade electric charging points in New Dover Road, Sturry and Wincheap park and ride sites  B. Use DEFRA Air Quality Grant for 3 new electric charging points in city centre car parks  C. Where suitable install electric charging points in all CCC public car parks	Promote low emission transport	Low emission infrastructure	CCC	A. Upgrade 2021  B. This project is currently out to tender and expected to be installed in October / November 2018  First phase St Radigunds and Pound Lane 2019-2020	Number of new ECPs installed per year - year one target is 12 sites = 24 charging points	NO2	Summer/ 2018	Spring 2019	A-C TBC

No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
2	Undertake a programme of facilitating electric charging points (cont):	Promote low emission transport	Low emission infrastructure	CCC	C. Opportunities identified and promotion completed April 2019	Number of new ECPs installed per year	NO2	Summer 2018	Spring 2019	D - TBC
	D. Liaise with other public car park providers such as supermarkets, universities and other major employers with car parks to promote use of charging points for electric/hybrid vehicles				D. OLEV bid submitted October 2018 Installation 2019					E. Joint bid with KCC for OLEV grant being prepared for EV infrastructure for taxis.
	E. Install electric charging points at taxi ranks, where possible				E. Installation of the first phase of this is likely to be Autumn 18 It is expected that further phases will follow in future years prompted by public demand and take up.					F. £40k: - £10k CCC, £30k OLEV for on street contract phase 1
	F. Install on street electric charging points, where possible									G -TBC
	G. Introduce electric charging at Whitstable Harbour				F. Installation December 2019					
3	Increase park and ride capacity at New Dover Road, Wincheap and Sturry Road sites	Alternative to private vehicle use	Park and Ride	CCC	Sturry Road + 100 spaces = 700 by 2023  Wincheap + 300 spaces = 900 by 2021  New Dover Road + 300 spaces = 900 by 2023	Progress on introducing additional 700 spaces across the 3 Park and Ride sites reported to AQ Steering Group	NO2	2018	2023	Wincheap £2.7M CCC +£1.0M developer  Sturry Road and New Dover Road developer funded £TBC

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No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost Source Identified / TBC
4	Develop public realm improvements to increase walking opportunities - <ul style="list-style-type: none"> <li>• St Margaret Street,</li> <li>• Stour Street,</li> <li>• a connection between the Marlowe, the Beaney and the King's Mile</li> <li>• improvements to subways in Canterbury</li> <li>• improve walking infrastructure such as signage and street lighting</li> </ul>	Transport planning and infrastructure	Walking and cycle network	KCC / CCC	St Margaret's Street Not yet programmed  Stour Street Not yet programmed  Works to The Friars, Orange Street and Best Lane (Marlowe, Beaney to Kings Mile) to be completed 2018  Improvements to subways to be completed Autumn 2018  Signage and streetlighting Ongoing	Completion of schemes	NO2	2018/19	March 2023	TBC
5	Develop programme of cycle route improvements to: <ul style="list-style-type: none"> <li>• Riverside cycle route - Asda - Vauxhall Avenue</li> <li>• Farleigh Road - Barton Mill</li> <li>• Thanington - Wincheap</li> <li>• Chaucer Road - A257</li> <li>• Canterbury to Bridge</li> <li>• Hersden to Sturry</li> <li>• Extension to Crab and Winkle way</li> <li>• Improve cycle infrastructure such as parking/ signage</li> </ul>	Transport planning and infrastructure	Walking and cycle network	CCC/ KCC	Riverside cycle route construction proposed 2018/19  Crab and Winkle extension cycle route construction proposed 2019  <i>All other schemes are dependant on developers' timetables</i>	Schemes completed	NO2	Autumn 2018	Ongoing	Riverside:104k S106 contributions crab and Winkle extension £150k; , other routes will be delivered by developers

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No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost Source Identified / TBC
6	<p>Work with KCC and developers to increase the number of bus lanes:</p> <ul style="list-style-type: none"> <li>Sturry Road bus lane missing links</li> <li>Wincheap relief road - bus lane through retail estate</li> <li>New Dover Road bus lane associated with Phase 1 of Mountfield Park development site</li> <li>introduce a fast bus route between South Canterbury and city centre</li> </ul>	Transport planning and infrastructure	Bus route improvements	KCC	<p>Work with KCC on feasibility Timescales linked to development build out rates.</p>	<p>Implementation progress reported to AQ Steering Group</p> <p>When introduced improved bus journey times and increased patronage will be reported</p>	NO2	2018	Summer 2023	£1.2m identified to be constructed with developer funding. The remainder to be constructed by developers.
7	<p>Develop road network improvements</p> <ul style="list-style-type: none"> <li>New A2 off slip Wincheap</li> <li>Wincheap relief road</li> <li>new A2 interchange at Bridge</li> <li>A28 - A257 relief road (former Howe Barracks)</li> <li>Sturry link road</li> </ul>	Traffic management	Strategic highway improvements	KCC/CCC	<p>Planning consent granted for A2 off slip</p> <p>Construction of A2 off slip proposed 2020/21</p> <p>Other schemes not yet programmed and linked to development build out rates.</p>	<p>Report on completion of works and change to traffic flows</p>	NO2	2019/20	March 2021	To be constructed with developer funding.
8	<p>Investigate reducing traffic delays at level crossings and minimise time that level crossing gates are down - Trackside detectors - reduce crossing time</p>	Transport planning and infrastructure	Rail network	Network Rail	<p>Work with Network Rail on feasibility - to complete by Autumn 2019</p>	Reduction in delays	NO2	2018	Summer 2023	TBC - likely to be funded by Network Rail

### Canterbury City Council Air Quality Action Plan 2018 - 2023

No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
<b>D Strategic approach</b>										
1	Sustainable Transport Forum to be consulted on initiatives within its remit	Policy guidance and development control	Other policy	CCC	Bi-annual meetings which are reported to Regeneration and Property Committee	None	NO2	2018	Ongoing	£0
2	Reporting of air quality: <ul style="list-style-type: none"> <li>• Include an air quality update in Corporate Annual Report</li> <li>• Publish the Annual Status Report on the assessment of air pollution in the area</li> </ul>	Policy guidance and development control	Other policy	CCC	Air quality update in CCC corporate Annual Report - July each year  Publish Annual Status Reports in June each year	Reports published	NO2	2018	Ongoing	£0
3	Introduce and implement measures to improve air quality in all relevant strategies when each strategy is reviewed	Policy guidance and development control	Other policy	CCC	Ongoing as each strategy or policy updated	Number of strategies having due regard to air quality	NO2	2018	Ongoing	£0
4	Work with KMAQP to update the Air Quality Planning Guidance for assessment of developments and their impact on air quality & to introduce a county wide Energy and low emission strategy.	Policy guidance and development control	Area -wide strategies to reduce emissions	CCC/KCC & Kent Local Authorities	Work in partnership to update and implement guidance by Autumn 2019	Development of guidance	NO2	2018	Autumn 2019	£0

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5	Embed air quality in procurement process relating to CCC vehicles and plant as well as those related to contracts	Promote low emission transport	Vehicle procurement	CCC	Consider air quality issues at research stage prior to drafting specification and consider in assessment process	Increase in low emission vehicles reported annually	NO2	2018	Ongoing	Cost implications to be determined as part of each procurement
No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
6	Ensure permits and licences issued for markets, concessions and events include standard terms and conditions to ensure good air quality, such as seeking to eliminate the use of solid fuel or generators using diesel or petrol	Environmental permits	Permits based on environmental criteria	CCC	Review 2018 Implement new policies 2019	No of permits and licenses issued reported annually	NO2	2018	April 2019	£0
7	Work with neighbouring authorities on Kent-wide Energy and Low Emission Strategy <ul style="list-style-type: none"> <li>Support the countywide energy and low emission action plan to appoint an officer to monitor the effectiveness of travel plans and if required implement other mitigation measures</li> </ul>	Policy guidance and development control	Area wide strategies to reduce emissions	KCC	Attend meetings to draft countywide strategy Countywide strategy adopted by December 2019	KPIs to be determined in countywide strategy	NO2	2018	Autumn 2019	Limited costs to CCC

### Canterbury City Council Air Quality Action Plan 2018 - 2023

<p>8 Work with stakeholders on projects such as:</p> <ul style="list-style-type: none"> <li>• Anti-idling signage at level crossings project with the University of Kent</li> <li>• Awareness raising with schools, doctors surgeries, community groups etc.</li> </ul>	<p>Policy guidance and development control</p>	<p>Other policy</p>	<p>CCC / KCC units and stakeholders</p>	<p>Anti-idling signage trial complete August 2018 Findings reported by November 2018 Other projects TBC</p>	<p>Number of projects delivered</p>	<p>NO2</p>	<p>Summer 2018</p>	<p>Ongoing</p>	<p>£9.5k secured from Defra air quality grant for anti-idling signage project</p>
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## E Overarching theme increase awareness and education via communications

Cost / source

1 Implement overarching air quality campaign to promote the council's ongoing work to deliver the actions within the air quality action plan, as listed above. To include:

Within existing Communications budgets

- dedicated web pages. with graphics, maps, information and links about air quality issues and progress on the actions within the air quality action plan with the facility to capture public feedback
- links to local and national initiatives such as Breathing Canterbury, Clean Air Day , Car Free Day and 'share the road campaign' to raise awareness of air pollution and promote behaviour change
- Specific CCC campaigns:
  - anti-idling enforcement
  - breathing streets / clean walking routes
  - travel alternatives
  - wood burning stoves - advice on correct use of fuel
  - freight initiatives
  - park and ride
  - electric charging points

**Table 5.1.a – Herne Air Quality Action Plan - specific measures**

Herne Air Quality Action Plan measures										
No	Measure / action	EU category	EU Classification	Lead	Milestones	KPI	Target pollution reduced in AQMA	Start date	Completion date	Estimated cost & source
<b>A Public Health – Good Behaviours and Awareness</b>										
1	Adopt district wide anti-idling enforcement powers plus <ul style="list-style-type: none"> <li>• Anti-idling education campaign in coach park</li> <li>• Anti-idling campaign on streets, especially around schools</li> <li>• Anti-idling campaign with taxi and private vehicle hire operators</li> </ul>	Traffic management	Anti-idling enforcement	CCC	Adopt district wide anti-idling enforcement powers by April 2019 Undertake education prior to enforcement Summer 2019	Number of Warnings and Fixed Penalty Notices issued	NO2	2019	Summer 2020	TBC
2	Breathing Streets initiative to promote good air quality routes and raise awareness of areas of poor air quality	Promote travel alternatives	Active travel	CCC	Use monitoring data to map air quality and develop clean air maps July 2019. Promotion Aug to Oct 2019	Number of Breathing Streets events	NO2	2018	Ongoing	£17k Defra air quality grant
<b>C Planning and development</b>										
1	Promote all development sites to have electric charging points for electric/hybrid vehicles	Promote low emission transport	Low emission infrastructure	CCC	Ongoing work with Development Management Team	Number of new ECPs per year	NO2	2018	Ongoing	Cost to developers
2	Deliver Herne relief road	Traffic management	Strategic highway improvement	KCC	Approval of outline scheme  Delivered by 2023	Reduction in volume of traffic through Herne	NO2	2020	2023	£6.8m developers' fees

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# Appendix A: response to consultation

## Table A.1 – Summary of responses to consultation and stakeholder engagement on the AQAP

### Theme: Public health

#### Comment

#### Our response

Increase anti-idling enforcement and awareness

This is already in the action plan. We will add anti-idling powers to the remit of our enforcement officers and target the coach park, schools and level crossings where it is a problem. The thrust of the anti-idling work will be encouraging behaviour change, not fining people. Signage will be introduced / improved at key sites such as near schools and level crossings and we'll run campaigns promoting it.

Promote cycling

The action plan contains proposals to promote cycling as a travel alternative and to develop a programme of cycle route improvements.

Introduce cameras so that drivers using cycle lanes can be prosecuted

The majority of our cycle lanes are advisory only and therefore vehicles are allowed to enter. This has allowed us to put cycle lanes which motorists might need to cross to access private premises, for example.

Some of the contra-flow cycle lanes are mandatory and the powers of enforcement currently rest with the police as they do with bus lanes.

Introduce a city-wide electric bicycle hire scheme  
Partner with a local company which supplies electric bikes

The action plan contains a measure to promote cycle hire options.

Cross-city cycle routes are needed	We have a proposed network of cycle routes set out in the Transport Strategy and welcome any additional suggestions for routes.
There is a lack of emphasis on pedestrian routes between the city centre and the stations - these are overcrowded	The pedestrian route from the West Station to St Peter's Street was widened and improved in 2015. We also have plans to improve the pedestrian routes through the Dane John gardens which will then link to East Station
The school run has a big impact on traffic congestion and air pollution	The council does not have direct influence over this. We have an action to undertake anti-idling campaigns in partnership with schools and we also plan to increase awareness and education. We will raise this with KCC as part of our partnership working with them. KCC works with schools to prepare their own Travel Plans, and many of the schools are also signed up to the KM Walk to School campaign
Introduce walking buses at schools	
Promote electric cars	We have taken this on board and agree our air quality website pages should include information about the benefits of electric cars. The action plan also aims to encourage electric car use by increasing the number of electric charging points across the district.
Produce a coherent approach to electric charging points so users do not have to register multiple accounts	We agree with this and have included a requirement in our tender for the new charge points to be open registration.
Promote car sharing	The action plan contains a proposal to promote car sharing as a travel alternative.
Promote car free days	We plan to promote national initiatives such as Car Free Day to raise awareness of air pollution.
Work with major employers to reduce the number of car journeys their staff make	We continue to work closely with the University of Kent and Canterbury Christ Church University to draw up and implement travel plans that promote sustainable travel and both universities subsidise

this. We have added an action to the plan to work with other large employers in the city to encourage them to adopt travel plans.

The council also has a staff travel plan which promotes more sustainable travel. We are reviewing our staff travel plan as part of this process.

People in poor health are the least able to walk, cycle or use public transport and private car journeys are essential to them

We appreciate private car journeys may be a necessity for some people.

Do more to discourage the use of wood burning stoves

The council does not have direct control over the use of wood burning stoves but the action plan contains a measure to review their use and promote DEFRA's Ready To Burn guide. We aim to promote the best appliances to use along with the best fuel to minimise emissions.

Smoking should be banned in all public spaces

We have introduced smoke-free play areas and worked with schools to create smoke-free environments at school gates.

## **Theme: Transport**

Introduce electric/hybrid taxis and set a clear timetable for the removal of diesel taxis

The council licences taxis to operate in the district and does not operate any taxis itself - this includes licensed hackney carriages and private hire vehicles.

The action plan aims to promote low emission taxis by ranking charges according to emission levels and encourage the use of electric/hybrid taxis through the introduction of electric charging points at taxi ranks. A review of the taxi licencing policy in 2020 will consider these issues further.

Introduce electric/hybrid buses (including park and ride buses)

Stagecoach is considering how to incorporate low-emission vehicles into their current provision. A means of charging buses is part of that consideration. CCC is encouraging low emission as a minimum. The new Park and Ride contract will include a requirement for low-emission buses as a

minimum when it is renewed. The cost of buying electric buses may be prohibitive, but their introduction remains a clear ambition.

It is implied that Euro 5 and Euro 6 engines might have a beneficial impact on emissions, but this is misleading and incorrect.

Euro 5 and 6 set standards for emissions and pollutants from diesel and petrol which significantly reduce carbon monoxide, hydrocarbons, nitrogen oxide and particulate matter.

Improved Euro class emissions will have a benefit on reducing emissions. For example, with a car travelling at 30 mph for 1km will generate the following emissions of NOx across Euro 5 and Euro 6 vehicle classes: 0.27612g/km of NOx emissions 0.23259g/km of NOx emissions This is a decrease of NOx emissions by 15.8% when changing from Euro 5 to Euro 6 cars.

Frequent, smaller hopper buses are needed

Bus size is designed to accommodate passenger numbers at peak times. Stagecoach is undertaking a review of its routes, although smaller hopper services are not likely to be used because the demand for bus services in the district would require very high numbers of smaller buses to match existing capacity. Developers will pay to subsidise bus services to larger new estates. This will result in more bus services to locations such as Thanington.

Bus routes, stops, shelters and frequency need reviewing, especially in Wincheap/Thanington and in rural areas

The action plan contains measures to work with the Quality Bus Partnership to support socially-necessary bus routes and review bus links to railway stations.

A bus route is needed between the bus station and both Canterbury East and Canterbury West railway stations

Bus fares need to be made cheaper to encourage more people to travel by bus

This has been discussed with Stagecoach which is keen to make bus travel more attractive, but equally must operate commercially. The vast majority of routes in the district are not subsidised. One-off tickets are quite expensive but this drops significantly with a season ticket or family ticket. Over 60s are entitled to free bus travel outside peak times and young people can get a discounted travel pass from KCC.

More school buses are needed

There are no dedicated school buses as such. Anyone is allowed to travel on any bus at any time. Stagecoach respond to passenger demand and as a result run some buses direct to schools in

	peak periods to avoid overcrowding (both number buses and number of people on the concourse) in the bus station.
Introduce a low emissions zone/clean air zone in Canterbury	An action has been included in the plan to carry out a feasibility study on whether to introduce a low emissions zone.
Make car parking prohibitively expensive to encourage alternative methods of transport	The council will be reviewing its Parking Strategy in the near future and parking charges will be considered as part of that work.
Reduce car parking capacity in the city centre	The long-term aim is to reduce car parking capacity in the centre of Canterbury and replace this with consolidated parking spaces further out of the city.
Make Park and Ride free / incentivise	Park and Ride is already subsidised and represents good value for money, particularly for car sharing as users only pay per car, not per passenger. The Parking Strategy review will explore how use of park and ride can be further encouraged / incentivised.
Create a freight interchange hub	Limits on the amount of space required mean we are not currently pursuing this idea.
More freight should be transported by rail to reduce the impact on the road network	This is not something the council has control over and the haulage of goods by rail or road is very much dependant on market forces.
Introduce a congestion charging zone/low-emission zone	An action has been added to the plan to explore the feasibility of introducing a low-emission zone in Canterbury city centre.
Ban cars from the city centre	Traffic is already banned within the city walls except for access. Additionally some streets are closed to traffic between 10.30am and 4pm. We would not be able to stop all vehicles within the city walls at all times as access is needed for deliveries etc and there are residential properties within the city walls.

There are no specific actions to address traffic volumes

The Transport Strategy aims to reduce the overall number and length of journeys undertaken across the district.

Council contractors should only use low emission or electric vehicles

The action plan contains a measure to embed air quality in procurement processes, especially those relating to vehicles - requiring more use of low emission/electric vehicles where possible.

Want to see targets for modal shift

The Transport Strategy has set a target for modal shift which equates to 5.7% over the five years of this action plan. This target has been adopted from the council's Transport Strategy (2014-2031) which seeks to achieve a 23% reduction in car and van use over the lifetime of that strategy.

Disincentivise diesel vehicle use in the city centre

This will be included as part of the low emission zone feasibility study.

Control traffic lights from a central monitoring centre so that traffic flows can be altered according to congestion

Traffic signals have sophisticated systems which constantly adjust the signals timings according to traffic flow. In addition they are linked to KCC's Highway Management Centre together with the traffic cameras so that KCC have an overview of network performance

### **Theme: Planning and Infrastructure**

No assessment of air quality was included in the Local Plan. LP Policy QL11, which requires developers to assess the cumulative effect of all strategic sites when assessing air quality impacts, is rarely done.

The Local Plan was considered at Examination and the inspector concluded the plan was sound. With regard to air quality the inspector stated: "Overall, the Local Plan has given appropriate consideration to air quality matters and achieving compliance with limit values and national targets for pollutants."

All strategic site applications are required to comply with Policy QL11. We are requiring strategic site developers to reassess the cumulative air quality impacts of the development.

New planning guidelines on air quality for developments are required with greater emphasis on accurate measurements and monitoring

Air pollution implications form part of the policy criteria in the determination of planning applications to ensure any potential impacts are considered and mitigated against. Transport Assessments and Travel Plans, for example are required where development is considered likely to have significant implications. Development proposals that could directly or indirectly result in worsening levels of air quality within the area surrounding a development site or impact on the existing Air Quality Management Areas will not be permitted unless acceptable measures to offset or mitigate any potential impacts have been agreed as part of the proposal.

Consider revising the Local Plan to apply air quality and public health information to large development sites.

The Local Plan inspector considered the Local Plan has given appropriate consideration to air quality matters

The density of large-scale developments should be reduced and space used to plant trees or protect woodland otherwise lost to development.

Planning applications for large-scale development are considered against all of the Local Plan policies including these that address issues of design and landscaping. Such applications are also subject to public notification

Developers should be required to monitor post-development with penalties if actual pollution exceeds predictions

Any mitigation measures required in connection with development will be required to be implemented in accordance with conditions that will be applied at the time the planning permission is granted

More and quicker-to-charge electric charging points are needed

We agree. The action plan aims to increase the number of electric charging points across the district.

Build an outer ring road / bypass

Only a small proportion of traffic on the existing ring road is through-traffic, therefore the transport strategy currently concentrates on encouraging other modes of transport so people who need to come to the city can choose to travel more sustainably.

Build link roads especially between Littlebourne Road and Sturry Road and between Sturry Road, Whitstable Road and the A2	The Local Plan contains proposals to develop a number of road network improvements including a Sturry link road and an A28-A257 relief road.
There is no modelling for the new A2 slip road	The A2 slip road at Wincheap has planning permission and the supporting information including modelling is available to view on the council's website
More roads in the city centre should be pedestrianised, especially St Dunstan's Street at weekends	We will explore this. The implications on access, traffic movement, congestion and deliveries will have to be carefully considered.
Create more shared use paths	The Transport Strategy aims to increase walking and cycling opportunities and this can be taken forward through new development proposals and projects.
Create more open green spaces	Policy on open space is set out in the Local Plan, and also the Open Space Strategy and Green Infrastructure Strategy. Tree planting is considered in all of our public realm schemes. However, the benefits in relation to air quality are known to be highly variable and need to be considered on a case-by-case basis.
Plant more trees	
More and safer cycle routes are needed. Strategic routes are needed between residential and key destinations such as stations and universities.	We agree. The Transport Strategy and this action plan contain measures to develop cycle route improvements and improve cycling infrastructure such as signage and cycle parking.
Allow electric vehicles and HGVs to use bus lanes	This would remove some of the advantage that buses have of being able to move faster than other traffic when in bus lanes. It would also undermine the compliance of the bus lanes and put cyclists, who are allowed in bus lanes, in more danger.

Level crossings are a major source of traffic congestion and air pollution and need addressing

The creation of Station Road West multi-storey car park will add to traffic congestion and air pollution. This should be a sustainable transport hub instead of a car park

The amount of new development will exacerbate traffic congestion and air pollution

The anti-idling campaign will help with the air pollution issue, although not with congestion. We do raise this frequently with Network Rail, but there is no long-term solution to the issues caused by level crossings.

The Transport Strategy identified the need to consolidate parking in a new multi-storey car park as part of its wider strategy for future provision of parking in Canterbury. It was therefore not considered in isolation. The Transport Strategy also includes measures to redevelop some of the city centre parking areas and enhance park and ride facilities.

The impact of the additional spaces that the car park will provide has been modelled and it has been demonstrated that this will produce negligible additional traffic at peak hours. Rationalising other city centre spaces into this car park will reduce the need for cars to move around the city looking for a space in a smaller car park. It also provides opportunities to create an enhanced integrated transport hub at the same site.

The Canterbury District Local Plan, adopted in 2017, provides the policy framework for development and land use for the district. The Transport Strategy was prepared alongside the Local Plan to promote more sustainable forms of travel and rebalance the transport system in favour of sustainable travel. Congestion and air pollution implications were considered during the Local Plan preparation process and also form part of the policy criteria in the determination of planning applications to ensure any potential impacts are considered and mitigated against. Transport Assessments and Travel Plans, for example are required where development is considered likely to have significant implications. Development proposals that could directly or indirectly result in worsening levels of air quality within the area surrounding a development site or impact on the existing Air Quality Management Areas will not be permitted unless acceptable measures to offset or mitigate any potential impacts have been agreed as part of the proposal.

More one-way routes are needed, particularly in the city centre, Wincheap and School Lane in Herne	Generally, one-way streets increase the distance vehicles have to drive to reach their destination. However, when new traffic management schemes are being considered such as that for Wincheap, it is proposed some streets will be subject to one-way orders if their benefits can be demonstrated..
Introduce a city-wide speed limit of 20mph	All of the roads within the city walls already have a 20mph speed limit and many housing estates also do. In order to reinforce the speed limit, traffic calming has been added to these streets but this is not suitable for the main roads and creates problems for the emergency services.
A Park and Ride site is needed on the approach into the city from the north west (from Whitstable/Faversham direction)	We will be expanding Wincheap Park and Ride to link with the construction of the A2 off slip so that drivers from the A2 and M2 will be able to drive straight into this Park and Ride.
Access to Canterbury West railway station from the northern side of the railway line is needed	This is within Network Rail's control. The council has responded to the two Network Rail public consultations and has firmly reiterated the desire to achieve an access to the station from the north.
Close Canterbury West railway station and divert all trains to Canterbury East	This is not within the scope of the Council's jurisdiction, but would require extensive realignment of the railway lines at Thanington as the east line crosses over the west line by means of a bridge. Closing Canterbury West would also offer fewer opportunities to travel by rail.
Create an integrated transport hub at Canterbury West railway station	An action has been added to the plan specifically about this. Improvements in 2013 integrated all forms of transport at the station to create an integrated transport hub. We will be looking to improve integration with additional direct bus routes as well as improved cycling walking and taxi facilities. Canterbury West has walking, cycling, taxi and bus facilities within 25m of the station and car parking approximately 100m away.
Move the bus station to outside of the city centre and use shuttle buses to bring people into the city	The bus station is not owned by the council and bus services are not operated by the council. However this is unlikely to be welcome as it would require people to change buses which could make public transport less attractive. There would also be a cost implication to the running of two sets of buses.

Close the coach park and send coaches to the Park and Ride sites instead	This has been considered. The coach park holds 50 coaches which is a high volume to disperse to the Park and Ride sites. It would create spikes in demand for the Park and Ride buses which would be difficult to predict and provide for and may displace existing Park and Ride users. Coach passengers would have to be provided with extra bus tickets for the return journey and arrangements would need to be made for coach visitors after the Park and Ride service stops at 7.30pm. The concern is that this would not enhance visitors' experience of Canterbury.
Close Westgate Towers to traffic	In 2012, traffic was banned from passing through the Westgate Towers as part of a one-year trial. Kent County Council, as highway authority, took the decision to reverse the scheme at the end of the trial.
New planning guidelines for air quality assessments are needed	Policy QL11 of the Local Plan covers air quality and includes reference to the Kent and Medway Air Quality Planning Guidance. National planning policies and guidance on the assessment of air quality are also used.
Encourage more solar energy installations	Policy DEB1 of the Local Plan covers sustainability and encourages developers to include solar energy and a range of other measures within their developments.
Introduce a tram system that runs to all park and ride sites	It is difficult to envision where a tram system would run without removing a significant amount of road space and without a significant investment in infrastructure. Buses perform a similar function but have more flexibility to run on roads.
Herne needs dedicated cycle routes to schools and safe walking routes	Agreed. This is something that we will work on with the local community

Restrict the size and weight of traffic through Herne - promote alternative routes

This is a KCC function, and may be possible once the Herne relief road is completed.

### **Theme: Strategic approach and reporting**

The Sustainable Transport Forum must escalate issues outside of their remit to the relevant body to ensure they are dealt with

Agreed. In addition the STF minutes are reported to the Regeneration and Property Committee.

Increase access to air quality information for the public

We agree and part of the action plan includes the creation of dedicated air quality web pages with air quality monitoring locations, graphics, maps, information and links about air quality issues.

Need to provide quality information on location and spatial dispersion of diffusion tubes and where exceedences occur.

Reporting should be more frequent (e.g. weekly or quarterly) and as actual figures, not the annual mean

Real-time air quality data from our two continuous monitoring stations is available from [www.kentair.org.uk](http://www.kentair.org.uk). There is also the facility for people to sign up to air pollution forecast email alerts from KentAir. This service provides an email forecast of the predicted air quality for the Kent and Medway area, if pollution levels are expected to be moderate or above.

Need to improve air quality data collection and reporting, including accurate measurements and exact locations

This information is currently available from KentAir ([www.kentair.org.uk](http://www.kentair.org.uk)) but we will look to improve this and link to this information from our air quality webpages for Canterbury (see above).

The plan should set a clear strategy for all pollutants - NO<sub>2</sub>, PM<sub>x</sub> and O<sub>3</sub> - and set out interim and lifetime targets

The plan needs an action to 'improve monitoring' PM<sub>2.5</sub> is not monitored, Why? And so how does the council know levels are not currently in exceedence of the permitted levels

Concern that 2016 figures are the latest available and that an annual mean is quoted instead of best and worst figures for hot spots.

It is disappointing that CCC is only stating its intention to meet minimum legal requirements

The plan needs clearer links to the Transport Strategy

The extension to the Canterbury AQMA does not reflect current monitoring in areas next to the AQMA

Query whether the Council has necessary data to eliminate all other areas outside the declared AQMAs

The plan states that vehicle numbers are not increasing - however vehicle numbers and

The plan specifically relates to nitrogen dioxide as the pollutant of concern as exceedances of the annual mean objective have been monitored within the AQMAs. However, other air pollutants such as particulates, which are associated with transport and domestic combustion have been included within the actions as there will be co-benefits from actions aimed at reducing nitrogen dioxide.

The air quality monitoring network is reviewed annually and new monitoring locations are installed when identified. There is no requirement to monitor PM<sub>2.5</sub> and there is no set objective to comply with.

2017 data is summarised in the 2018 Annual Status Report and is available at [www.kentair.org.uk](http://www.kentair.org.uk)

The Action Plan aims to reduce pollution within the AQMAs to be below 40 micrograms per cubic metre of nitrogen dioxide but also aims to reduce overall levels of air pollution across the district which goes beyond the legal requirements.

Actions from within the Transport Strategy have only been included if they fall within the period 2018 - 2023.

The extended AQMA covers all areas which are monitored or have been modelled to be above the annual mean of 36 micrograms per cubic metre of nitrogen dioxide. Extensive modelling has been undertaken to ensure that all potential exceedance areas have been captured.

The volume of traffic on the A roads of the city is counted annually by the Department for Transport. Comparisons of traffic flow since 2000 have demonstrated no increase in the volumes of

### Canterbury City Council Air Quality Action Plan 2018 - 2023

engine sizes are increasing - the plan needs to corroborate this

traffic in that time. At the same time the legislation on vehicle emissions has required vehicles to become less polluting.

The council must adopt a more stringent approach and go beyond narrow statutory duties

We recognise that tackling air quality is a real challenge and we have attempted to put together a realistic plan which will see results and which the council can deliver and use to influence partners. Modelling by Bureau Veritas indicates that the plan will deliver the required reduction in air pollution over its lifetime.

### **Theme: Increase awareness and education via communications**

Create a tool for people to report idling and other air quality issues

Air quality issues can already be reported via the council's website pages. Once anti-idling enforcement powers are adopted by the council we will explore how people can best report idling to us.

Ensure the air quality pages on the council's website are kept up to date with progress against measures in the action plan

This will be a key part of the council's new air quality web pages once created (see above).

Use factual information to quantify the benefits of the proposed measures and effect behaviour change. Use District Life to publish info on the physical effects of pollution.

We agree and this will form part of our communications strategy.

Highlight the impact of smoking and of obesity on public health

These are not air quality issues and are already priorities for colleagues in public health.

Link in with national health promotion initiatives

Our communications campaign will be doing that.

Install electronic signs on streets (especially in the Air Quality Management Areas) alerting people to current air quality levels	The action plan contains a measure to use existing intelligent signs to provide clean air messages and up-to-date information.
Work with the local press and television to improve education and awareness of air quality issues	We will explore this as part of our communications strategy.
Work more closely with all schools and major employers	We have an action to undertake anti-idling campaigns with schools and we also plan to increase awareness and education with our Breathing Streets initiative. We will work with major employers to promote electric vehicle charging, sustainable transport and ways to reduce their emissions.
Work more closely with local groups such as Canterbury Clean Air and draw on expertise from local universities	The council's Air Quality Officer is already actively engaging with representatives of local groups, including Canterbury Clean Air, and is working with university experts - she will continue to do so through the lifetime of this plan.
Ask members of the public to reduce the number of journeys they make into Canterbury by 10% Hold a green event in the Dane John - combine with the food fair	We will explore this as part of our communications strategy.
Better communication is needed with Herne residents on air quality	The council's Air Quality Officer will engage with Herne residents over the lifetime of this plan.
Monitor the structural integrity of Herne buildings and deterioration caused by chemical weathering as a result of air pollution and vibrations from buses and HGVs	This is outside the remit of the air quality action plan, although actions to divert traffic away from Herne Centre will help to alleviate these issues.

## Other comments

The action plan doesn't go far enough - more radical actions are needed to tackle air quality.

We recognise that tackling air quality is a real challenge and we have put together a realistic plan which will see results and which the council can deliver and use to influence partners. Modelling by Bureau Veritas indicates that the plan will deliver the required reduction in air pollution over its lifetime.

There is no impact analysis of the proposed measures

The projected impact of the action plan as a whole has been modelled and is included in the text.

Need to set clear, measurable targets for all measures in the action plan

The action plan has been updated and now includes milestones, start dates and target completion dates for all measures, as well as the target pollutant to be reduced. Baselines for performance will be set after year 1.

Particulate matter also needs to be measured and reported. The lack of data on particulates is a key omission.

Levels of particulate matter in the fraction of 10 microns are monitored at Chaucer School and levels across the district currently comply with air quality standards. We are not required to monitor particulate matter in the fraction of 2.5 microns. We anticipate measures implemented within this action plan will also reduce concentrations of particulate matter.

More and better air quality monitoring stations are needed, especially by the bus station

The council has an extensive network of monitoring locations across the district and we undertake a review of our monitoring network each year. We will explore the feasibility of monitoring at or near to the bus station.

Whitstable needs more focus in the action plan - traffic congestion in the town centre. Also, Bretts is a major contributor to air pollution

The council has a legal requirement to declare an Air Quality Management Area when there is, or is likely to be, an exceedance of 40 micrograms per cubic metre of nitrogen dioxide. This is not the case in Whitstable. However, actions in the plan will also have a positive effect in Whitstable - such as anti-idling awareness, signage and enforcement

Representatives of Canterbury Clean Air and of residents' associations should be included on the Air Quality Steering Group

The material that comes out of the top of the chimney at Bretts is steam, not smoke. Bretts premises are inspected annually to ensure they are complying with the conditions of their permit to operate. Emissions are tested twice annually and are always well within DEFRA guidelines.

The steering group is deliberately made up of officers from the council and other organisations who are responsible for the delivery of measures in the action plan so does not include representatives from community groups or lobby groups. However, the council's Air Quality Officer will actively engage with representatives of such groups and feed their comments back to the steering group for their consideration.

The workshop held before the consultation did not involve enough people, particularly members of the public

This workshop was deliberately designed so that representatives and stakeholders from organisations who have responsibility for improving air quality were invited to suggest measures for inclusion in the draft action plan. This was important so that they could contribute before we went to public consultation

Once the action plan was drafted, it then went to full public consultation to assess levels of support for the draft measures and understand whether anything was missing that should be added.

There was little consultation and one public event during the consultation is insufficient

We do not agree. There was a public event, which was widely publicised via social media and the local press. Residents' associations, parish councils, Kent County Council, schools and higher and further education establishments were also directly emailed inviting them to attend.

Additionally, there was an online questionnaire (paper copies of which were also available from various locations across the district) and written submissions either by email or in writing were welcomed. All of these methods of consultation were open for a period of eight weeks and promoted widely via the council's newsroom site ([news.canterbury.gov.uk](http://news.canterbury.gov.uk)), social media, the local press and District Life magazine.

## Appendix B: reasons for not pursuing action plan measures

The steering group have considered and discussed a number of potential actions which have not been included in the AQAP, the reason for this is summarised below in table B.1.

**Table B.1 – action plan measures not pursued and the reasons for that decision**

Transport	Ban all vehicles from the city centre	We already restrict access during the day and will be exploring whether to extend this. Businesses and city centre residents do need to be able to retain some access - not least for deliveries.
Transport	Control traffic lights from a central monitoring centre to alter traffic flows according to congestion	
Freight and Delivery Management	Freight consolidation centre	Previous work on behalf of KCC suggested that this was not viable, but it will be kept under review

Freight and Delivery Management	City centre shopping delivery scheme back to Park and Ride sites	Initially proposed by Canterbury BID representative, but not commercially viable when it was previously trialled.
Freight and Delivery Management	Investigate “virtual loading bay” to support traffic flows	This is being trialed in London, but Canterbury city centre has a restricted and controlled delivery system already
Freight and Delivery Management	Develop Canterbury Freight hub - based at a Park and Ride site	Limits on amount of park and ride space mean that we are not currently pursuing this
Infrastructure	Allow electric vehicles and HGVs to use bus lanes	This would remove one of the advantages of bus travel, by slowing their journeys.
Infrastructure	Close the coach park and use Park and Ride sites instead	This has been considered. The concern is that this would not enhance visitors’ experience of Canterbury.  The coach park holds 50 coaches which is a high volume to disperse to the Park and Ride sites - creating significant spikes in demand for the Park and Ride buses which would be difficult to predict and provide for and may displace existing Park and Ride users. Arrangements would need to be made for coach visitors after the Park and Ride service stops at 7.30pm.
Infrastructure	Introduce a tram system	Not considered to be a viable suggestion without significant investment and impact on already limited road space and historic fabric of the city.

## **Appendix C: additional appendices**

Appendix 1 Notes from stakeholder meeting 11 December 2017

Appendix 2 Canterbury City Council Steering Group Terms of Reference

**Notes from stakeholder meeting 11 December 2017**

**Notes from group 1**

**Traffic**

**Ideas**

**Implications, barriers, concerns**

Kent Connect includes cycle routes - promote more

Part of communications strategy for air pollution

Charge car users for number of miles they drive

How? Alternative to road tax?

Cycling UK tube map of cycle routes

Part of communications strategy for air pollution-'Spokes' to share

Illustrate to individuals the amount of air pollution they create

Pilot / example projects  
Part of communications strategy for air pollution

20 miles per hour zone within city walls  
Also on all new developments

Anti-idling - target coaches / buses  
Also around schools / identify and promote clean air areas- council to

Taxi licensing fees?  
Coach park FPN?

apply to DEFRA to enforce and collect fines

Promote cycling - make it more visible / safer- Comment cyclists feel safer on London Streets.

Engagement / consult for better cycle parking

Promote positive message about public transport (buses / trains etc)

Commuter competition

Research / data on how people actual move around the city-  
complaint about number of pedestrians at certain times- eg lunch time  
students new dover rd

More information in District Life

Illustrate how quick and easy walking is compared to using the car  
around the city

Bus routes to train stations from park and ride not just Bus station

Travel plans for major companies / schools

Work car sharing

Cycle racks at supermarkets

Education and enforcement /fines

Perception cycling is dangerous / obstructions

Cycle tracks disjointed - signage a problem

Mixed messages - seem to be promoting cars into city  
P and R price rise

Outdated traffic management

Note Wincheap P and R stops at Canterbury East. Others not on  
route?

Clean air Day 2018- organise to promote event and AQAP

Link to Beaney Front room exhibition

Connect bikes walking bus and rail-promote routes better and get infrastructure to interlink- communicate info better

Cyclists feel unsafe in district

Promote cycle safety-Birmingham undercover cycle cops- work with Police and community safety?

Freight-hub KERB scheme Glasgow

### Notes from group 1

#### Development

##### Ideas

##### Implications, barriers, concerns

Make non car traffic a focus- not just around a site but to connect to other points- schools shops etc

Aim for a connected cycle routes - around towns and developments

Consideration of railways

No strategic overview

Rethink bus network

Cost of buses putting people off

Developments are organised very much to be accessed by car drivers not pedestrians- shops very noticeable

Reduce student accom around town centre- this should be for residents- allows links to facilities and excellent access/travel. Make sure developments are flexible design to allow to adapted for change

in future- eg student to sheltered or social housing

Wood stoves- DEFRA advice is available need to communicate it- perhaps also through Wood stove shops/fitters

## Notes from group 2

### Traffic

<b>Ideas</b>	<b>Implications, barriers, concerns</b>
Electric / Hybrid Park and ride buses	Need to put into specification Need electric infrastructure to charge buses
Park and pedal	Launching in spring 2018 from Wincheap
Integrated transport - standard bus ticket not valid on park and ride	Two different contracts - potential in next contract
Increase buses / usage - need to reduce central car parking - reduce road capacity	Economic impact on city centre - need to be creative
“Traffic evaporation” - reducing roads or more challenging	
Provide shopping drop off from city centre back at park and ride	Potential BID project
Provide park and ride for visiting coaches	Close coach park near sainsbury’s?
Low emission buses - 470 buses in south east, most in canterbury are Euro 6	Note: older buses (polluting?) sold to local bus companies - then drive around district
On street electric charging	Challenging for the street “do they want it” and also the appropriate

Council fleet - low emission	power supply
Council contractors low emission	Very few vehicles
Building contractors - low emission	Procurement policy
General issue is cost	Is the low emission plant available / affordable for local builders to use?
	Cost to the council - higher the specification
	Cost to the contractor (purchase electric buses)
	Cost to the bus users in ticket price
	But can we afford not to address air quality
There should be a joined-up approach - each measure shouldn't be taken in isolation	

## Notes from group 2

### Development

Ideas	Implications, barriers, concerns
Implement Transport strategy - its really good for walking / cycling	In process but implementation may take time - Ruth gave an example of seeking planning permission for 1 year for 200 metre stretch of cycleway

Reward walking to school - get children more active

Use electric vehicles to “deliver goods” into city centre shops from delivery hub on edge of towns

Park and Ride to stations

Smooth out traffic flow - reduces stop start and air pollution

Ban wood burning stoves if such a problem

All housing developments - electric charging points, solar panels to provide energy

Brighton approach - City centre car parks very expensive. Commuter buses are 2% of traffic but 45% of commuters

Mitigation measures proposed for developments should be monitored for implementation/effectiveness - see the recent Gladman ruling

Consider part of 4 hours per week activity?

Coordination of freight centre / space

Potential in new developments

KCC considering removing roundabouts and replacing with lights  
Then can have a “green wave” around city centre ring road.

Do not think we would want to and can't - outside regulations

Part of larger developments???

### Canterbury City Council Steering Group Terms of Reference

#### Air Quality Steering Group

#### Terms of Reference

##### **Purpose of group**

“To develop, implement and appraise progress on emissions reductions measures for Canterbury district, with a focus on an Air Quality Management Area which will provide the necessary reductions in concentrations of pollutants to achieve the air quality objectives (and improve the air quality in the Air Quality Management Area within the shortest practicable period of time)”

Ensuring compliance with the provisions of Part IV of the Environment Act 1995 and related subordinate legislation and policy in particular in relation to consideration of the AQMA and the preparation of a new AQAP

##### **Main legislative and policy drivers**

Part IV of, and Schedule 11 to, the Environment Act 1995

The Air Quality (England) Regulations 2000

Local Air Quality Management Policy Guidance (PG16) 2016 (defra)

Local Air Quality Management Technical Guidance (TG16) 2016 (defra)

##### **Related legislative and policy drivers**

[Canterbury City Council Air Quality Action Plan 2018 - 2023](#)

Directive 2008/50/EC on ambient air quality

The Air Quality Standards Regulations 2010

UK plan for tackling roadside NO concentrations Detailed Plan July 2017 (DEFRA & DFT)

UK plan for tackling roadside NO concentrations Technical Report July 2017 (DEFRA & DFT)

### **Canterbury City Council statutory role**

Local authorities have a duty under section 83(1) of the 1995 Act to designate those areas where the air quality objectives are unlikely to be, or are not being, met as air quality management areas. These areas have to be designated officially by means of an 'order'.

They shall conduct a review from time to time

There needs to an assessment review and monitoring of the area and an annual status report is required

### **Kent County Council statutory role**

Under section 86(2) the county council may make recommendations to the district council in relation to any review and assessment of air quality or development or amendment of Action Plans in the local authority area

County councils are expected to actively engage at all stages of review, assessment and action planning in relation to LAQM in its area

### **Steering Group membership**

**Canterbury City Council Air Quality Action Plan 2018 - 2023**

<b>Name</b>	<b>Organisation / title</b>	<b>Role in group</b>
Suzi Wakeham	CCC / Assistant Director Direct Services, Strategy and Democracy	Strategic chair
Tim Reed	KCC / Head of Transport	Advising on Transport issues
Andrew Scott -Clark	KCC / Public Health	Advising on Public Health issues
Carolyn McKenzie	KCC / Sustainable business	Strategic lead on county wide issues
Richard Maggs	Bureau Veritas	Technical Advisor / lead on producing AQAP
Karin Grey	Kent and Medway Air Quality Partnership	Represent neighbouring authorities
Roger Kidd	Environment Agency	Representing Environment Agency
Tricia Jordan	CCC / Environmental Health	Advising on environmental health issues

Simon Thomas	CCC / Planning Services Manager	Advising on Local Plan, Advising on planning policies and development control
Karen Britten	CCC / Planning policy Manager	Advising on planning policy issues
Cherry Jones	CCC / Development Control Manager	Advising on development control issues
Sarah Maloney	CCC / Environmental Health	Advising on environmental health issues
Richard Griffiths	CCC / Strategy Manager	Project manager and corporate links
Richard Moore	CCC / Transport and Environment Manager	Advising on transport and environment initiatives
Doug Rattray	CCC / Neighbourhood Services Manager	Advising on Licensing
Debra Nichols	CCC / Contracts Manager	Advising on contractual matters
Peter Kee	CCC / Legal Services Manager	Advising on Legal implications

**Canterbury City Council Air Quality Action Plan 2018 - 2023**

Richard Hall	CCC / Regeneration Manager	Advising on regeneration issues
Leo Whitlock	CCC / Head of Communications	Advising on communications and promotional campaigns

### **Accountability**

The AQAP steering group will report to CCC Management Team and on to Policy and Resources Committee

### **Review:**

The AQAP steering group will review its role once an Air Quality Action Plan has been adopted by CCC - aiming for late summer 2018

### **Working methods / ways of working:**

- We will adopt a shared learning approach
- We will contribute our own expertise for the benefit of the group
- Specialised advisors (non -members of the group) can be asked to attend if required
- We will engage stakeholders (local business, amenity groups, contractors etc) throughout the process and consult the general public on a draft Air Quality Action Plan
- Opinions on the draft AQAP will be sought from statutory consultees prior to the adoption of the AQAP

**Canterbury City Council Air Quality Action Plan 2018 - 2023**

## **Meetings**

- Regular meetings as required - attendance based on agenda
- Held at CCC offices Military Road
- CCC will arrange and provide secretariat for the meetings
- Option of sub groups to work up specific detail and report back

## **Sharing of information and resources (including confidential materials)**

CCC use Google / contact via Emails with partner organisations

## Glossary of terms

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
EU	European Union
LAQM	Local Air Quality Management
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides

PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
ULEV	Ultra low emissions vehicle
Ambient	Ambient means outdoor air quality. Health and Safety regulations deal with indoor air quality

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