York's Fourth Air Quality Action Plan (AQAP4)

Consultation Summary

CITY OF YORK COUNCIL

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1 Introduction

City of York Council's (CYC) Fourth Air Quality Action Plan (AQAP4) outlines the action CYC will take to further improve air quality in York over the next 5 years between 2023 and 2027 to go beyond health-based National Air Quality Objectives in all areas and work towards meeting World Health Organisation (WHO) Air Quality Guidelines. AQAP4 aims to reduce concentrations of air pollutants and exposure to air pollution, thereby improving the health and quality of life of residents and visitors to York.

AQAP4 updates and replaces the previous action plan (AQAP3) which ran from September 2015 and has been developed to reflect growing evidence about the health impacts of air pollution, updated work to consider local sources of air pollution and the current air quality in York compared to the health-based standards.

Residents, workers and visitors to York took part in Our Big Conversation, a city-wide discussion helping the city to get to grips with some of the biggest challenges facing York over the next decade, including transport and air quality, climate change and York's economy. Development of AQAP4 has been informed by this and consultation across multiple council departments.

Measures in AQAP4 are aligned to the Council Plan and reflect ambitions contained within our 10-Year Strategies covering climate, health and wellbeing and the economy. AQAP4 firmly embeds the Council Plan's priority of sustainable, accessible transport for all and our commitment to build healthy and sustainable communities.

Through delivery of the measures in AQAP4, CYC will continue to work towards making York a city that offers some of the best urban air quality in the UK.

2 Legal position, Air Quality Objectives and Environment Act

Local authorities must regularly review and assess air quality in their areas to determine if health-based air quality objectives are likely to be achieved. Where an exceedance of an objective is considered likely, a local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) to set out measures to deliver air quality improvements.

Local authorities must prepare an Annual Status Report (ASR) every year, to report on progress in achieving reductions in pollution and on progress with delivering measures in a local AQAP. Previous ASRs produced by CYC are available on the CYC website.

The recent Environment Act 2021 enables more effective action to tackle air pollution and deliver health benefits, as well as increasing transparency, co-operation between authorities and accountability at all levels. Specifically, new standards have been set for fine particulate matter ($PM_{2.5}$) and provisions for local authorities to tackle pollution from domestic burning (a significant source of $PM_{2.5}$ in the UK) have been strengthened.

3 Health impacts of air pollution

Air pollution is associated with a number of adverse health impacts. It is a contributing factor in the onset of heart disease and cancer and 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 inequality, because areas with poor air quality are also often the less affluent areas[1,2,3]. Air pollution in the UK is responsible for 29,000 to 43,000 premature deaths per year[4], with a total estimated cost to the NHS and social care of £157 million in 2017[5]. It is estimated that long-term exposure to air pollution (specifically fine particulate, $PM_{2.5}$) was a contributory factor to the cause of death in 4.4% of deaths (approximately 90) in York in 2021[6]. This is approximately 1 in every 22 deaths.

Studies have demonstrated that long-term exposure to air pollution can reduce life expectancy, mainly due to conditions affecting the heart or blood vessels, respiratory conditions and lung cancer. In addition, short-term exposure (over hours or days) to increased levels of air pollution can also cause breathing difficulties, make asthma worse and increase hospital admissions due to heart and lung conditions[7]. The health effects

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

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

[3] https://pubs.rsc.org/en/content/articlelanding/2023/va/d3va00054k (overview at https://www.york.ac.uk/news-and-events/news/2023/research/deprived-communities-air-pollution/)

[4] Defra. Air quality appraisal: damage cost guidance, January 2023

[5] Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

[6] https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/3/gid/1000043/pat/6/par/E12000003/ati/302/are/E06000014/iid/93861/age/230/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1

[7] Health matters: air pollution. Public Health England. https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution

of air pollution are varied and complex and can affect everyone, at all stages of life.

Figure 3.1 Impacts of air pollution through life

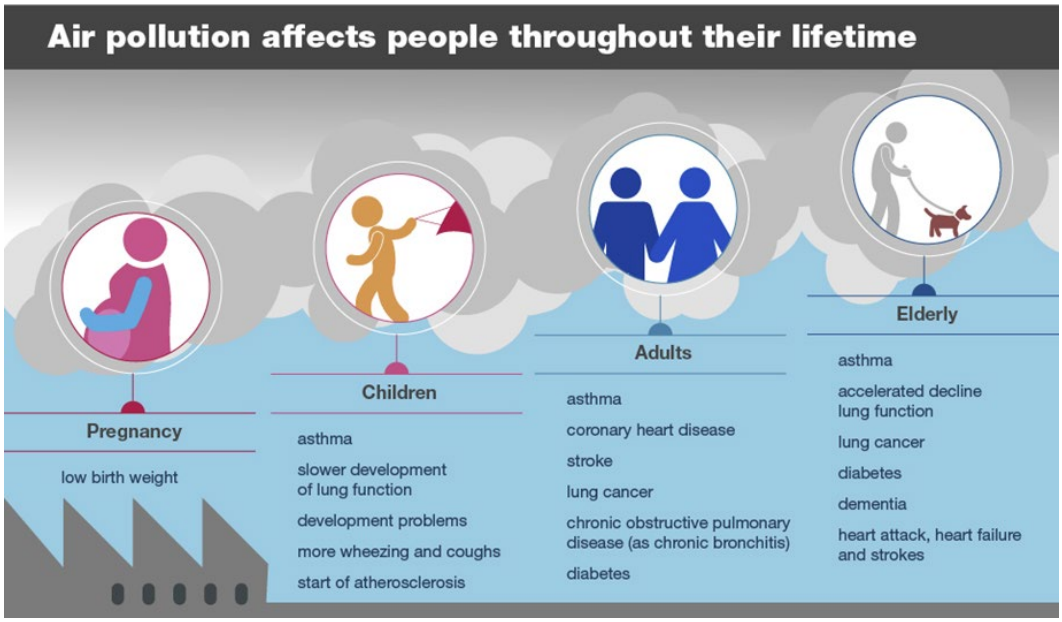


Image from Public Health England: Health Matters, which depicts:

- ***Pregnancy** – low birth weight.*
- ***Children** – asthma, slower development of lung function, development problems, more wheezing and coughs, start of atherosclerosis.*
- ***Adults** – asthma, coronary heart disease, stroke, lung cancer, chromic obstructive pulmonary disease (as chronic bronchitis), diabetes.*
- ***Elderly** – asthma, accelerated decline lung function, lung cancer, diabetes, dementia, heart attack, heart failure and stroke.*

Whilst air pollution can be harmful throughout life and across all ages, some people are more affected, perhaps because they are exposed to higher levels of air pollution in their day to day lives, live in polluted areas, or are more susceptible to air pollution related health issues.

Figure 3.2 Air pollution and health inequalities

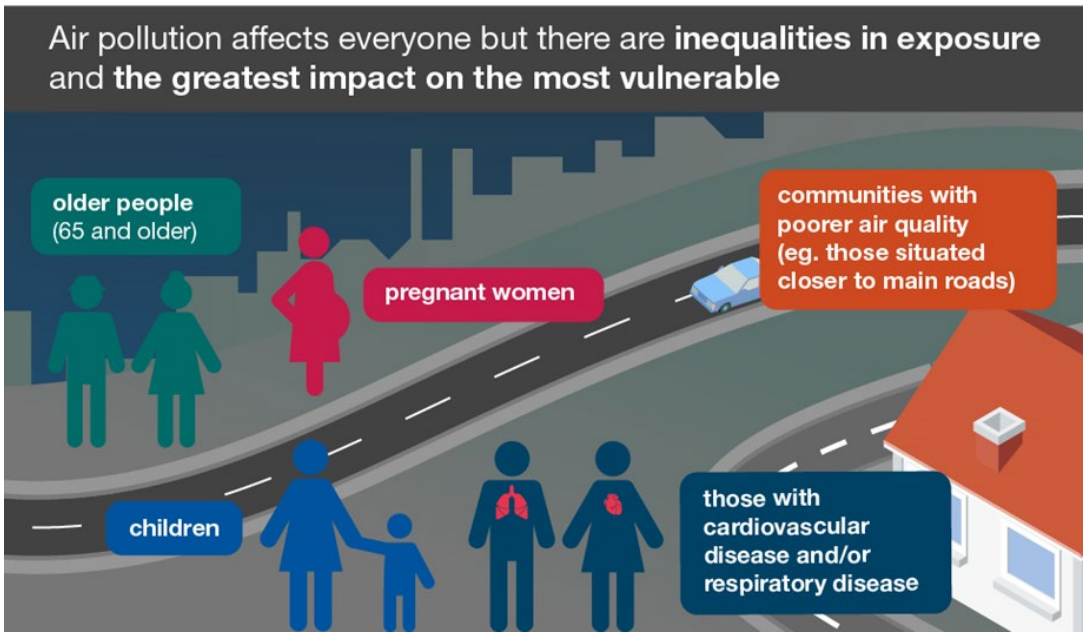


Image from Public Health England: Health Matters, which illustrates: Air pollution affects everyone but there are inequalities in exposure and the greatest impact on the most vulnerable: older people (65 and older), pregnant women, children, those with cardiovascular disease and/or respiratory disease.

Air pollution can also have economic impacts through sickness absence and reduced productivity. The coronavirus pandemic clearly demonstrated the critical link between human health and economic prosperity.

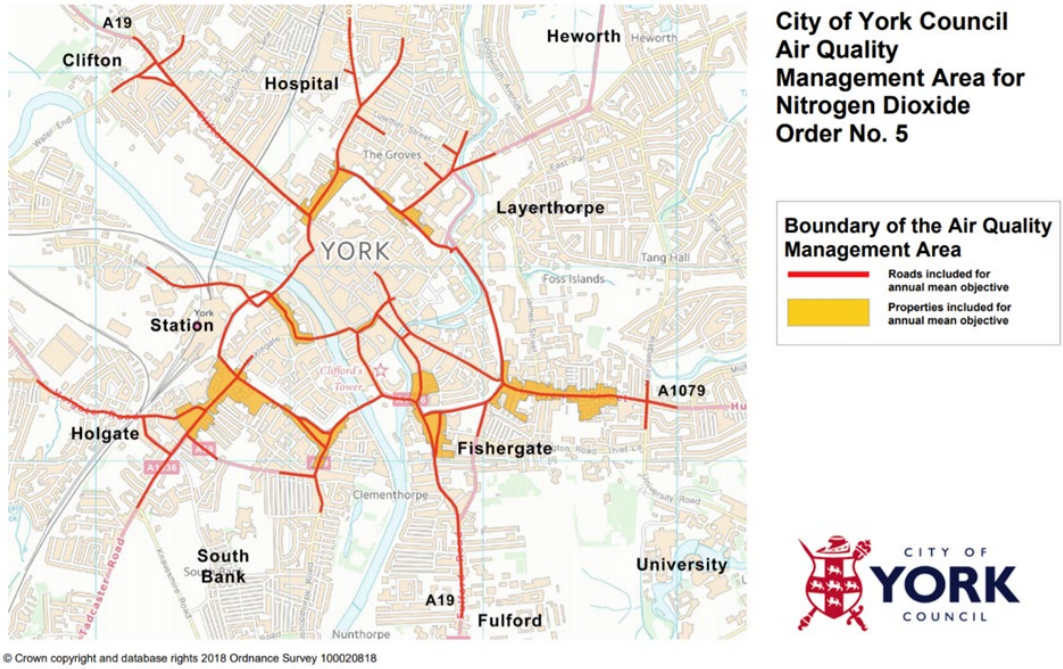
AQAP4 contains measures to reduce concentrations of nitrogen dioxide (NO_2) and particulate matter ($PM_{2.5}$ and PM_{10}) to meet the health-based air quality objectives and work towards stricter World Health Organisation (WHO) Air Quality Guidelines to improve public health. Alongside other complementary strategies, AQAP4 will also deliver wider public health benefits, such as reducing obesity and improving mental health and wellbeing, via promotion of active travel options such as walking and cycling.

4 Current air quality in York

Through monitoring of air quality across the city, CYC has previously identified some areas of the city centre, around the busy inner ring road, where long term annual average nitrogen dioxide (NO_2) levels are above health based objective levels. These areas have been incorporated into an Air Quality Management Area (AQMA).

The AQMA includes areas where members of the public are likely to be exposed to air pollution regularly over long periods of time, such as residential properties, nursing homes and schools. These are called 'relevant locations'. Roads are also included within the AQMA boundary and reflect the wider area of the city that residents and businesses stated they wanted to see air quality improved following public consultation. York's current AQMA is shown in figure 4.1 below.

Figure 4.1 York's Air Quality Management Area (AQMA)



Map showing CYC Air quality Management Area for Nitrogen Dioxide Order No. 5 .Red line denotes roads included for annual mean objective, yellow shapes denote area of properties included for annual mean objective.

Additional maps of the current and historical AQMAs in York can be viewed on the CYC website.

Concentrations of NO_2 across the AQMA have tended to decrease over the last 10+ years, due to vehicle technology improvements and measures within CYC's previous Air Quality Action Plans, Local Transport Plans and wider sustainable travel programmes.

There are, however, still three areas within the AQMA where concentrations of NO_2 are above the health based objective (Gillygate, Rougier Street / George Hudson and Holgate Road / Blossom Street areas).

Measures in AQAP4 aim to improve in air quality in these areas and across the wider city, allowing the council to remove the AQMA declared for NO_2 and reduce particulate pollution to improve public health.

5 Where the pollution comes from (source apportionment)

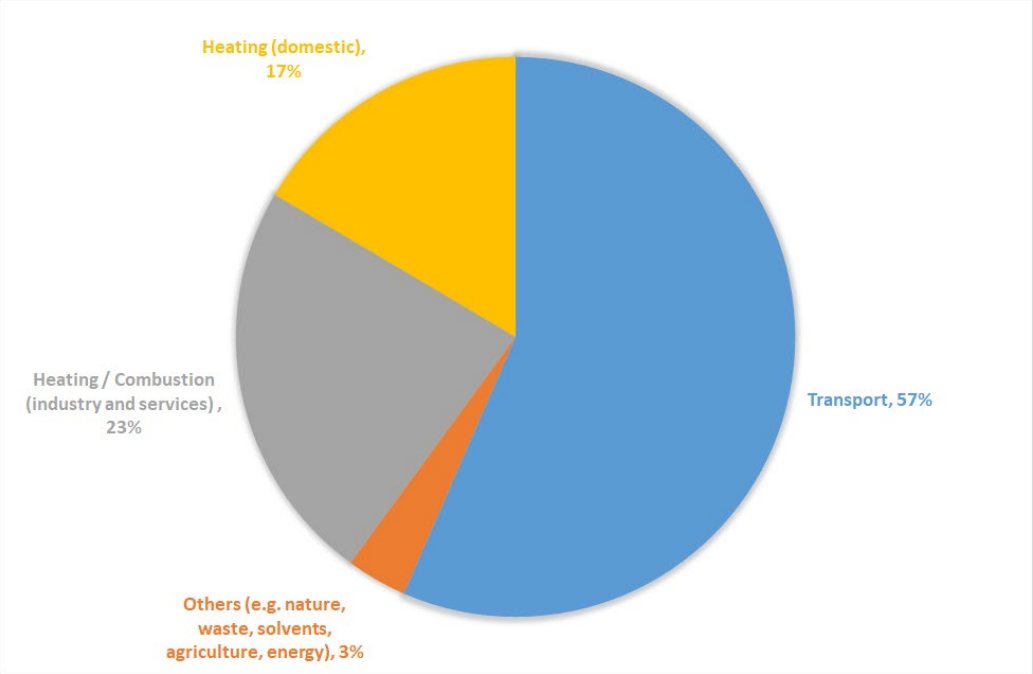
Transport[8] in York produces 57% of total NO_x emissions, compared to 17% of $PM_{2.5}$ emissions. In comparison, heating homes makes up 17% of NO_x emissions and 37% of $PM_{2.5}$ emissions.

It is estimated that nearly a third (31%) of $PM_{2.5}$ emissions from heating homes are due to wood burning.

The contribution of each activity sector to the total emissions of NO_x and $PM_{2.5}$ in York are summarised in the figures below.

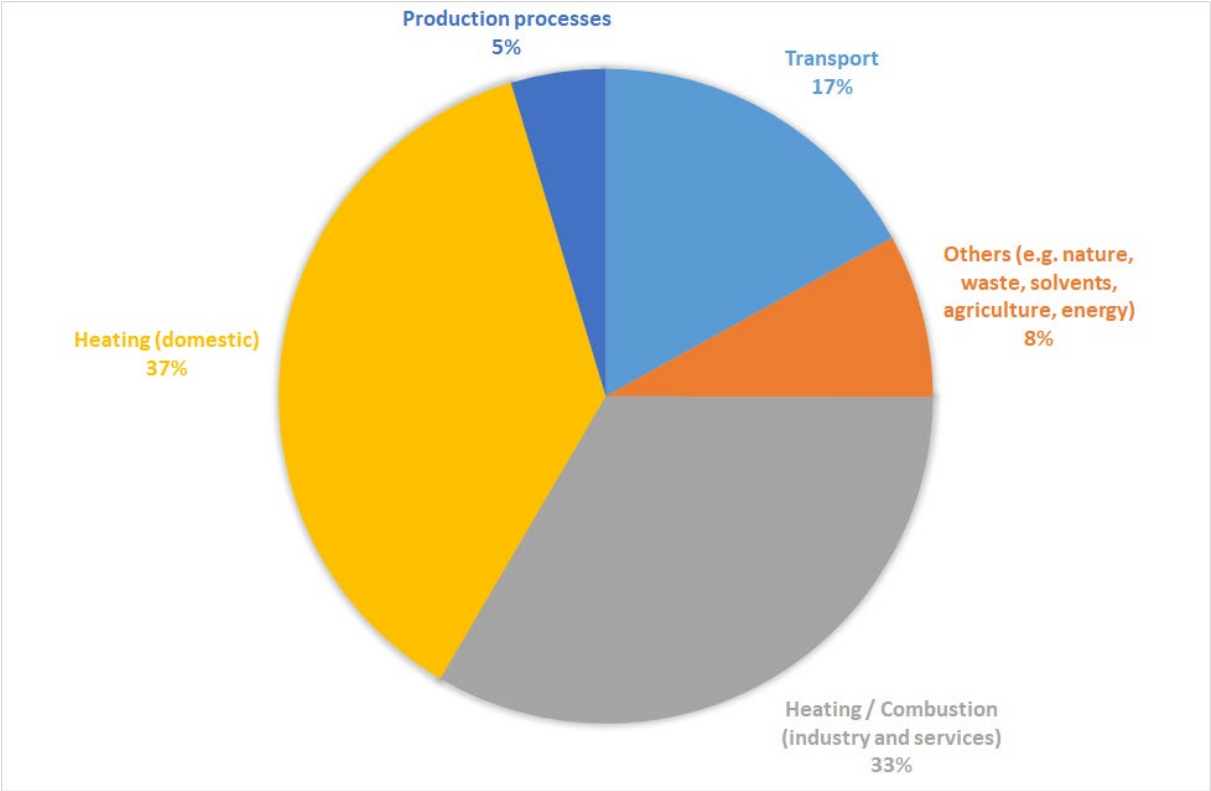
[8] mainly road transport but some rail and non-road mobile machinery

Figure 5.1 Sources of total NO_x emissions in York



Pie chart showing (clockwise from top): Light-blue, transport, 57%. Orange, others (for example, nature, waste, solvents, agriculture, energy) 3%. Grey, heating/combustion (industry and services) 23%. Yellow, heating (domestic) 17%.

Figure 5.2 Sources of total $PM_{2.5}$ emissions in York



Pie chart showing (clockwise from top): Light-blue, Transport 17%. Orange, others (for example, nature, waste, solvents, agriculture, energy) 8%. Grey, heating/combustion (industry and services) 33%. Yellow, heating (domestic) 37%. Dark-blue, production process 5%.

Road transport sources in York:

- Pollution from transport is the main source of NO_x in York so we must continue to deliver sustainable transport solutions and work towards reducing pollution from all types of vehicle.

- NO_x emissions from petrol and diesel cars continue to make up over half of these transport emissions, showing that CYC must continue to encourage people to walk, cycle and use public transport instead of cars. We must also maximise the uptake of zero tailpipe emission vehicles via incentives and provision of suitable charging infrastructure. This should be supported by measures such as ongoing campaigns to reduce idling emissions and robust planning guidance to ensure private vehicle trips are minimised on new developments.

- Heavy Goods Vehicles (HGVs) are a significant pollution source on the majority of major roads, where they contribute between 15 and 25% of the total road NO_x emissions (but on a few roads as much as 55%).

- Light goods vehicles (LGVs) are responsible for less than 10% of road traffic NO_x emissions on the majority of roads but are more significant in certain areas such as the outer ring road and on key main roads, representing up to 25% of total road traffic emissions.

- Pollution from buses has reduced significantly in recent years due to the introduction of a Clean Air Zone (CAZ) in the city centre and upgrades to vehicles serving high frequency routes, including Park and Ride services. Whilst bus emissions now comprise less than 10% of road traffic emissions on the majority of streets, in some areas, such as George Hudson Street and Blossom Street, they still contribute up to 25%. The council will continue to work with bus operators to reduce pollution from buses further.

Further detail about traffic source contributions, including how these vary across the city, is presented in the main AQAP4 document.

6 Required reduction in emissions

We have calculated that we need a further reduction in NO_x emissions of approximately 25% to meet the health-based targets in all areas – this can be achieved by:

- Further reduction in car usage of 5% via shift to more sustainable modes such as walking, cycling and public transport
- Reduce HGV and LGV movements by 25% through freight consolidation facilities and other initiatives
- Transition of 10% of car/taxi and LGV fleet to electric vehicles with zero tailpipe emissions, through expansion of local charging infrastructure, awareness raising and incentives
- Conversion of remaining bus fleet to electric vehicles with zero tailpipe emissions

It should be noted that in future years, falling background pollutant concentrations and improvements in vehicle emissions generally across the fleet will also drive reductions in pollution in York.

CYC has a statutory duty to deliver air quality improvement in the shortest possible time and AQAP4 must take all measures reasonably practical to deliver cleaner air and achieve further reductions in vehicle miles travelled.

7 Previous actions to improve air quality

We have previously introduced electric buses across York's Park & Ride sites, a city centre Clean Air Zone (CAZ) for buses, low emission planning guidance to minimise and mitigate development related emissions, an anti-idling campaign, widespread EV charging infrastructure across the city and incentives for low emission vehicle use. AQAP4 will build on the successful initiatives and programmes delivered to date in pursuit of cleaner air for all.

8 Actions and priorities for AQAP4

AQAP4 sets out a range of actions to reduce air pollutants from different sectors and vehicle classes. A key aim of AQAP4 is to achieve and go beyond the health-based air quality objectives for NO_2 as soon as possible and, importantly, to ensure that compliance is sustained into the future.

Measures to tackle vehicle emissions and promote modal shift (to walking, cycling and public transport) will also reduce emissions of larger particulate such as PM_{10} (arising from vehicle exhausts, but also from non-exhaust sources such as vehicle brake and tyre wear).

AQAP4 also includes measures to address fine particulate, $PM_{2.5}$, based on current evidence this is the pollutant most damaging to health. Responsibility for meeting national targets for $PM_{2.5}$ lies with central government, but local authorities are expected to contribute to achieving the targets through local action wherever possible.

In addition to reducing transport pollution, there are also opportunities to reduce $PM_{2.5}$ from domestic burning of solid fuels. Whilst in part this will be addressed by new legislation around the types fuels that can now be legally sold, there are opportunities for CYC to raise awareness of the impacts of burning solid fuels and ensure that suppliers/retailers are complying with legal requirements. Measures to address this issue will also help to reduce NO_x emissions, albeit to a lesser extent.

As part of AQAP4 development, all proposed measures were evaluated in terms of air quality impact, feasibility, funding, cost, implementation timescales and alignment with wider CYC strategies. This cost benefit analysis is presented in the main AQAP4 document.

AQAP4 outlines 29 actions that fall under the following priority areas:

- **Reducing emissions from freight / delivery vehicles** - CYC will continue feasibility work to address first/last mile delivery of light goods in York and will work with partners to evaluate low emission delivery modes. Minimising the overall number of delivery vehicles and ensuring the remaining deliveries are made by zero emission modes has the potential to significantly improve air quality in York. We will also prioritise a pilot project to test a 'micro-consolidation centre' for the purpose of distributing commercial light goods around the city centre and will consider the feasibility of extending the Clean Air Zone to include HGVs / freight vehicles.

- **Reduce emissions from buses** - CYC will continue to work in partnership with bus operators to improve bus provision for all service users. Whilst considerable progress has been made to clean up York's buses in recent years, CYC must continue to address pollution from lower frequency services and maximise the number of services operating fully electric buses to further reduce exhaust emissions. CYC will work with partners to deliver further bus upgrades using secured DfT funding and extend the Clean Air Zone (for buses) to York Central.

- **Reduce emissions from idling vehicles** - CYC will be proactive in raising awareness of pollution from idling vehicles upon public health through our Kick the Habit anti-idling awareness / behaviour change campaign, supported by regular anti-idling patrols. This will include raising awareness with commercial vehicle operators, such as those involved in deliveries or construction.

- **Reducing emissions from taxis** - CYC will continue to work with the trade to replace diesel and petrol taxis with low and zero emission vehicles via the use of incentives and awareness raising. This will be supplemented with further revisions to Taxi Licensing policy to phase out older, more polluting taxis, following consultation with the taxi trade. We will prioritise further opportunities for minimising pollution from taxis in the city centre, including exploring the feasibility of including them within the Clean Air Zone.

- **Reduce emissions from the CYC fleet** - CYC recognise that the way our own fleet vehicles are renewed is a vital part of the CYC air quality improvement / carbon reduction programmes and that the transition to a cleaner, greener fleet must be done without compromising the essential services CYC delivers. We also recognise that we must lead by example; the successful operation of ultra-low and zero emission vehicles as part of the CYC fleet will show leadership and will act as a catalyst for other fleet operators in the city to upgrade their vehicles and accelerate their renewal programmes.

- **Expand EV charging** - CYC's EV Charging Strategy set out how we plan to deliver York's EV charging network up to 2025. CYC will deliver additional fast and rapid charge points and actively monitor plug-in vehicle uptake in the city to ensure our charging network remains fit for purpose.

- **Minimise development related emissions** - CYC will continue to ensure that air quality impacts from new developments (including during construction) are appropriately assessed and mitigated, exposure to poor air quality is reduced via good design practices and that new private trips are minimised via provision of opportunities for sustainable transport. We will ensure that air quality considerations are used to inform the design of new developments and will strengthen local planning guidance to facilitate a transition away from fossil fuel heating sources, which can contribute to local air quality issues.

- **Provide local incentives for low emission vehicles and alternative fuels** - CYC is committed to further encouraging the wider uptake of ultra-low emission and zero emission vehicles (and other zero emission micro-mobility modes) via development of incentives, such as parking discounts for low emission vehicles.

- **Improved public information and awareness** - Delivering clear messages to the public around the cause and consequence of poor air quality, particularly around impacts on health, are particularly important for driving behaviour change. Campaigns relating to issues such as energy efficiency, domestic smoke control, bonfires, fireworks and indoor air quality can all be valuable parts of a wider local air quality improvement strategy. CYC will continue to address these wider issues, alongside existing public information campaign work relating to sustainable transport provision in the city.

- **Modal shift, active travel and network improvement** - Measures to reduce private vehicle trips and encourage walking, cycling and use of public transport are considered fundamental to AQAP4. CYC's Local Transport Plan (LTP) continues to be a key part of the overall approach to air quality improvement across the city, with active travel at the apex of the city's travel hierarchy. We will implement measures to reduce vehicle congestion, which will have significant positive benefits for local air quality.

- **Regulation of industrial and domestic emissions** - In addition to reducing transport pollution, AQAP4 aims to reduce emissions from domestic and industrial combustion / heating, particularly fine particulate matter ($PM_{2.5}$). AQAP4 also recognises the synergies with CYC's carbon reduction programmes and measures to improve energy efficiency and support services. CYC will actively seek opportunities for grants to support such activities.

- **Monitor air quality / access to air quality information** - Monitoring allow CYC to assess compliance with Air Quality Objectives, evaluate the effectiveness of air quality improvement interventions and provide reliable information to York's residents, visitors and workers to help them reduce exposure. We will ensure that the location and type of monitoring in the city is reviewed annually and remains relevant and targeted to key sources and pollutants. We will seek further opportunities to improve access to air quality information by residents, especially vulnerable groups.

The full list of AQAP4 measures, together with anticipated timescales for planning and delivery is provided in Annex 1.

9 Further information

For further information please contact City of York Council's Public Protection team:

City of York Council
Public Protection
Hazel Court Eco Depot
James Street
York
YO10 3DS

Telephone: 01904 551525

Email: public.protection@york.gov.uk

Annex 1: Air Quality Action Plan Measures: 2023 – 2027

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
1a	Explore opportunities / options for reducing freight emissions	Freight and Delivery Management	Delivery and Service Plans Freight Consolidation Centre Freight Partnerships for city centre deliveries	2023	2023/24	CYC Freight transport industry Local operators York Civic Trust Local Enterprise Partnership York Business Improvement District (BID)	DEFRA funding secured for feasibility study and pilot	Yes	Partially Funded	£100k - £500k	Planning	Baseline emission assessment undertaken (2021) demonstrated that HGVs are a significant emission source on the majority of major roads, where they contribute 15 – 25% of total road NO_x emissions and up to 55% in some areas. LGVs generally responsible for less than 10% of road traffic NO_x emissions, but are more significant in certain areas such as the outer ring road and on key routes like Fulford Road, representing up to 25% of total road emissions.	Feasibility studies completed Reduction in freight mileage / freight emissions	Initial feasibility study to address first/last mile delivery of light goods in York undertaken Oct/Nov 2021. Reviewing recommendations and progressing pilot study Freight forum established 2021 Council Plan commitment to develop a city-wide Movement and Place Plan that will consider management of freight deliveries	Initial feasibility study funded. Permanent consolidation facilities subject to further costing and investment
1b	Undertake pilot project to test 'micro-consolidation centre' for distribution of commercial light goods	Freight and Delivery Management	Freight Consolidation Centre	2023	2024	CYC Local delivery operators and support staff	DEFRA funding secured for pilot	Yes	Funded	£100k - £500k	Planning	Subject to evaluation of pilot and reduction in freight mileage	Completion / evaluation of pilot Reduction in freight mileage / freight emissions (as demonstrated through pilot)	Currently seeking pilot delivery partners and suitable premises	Pilot funded Anticipated that the pilot will be supported by Blueberry Academy, who provide specialist support for young people and adults with learning differences, autism, social, emotional and mental health needs and/or other disabilities.

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1c	Consider feasibility of extending Clean Air Zone to include freight vehicles	Promote Low Emission Transport	Clean Air Zone (CAZ)	2023	Currently unknown	CYC Freight transport industry Local operators York Civic Trust Local Enterprise Partnership York Business Improvement District (BID)	Currently unknown	No	Not funded	Currently unknown	Planning	Currently unknown	To be developed	CYC Council Plan 2023 – 2027 aspiration to consider extension of CAZ to freight vehicles	Subject to further feasibility work
2a	Upgrade (CAZ exempt) inter-urban and rural services to ultra-low emission (electric) vehicles	Promoting Low Emission Transport	Clean Air Zone (CAZ)	2023	2025	CYC Sustainable Transport Bus operators Manufacturers of low emission buses Charging infrastructure providers Emissions abatement equipment providers	DfT Bus Operators (match funding)	No (DfT funded)	Funded	tba	Implementation	Buses generally contribute less than 10% of traffic emissions on the majority of streets and are most significant on roads with proportionally less emissions, where bus flows form a larger proportion of the overall traffic. In areas like George Hudson Street and Blossom Street, between 10 - 25% of the total road NO_x emissions are due to buses	% inter-urban and rural services electric / Euro VI diesel *BSIP target to convert all inter-urban and rural services to Euro VI diesel by 2024/25 (if it not practical to electrify the routes)* *Enhanced Partnership Plan (Sept 2022) contains high level objective of at least 95% of inter-urban and rural services to be operated using vehicles of Euro VI standard or better by 2024/25.*	See update for associated measure 2b. Where it is not practical to electrify routes, all inter-urban and rural services will be upgraded to Euro VI	An advisory minimum emission standard applied to CAZ exempt vehicles of Euro IV by January 2020, increasing to Euro V from January 2022 and ULEB / Euro VI from January 2024
2b	Work in partnership with bus operators to pursue an all-electric, zero emission	Vehicle Fleet Efficiency	Promoting Low Emission Public Transport	2023	2025	CYC Sustainable Transport Bus operators Manufacturers of low emission buses	DfT Bus Operators (match funding)	No DfT funded	Funded	>£10m	Implementation	Emission contributions from buses discussed under measure 2a The new buses will be used on First's routes 1,	% Electric Bus within 'urban' bus fleet *BSIP target to convert all bus services operating*	In March 2022, CYC was awarded £8.4m through DfT's ZEBRA fund to buy an additional 44 new electric buses. This will be matched by a further £10 million investment by First. Once in operation, this will	Additional benefits include reduction in carbon emissions, noise pollution and improved passenger (and driver) experience York will receive 24 single deck GB Kite

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	bus fleet for all services operating predominantly in the York urban area					Charging infrastructure providers						4, 5 and 6, for the York Hospital shuttle bus and on Park&Ride route 2, reducing carbon emissions in York by 2,300 tonnes per year as well as reducing NO_x and particulate emissions across the city. This adds to the current annual reduction of 1,600 tonnes achieved by the zero-emission Park and Ride fleet.	*predominantly in the York urban area to electric vehicles by 2024/25.* Enhanced Partnership Plan (Sept 2022) contains high level objective of At least 90% of bus services operating predominantly in the York urban area to be operated using electric vehicles by 2024/25.	expand the York bus fleet to 77 all-electric buses, which will run more than half the bus-miles operated in the city, including the entire Park and Ride network Bus Service Improvement Plan (BSIP) bid submitted to DfT in October 2021. In April 2022, CYC was awarded an additional £17m to support the development of key schemes and initiatives in the BSIP, including wider electrification of the urban bus fleet. Approximately £12m will be used to fund the conversion of 60 additional buses and associated infrastructure.	Electroliners and 20 Double Deck StreetDecks. This will more than double the number of electric buses in use in the York area, helping to improve air quality by reducing diesel exhaust emissions, First Bus placed order with UK manufacturer Wrigthbus in Sept 2022 Opportunities to work with York tour bus operators to facilitate upgrades
2c	Extend CAZ (for buses) to York Central	Promoting Low Emission Transport	Clean Air Zone (CAZ)	2023	Currently unknown	CYC Sustainable Transport Bus operators Traffic Commissioners Office	Currently unknown	No	Not funded	Currently unknown	Planning	-	Change to the Traffic Regulation Condition (TRC)	CYC Council Plan 2023 – 2027 aspiration to consider extension of CAZ area to York Central	Subject to discussions with the Traffic Commissioners Office and a change to the Traffic Regulation Condition
3a	Continued promotion of CYC 'Kick the Habit' campaign	Traffic Management Public Information	Anti-idling enforcement Via leaflets / the Internet / Other	2023	Ongoing	CYC Public Protection / Parking Services / Sustainable Transport. Bus companies, taxi companies, freight / delivery companies, local businesses. Promotion undertaken with partners such as York Hospital, University of	CYC internal funding for ongoing promotion and development of resources to support the campaign	Original campaign resources funded through DEFRA grant funding	Funded	<£10k	Implementation	Previous feasibility work undertaken by CYC suggested at 5 busiest service bus locations, estimated savings of 1,526kg NO_x, 36kg PM_{10}, 46,555kg CO_2,and 17,949 litres of fuel per year could be	Estimate of idling time saved (mins)	Existing 'Kick the Habit' campaign Annual promotion on Clean Air Day	Partnership working with schools, hospital and academic institutions Opportunities to roll-out campaign in other local authority areas Awareness raising with commercial operators

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						York and local schools						made by addressing idling.			
3b	Erect further signage / develop new anti-idling resources / review approach to anti-idling enforcement	Traffic Management	Anti-idling enforcement	2023	Ongoing	CYC Public Protection / Parking Services / Sustainable Transport	CYC	Original campaign resources funded through DEFRA grant funding, ongoing resource development likely to be CYC funded	Partially funded	New resources <£10k Staff resource for enforcement subject to higher cost but opportunities to incorporate idling duties into other related posts.	Planning	Difficult to quantify exact emission savings as measures aimed at preventing idling / education	N/A	Permanent signage in CYC car parks, at most city centre bus stops, multiple taxi ranks and at other key locations since scheme launch in 2019. Anti-idling leaflets produced for different target audiences (schools, taxi drivers, commercial vehicles etc)	Applicable to all vehicle modes, including cars, taxis, buses, LGVs, HGVs
4a	Review and update of CYC Taxi Licensing Policy to accelerate uptake of ULEVs	Promoting Low Emission Transport	Taxi Licensing conditions	2023	2024	CYC Public Protection / Taxi Licensing	CYC	No	Funded	£10k - £50k	Planning	Air quality / emissions impact can be quantified when policy revisions are agreed	Adoption of new Taxi Licensing Policy	Consultation with the taxi trade previously undertaken in 2020	Review of policy subject to consultation with taxi trade and member approval CYC will consider opportunities for addressing emissions associated with non-CYC registered taxis that operate in the city
4b	Seek further opportunities for CYC to support taxi drivers to upgrade vehicles to ULEVs	Promoting Low Emission Transport	Taxi emission incentives	2023	Ongoing	CYC Public Protection / Taxi Licensing	Likely to require external funding	Previous DEFRA grant funding obtained for Low Emission Taxi Grant scheme	Not funded	£500k - £1m	Planning	Converting the remaining taxi fleet to electric or petrol-hybrid technology can offer considerable emission savings compared with older diesel technology	% low emission taxis (electric / hybrid) across CYC licensed taxi fleet Baseline (June 2023) is 34%	Low Emission Taxi Grant scheme rolled out 2021/22 34% of York registered taxis were electric or petrol hybrid as of June 2023	CYC will also work alongside the taxi trade to understand requirements of charging infrastructure needs.
4c	Consider feasibility of extending the Clean Air Zone to include taxis	Promoting Low Emission Transport	Clean Air Zone (CAZ)	2023	Currently unknown	CYC Public Protection / Taxi Licensing Taxi Trade	Currently unknown	No	Not funded	Currently unknown	Planning	Currently unknown	To be developed	CYC Council Plan 2023 – 2027 aspiration to consider extension of CAZ area to include taxis	Subject to further feasibility work

City of York Council - Fourth Air Quality Action Plan (AQAP4) Summary

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
5a	Implement an EV fleet replacement programme for all vehicles under 3.5 tonnes	Promoting Low Emission Transport	Company Vehicle Procurement – Prioritising uptake of low emission vehicles	2023	2025	CYC Highways and Fleet	CYC	No	Funded	£1m - £10m Estimate of costs of upgrades to 153 vehicles over programme lifetime (capital and revenue costs)	Implementation	CYC's 2020 vehicle fleet emitted 1763t of CO_2 every year (including HDVs). NOx/PM reduction not yet estimated	% of EVs in CYC Fleet <3.5T (Sept 2023 figure 33.5%)	Phased fleet programme agreed for vehicles under 3.5 tonnes Upgrades to power distribution at Hazel Court Depot progressed 2022	Phased vehicle upgrade as part of replacement programme will see gradual increase in EVs across all services
5b	Explore options for fleet vehicles over 3.5 tonnes to move away from diesel	Promoting Low Emission Transport	Company Vehicle Procurement – Prioritising uptake of low emission vehicles	2023	Ongoing	CYC Highways and Fleet	CYC	No	Partially funded	£1m - £10m	Planning	CYC's 2020 vehicle fleet emitted 1763t of CO2 every year (including HDVs). NOx/PM reduction not estimated	% ULEV (over 3.5 tonnes) (Sept 2023 figure 3.6% which relates to 2 electric refuse vehicles)	Zero-emission 'eCollect' refuse collection vehicles (eRCVs) are used six days a week on commercial waste collections benefitting the city with zero emissions and quieter operations.	CYC will continue to arrange trials and evaluation of vehicles to assess suitability for core service areas.
5c	Maximise CYC journey efficiency (and minimise emissions) through use of telematics, training and sustainable travel options for staff	Vehicle Fleet Efficiency	Driver training and ECO driving aids	2023	Ongoing	CYC Highways and Fleet / Rethinking Travel	CYC	No	Funded	Dependent upon exact options progressed	Planning	NOx/PM reduction not estimated	Telematics feedback and evaluation Use of pool bikes, car club vehicles, discounted public transport tickets for work travel	ECO driver training previously undertaken Masternaut telematics system rolled out 2021	-
6	Delivery of CYC Public EV Charging Strategy / roll-out of additional charge points / hubs	Promoting Low Emission Transport	Procuring alternate refuelling infrastructure to promote Low Emission Vehicles, EV Charging	2023	Ongoing Strategy introduced 2020 and will run until 2025 with annual review	CYC Transport (EV Strategy) BP Pulse (access partner) EV Charge Point manufacturers	CYC	No Funding for HyperHubs secured through OLEV/ERDF	Funded	£1m - £10m bracket Remaining charge point rollout programme to 2025 estimated at £4 - £5m	Implementation	Emission reduction dependent upon EV uptake. For every conventionally fuelled vehicle replaced local emissions of NO_x and tailpipe PM_{10} are eliminated.	Number of operational fast, rapid and ultra-rapid CYC charge points (Sept 2023 figure is 103 comprising 84 Fast, 11 Rapid 11 and 8 Ultra Rapid) Number of charging	Extensive 'pay as you go' fast charge public electric vehicle recharging network consists of 84 Fast, 11 Rapid 11 and 8 Ultra Rapid chargers (Sept 2023) Two Hyperhub sites delivered and operational Two further Hyperhub sites in development	Work programme agreed and funded CYC will monitor plug-in vehicle uptake in York and usage of CYC's network (at least annually) to assess if charge point provision meets demand.

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													episodes (2022 figure was 24,109)		Updated EV charging strategy to be produced by end 2025
7a	Review / update Low Emission Planning Guidance and ensure alignment with carbon reduction policies	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2023	Anticipated 2024 Timescales for adoption of updated guidance is subject to the Local Plan and examination process.	CYC Public Protection / Planning / Integrated Strategy / Carbon Reduction	CYC	No	Funded	£10-£50k	Implementation	NOx/PM reduction not estimated	Revision and adoption of updated low emission planning guidance	Draft guidance written and currently being actively used for development control purposes	Cost anticipated mainly in relation to staff time and consultation CYC will ensure that local standards for EV charging infrastructure provision remain appropriate for current EV use (and anticipated future EV uptake) in the city and are aligned to CYC's vision as laid out in CYC's EV Charging Strategy. Consideration of energy efficiency with respect to commercial / domestic heating Consideration of low NOx boiler technologies Aim to ensure that heating technologies in new developments achieve the lowest emissions possible, considering both local air quality and carbon reduction targets Consideration of emissions from Non-Road Mobile Machinery (NRMM) and local standards Opportunities for formal adoption of the guidance as a Supplementary Planning Document (SPD) in the longer term

City of York Council - Fourth Air Quality Action Plan (AQAP4) Summary

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7b	Ensure development related emissions are appropriately assessed and mitigated in line with CYC guidance	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2023	Ongoing	CYC Public Protection / Planning	CYC	No	Funded	£50-£100k Staff time plus oncosts	Implementation	NO_x/PM reduction not estimated	Planning applications reviewed in terms of air quality and a summary of any conditions imposed are summarised as part of CYC's Annual Air Quality Status report to DEFRA.	Ongoing assessment of planning applications Development of standard planning conditions for air quality issues Development of local standards for EV charging provision AQ Policy ENV1 developed as part of Local Plan	Cost anticipated mainly in relation to staff time for implementing guidance Assessment of air quality impacts will consider cumulative impacts from nearby sites to minimise 'emission creep' across the city. Standards for EV charging provision subject to annual review
8	Continue to explore incentives and opportunities to encourage the wider uptake of low and zero emission vehicles	Promoting Low Emission Transport	Priority parking for LEV's Company Vehicle Procurement - Prioritising uptake of low emission vehicles Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2023	Ongoing	CYC Transport / Public Protection / Parking Services / Transport Planning Partners may include infrastructure delivery partners, developers, micro-mobility solution providers	CYC	No	Not funded	Scheme Dependent	Planning	NOx/PM reduction not estimated	Number of low emission parking permits issued Further ULEV / ZEV / micro mobility trials undertaken	Parking incentives whilst use of rapid and ultra-rapid charge points Low emission discount offered on parking permits Advice to businesses on EV transition and infrastructure	CYC will explore further incentives to increase use of micro-mobility modes, such as E-Bikes / E-Scooters
9a	Improve public access to air quality information and advice	Public Information	Via the Internet	2023	Ongoing	CYC Public Protection / Public Health	CYC	No	Partially funded	Dependent on activity but likely to be <£10k for review and update of existing web content	Implementation	N/A	Web content subject to ongoing periodic review to consider topics of local significance and interest Availability of local, up to date, air quality monitoring data and annual summary reports	Air quality pages of CYC website Real-time air quality data available at Air Quality England. Diffusion tube data available on YorkView Promotion of smoke control area (SCA) requirements	Updates will assist with providing information to the public about the health impacts of air pollution and how behavioural change can reduce emissions and exposure. Updates will also cover issues such as the impacts of bonfire smoke

City of York Council - Fourth Air Quality Action Plan (AQAP4) Summary

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9b	Air Quality Alert / Notification Service	Public Information	Via the Internet / Via other mechanisms	2023	2024	CYC Public Protection / Public Health External IT platform provider	Measure subject to DEFRA grant	Yes	Funded	£50k - £100k	Planning	Measure aimed at reducing exposure rather than pollution reduction per se	Ongoing platform usage (e.g. visitor stats and subscriptions to notification service), supplemented with registered platform user feedback	DEFRA AQ Grant obtained for Air Quality Forecasting and Alert Service in 2023, currently in development	Will result in improved knowledge and awareness of air pollution, links to health impacts, and means to reduce exposure to pollutants via lifestyle choices / travel route / modal choice We will also explore wider behaviour change messaging in response to high pollution episodes
9c	Local promotion of 'Burn Better' campaign and rules around Smoke Control Areas (SCAs)	Public Information	Via the Internet / Via leaflets / Via other mechanisms	2023	Ongoing	CYC Public Protection / Public Health	CYC for ongoing local promotion of SCAs and existing campaigns New dedicated particulate awareness and reduction campaign subject to DEFRA grant	Yes	Funded	Local promotion of SCAs and existing campaigns <£10k New particulate campaign £10k - £50k	Planning	NO_x/PM reduction not estimated but communications campaigns can increase awareness of air quality issues and drive behavioural change	Annual promotion undertaken Reduction in solid fuel burning / change in domestic heating patterns, awareness of correct maintenance and efficient use of appliances and fuel certification schemes	Promotion undertaken via CYC media channels Autumn/Winter 2022 Compliance checks across solid fuel distribution outlets were progressed throughout 2022 to ensure that all solid fuels being sold were certified as 'Ready to Burn' DEFRA AQ Grant obtained in 2023 for campaign work in relation to domestic solid fuel burning and links to air pollution and health	Promotion of 'Burn Better' campaign will help householders choose cleaner fuels and ensure they are aware of best practice in terms of maintenance of solid fuel burning appliances.
10a	Continue to promote sustainable travel in York	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure Promotion of cycling Promotion of walking School Travel Plans Workplace Travel Planning	2023	Ongoing (funding dependent)	CYC Sustainable Transport CYC Marketing and Communications Schools Local businesses Sustrans	DfT	No	Partially funded	£100k - £500k (annually) for engagement with businesses, schools and the general community	Implementation	Hard to precisely quantify but target to increase modal shift away from private car to walking / cycling and public transport use	Various KPIs reported as part of Local Transport Plan, such as: Cycle counts / cycle training delivered School travel plans delivered Businesses adopting sustainable travel modes	Since 2021/22 CYC's I-Travel programme has delivered: E-cycle switch scheme E-cargo bike scheme Delivery of active travel campaign 'Better Points' scheme 'Bikeability' training to all Primary and Secondary state schools Urban Cycle Skills training for adults and families	Existing I-Travel programme subject to ongoing funding Continued work with schools to promote sustainable travel choices, minimise idling events, deliver cycle training, produce school travel plans and facilitate events to promote Walk to School week / Clean Air Day etc

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													Increase in bus patronage Increase in walking / cycling	York Walking Festival Production of cycle route videos and audio walking guides School Travel Planning CYC is currently developing a Local Cycling and Walking Infrastructure Plan (LCWIP)	Continued work with businesses to embed sustainable travel modes into current business models and encourage uptake Also see measure 10c for updates on CYC's LCWIP
10b	Delivery of Bus Service Improvement Plan (BSIP)	Transport Planning and Infrastructure	Bus route improvements Public transport improvements – interchanges, stations and services	2023	2025	CYC Sustainable Transport Bus companies Infrastructure providers	DfT	No	Funded	>£10m	Implementation	Bus emissions (post CAZ implementation) generally up to 10% of road traffic emissions on majority of network, but up to 25% in some areas of AQMA – see section 3.3	Various KPIs outlined in BSIP, examples include: Passenger trips per year Bus punctuality /excess wait time Service frequency % Electric Bus BSIP Target of 20 million bus passenger trips a year by April 2025 (25% increase on the peak seen in 2017/18).	Award of £8.4m through DfT's ZEBRA fund in March 2022 to fund 44 electric buses, with an additional award of £1.8m to increase the scope to co-fund a further 9 buses Award of £17m in April 2022 to support the development of key schemes and initiatives in line with York's Bus Service Improvement Plan, including wider electrification of the urban bus fleet, bus priority measures, improvements to stops, shelters and passenger information	See BSIP report to Executive Member of Transport
10c	Delivery of other LTP infrastructure measures	Transport Planning and Infrastructure	Other	2023	Ongoing	CYC Infrastructure providers	Scheme dependent	No	Scheme dependent	Scheme dependent	Implementation	Scheme specific York Outer Ring Road Air Quality Impact Assessment demonstrated a long-term 'moderate beneficial' residual effect on air quality within York city centre	Scheme specific / to be developed	Capacity upgrades to York Outer Ring Road (YORR) CYC is in the process of developing a Local Cycle and Walking Infrastructure Plan (LCWIP), which will designate strategic networks within York for cycling and walking and will identify and prioritise infrastructure schemes to deliver such networks. Consideration of Gillygate specific measures in progress	Scoping report for CYC LCWIP

City of York Council - Fourth Air Quality Action Plan (AQAP4) Summary

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11a	Regulation and control of industrial emissions	Environmental Permits	Other	2023	Ongoing	CYC Public Protection	CYC	No	Funded	£10k - £50k	Implementation	NO_x / PM emission reduction not estimated but will prevent further deterioration in air pollution via regulation and control of existing processes	Scheduled CYC inspections completed per annum	Annual inspection programme ongoing	Scheduled inspections undertaken by CYC Public Protection staff. Work programme subject to maintaining existing staff resource
11b	Regulation and control of domestic emissions	Promoting Low Emission Plant	Other Policy	2023	Ongoing	CYC Public Protection	CYC	No	Funded	£10-£50k	Planning	NOx / PM emission reduction not estimated – subject to review of boundaries and further assessment	Review smoke control area boundaries and implementation of new legislation, including enforcement methods Reduction in complaints of smoke nuisance	Compliance checks across key solid fuel distribution outlets have been undertaken as part of other routine CYC operations.to ensure that all solid fuels being sold were certified as 'Ready to Burn' in line with the Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020.	Work programme subject to maintaining existing staff resource Revised enforcement approach in line with amendments to the Clean Air Act 1993 made through the Environment Act 2021 CYC will also investigate sales of non-authorised solid fuels and complaints of non-compliance.
11c	Provision / promotion of energy advice services and upgrade grants to domestic and business sectors	Promoting Low Emission Plant	Other Policy	2023	Ongoing	CYC Carbon Reduction	External grant funding	No	Funded	Scheme dependent	Implementation	Home upgrade energy efficiency grants and advice services to residents and businesses will complement wider emission reduction measures of AQAP4. Across York, domestic buildings are the largest sources of greenhouse gas emissions at 31.9%.	Grants awarded / energy savings / carbon reduction	Rollout of Home Upgrade Grant (HUG) that provide insulation for low-income households to reduce heating bills and carbon emissions Building retrofit events delivered Resource Efficient Business (REBiz) programme Production of CYC Local Area Energy Plan outlining demonstrator and 'low regret' projects for near term implementation	CYC gas consumption will be reduced through a range of initiatives including building efficiency improvements, transitioning to electrical heating and encouraging staff to take steps to reduce energy usage when working from home. CYC secured £175,980 grant funding from the Government's Low Carbon Skills Fund to create decarbonisation plans for 21 schools and 5 leisure centres in the City, identifying opportunities to reduce energy

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															consumption, providing both financial and carbon savings. Building fabric upgrades (energy efficiency) and low carbon heating technology upgrades will contribute to improved local air quality and carbon reduction targets
12a	Maintain CYC's air quality monitoring network and respond to changing monitoring priorities	-	-	2023	Ongoing	CYC Public Protection Academic Institutions (equipment trials)	CYC	No	Funded (routine operation of existing equipment) Future upgrades subject to additional funding	£10-£50k per annum	Implementation	No direct air quality impact but used to monitor impact of AQAP measures and complementary CYC strategies affecting traffic and local development	Average and/or maximum concentrations of NO_2, PM_{10} and $PM_{2.5}$ across key areas in the AQMA / the wider area of York	Established monitoring network including 9 real-time monitoring stations and 233 passive NO_2 diffusion tubes across CYC area	Full details of CYC's up to date monitoring strategy and any changes are provided annually in CYC's Annual Air Quality Status Reports New and upgraded monitoring equipment subject to internal / external funding and national standards
12b	Ensure AQ data is disseminated to the public and shared with local leads for air quality, public health and transport	Public Information	Via the Internet Other	2023	Ongoing	CYC Public Protection	CYC	No	Funded	£10-£50k per annum	Implementation	N/A	Publication of annual air quality summary / ASR Briefings to local leads for Air Quality Real-time air quality data publication on online portal	AQ data currently disseminated via Air Quality England website and CYC Annual Status Reports hosted on council website Successful DEFRA AQ Grant bid for air quality alert / forecasting service	Costs relate to annual staff costs. Additional mechanisms to disseminate data, would be subject to additional funding.