



Author/Lead Officer of Report: Tom Finnegan-Smith,
Head of Strategic Transport, Sustainability and
Infrastructure

Version: Final - V6.00

Email: Tom.Finnegan-smith@sheffield.gov.uk

Report of: *Michael Crofts, Executive Director of Place*

Report to: *Cooperative Executive*

Date of Decision: *26th October 2021*

Subject: *Clean Air Plan*

Is this a Key Decision? If Yes, reason Key Decision:-	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
- Expenditure and/or savings over £500,000	<input checked="" type="checkbox"/>	
- Affects 2 or more Wards	<input type="checkbox"/>	
Which Executive Member Portfolio does this relate to? <i>Executive Member for Climate Change, Environment and Transport</i>		
Which Scrutiny and Policy Development Committee does this relate to? <i>Overview and Scrutiny Committee</i>		
Has an Equality Impact Assessment (EIA) been undertaken?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If YES, what EIA reference number has it been given? (<i>REF: 803</i>)		
Does the report contain confidential or exempt information?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If YES, give details as to whether the exemption applies to the full report / part of the report and/or appendices and complete below:-		
<i>"The (report/appendix) is not for publication because it contains exempt information under Paragraph (insert relevant paragraph number) of Schedule 12A of the Local Government Act 1972 (as amended)."</i>		

Purpose of Report:

This report updates on the development of the Sheffield and Rotherham Clean Air Plan (CAP) to tackle Nitrogen Dioxide (NO₂) exceedances and sets out the actions required to achieve compliance with our Direction by Government to reach legally compliant annual average levels of NO₂. In summary these are:

- Proceeding with the recommended CAP proposals which includes establishing a Category C charging Clean Air Zone (CAZ) within Sheffield City Centre with wider traffic management measures.
- Accepting the grant funding received from Government in March 2020
- Commencing public consultation in November 2021.
- Submission of the Full Business Case to Government early in 2022 including any revisions arising from the consultation
- Completing the procurement, and thereafter contract awards, for any necessary infrastructure, goods and services required, together with any other such steps, to implement and meet the aims and objectives of the Clean Air Plan.
- To report to the Executive on the consultation findings early in 2022.

Background

In common with other cities, air pollution is a major public health challenge that is damaging the health and life chances of people in Sheffield, contributing to the deaths of around 500 people a year in the city. Multiple places across our road network are in breach of legal limits for air quality with road vehicles (and particularly diesel vehicles), exposing communities to invisible but harmful concentrations of Nitrogen Dioxide (NO₂).

In 2017 Government placed Sheffield and Rotherham under a legal duty to improve the city's air quality by reducing NO₂ emissions below the legal limits in the shortest possible time.

In response, SCC and RMBC developed and submitted an Outline Business Case (OBC) to Government in December 2018, which identified the option to deliver compliance was a Category C+ Charging Clean Air Zone on and within the Inner Ring Road, along with a number of additional traffic management measures.

In February 2020 Government issued a further Ministerial Direction under which SCC are legally obliged to implement a CAZ C charging Clean Air Zone.

Having announced a review of our Clean Air Plan in September 2020, to consider the implications of Covid-19 and the lengthy period between the submission and Government's approval of the OBC, this is now complete.

The outcome of the review of the Clean Air Plan has confirmed that in order to achieve legally compliant levels of air quality in Sheffield we need to deliver a Class C Clean Air Zone along with wider traffic management measures. The review has also confirmed that the original proposals around the compliance standards for taxis can be amended to incorporate the current standards without major additional burdens on the majority of the existing taxi fleet .

The primary goal of the proposed Clean Air Zone is to encourage and support the removal of the most polluting vehicles from the city's roads in order to make our air cleaner and safer to breathe. It is not the intention to penalise drivers or companies and the report sets out the proposed financial support measures that will be offered to certain drivers to upgrade and replace non-compliant vehicles. In addition, the report includes details of specific fleet where circumstances determine that an exemption to charges is appropriate.

The CAP proposals are significant and form part of Sheffield's ambitions to deliver clean air for everyone and support the development of safe, reliable and clean transport options in the city.

Given the proposals to see the continued regeneration of the City Centre and the delivery of approximately 21,000 new homes in the central area, the importance of making our air cleaner and safer to breathe must be a pre-requisite to continued development. The proposals for the City Centre Vision will highlight this aspect further.

Whilst a major consultation on our CAP proposals was undertaken in Summer 2019, given the time that has elapsed and the development of the scheme, it is now proposed that consultation on the final Clean Air Plan proposals is undertaken. This will provide an opportunity for people to give feedback on the full details of the scheme, including financial support measures and exemptions, the detail of which was not previously available.

Alongside this, the Full Business Case will be developed in liaison with Government's Joint Air Quality Unit (JAQU), but only finalised once the outcome of the consultation is known and any final amendments to the scheme are made where necessary. In addition, arrangements to distribute funds to support those businesses, individuals and organisations who need to upgrade their vehicle to become compliant will be finalised and in line with existing delegated authority the delivery of the Clean Air Zone infrastructure will continue to be progressed.

Recommendations.

That the Cooperative Executive:

1. To approve acceptance of the grant funding of £23,967,436 awarded in March 2020 from the Department for Environment Food & Rural Affairs (DEFRA) and the Department for Transport to enable the Council to comply with its statutory duty through the measures described in this report.
2. Approves the launch of further consultation on the Clean Air Plan in November 2021 as detailed in this report.
3. Delegates authority to the Executive Director Place to enter into the contract for the successfully tendered infrastructure work required for the charging zone including supply, installation and maintenance of Automatic Number Plate Recognition cameras
4. Delegates authority to the Executive Director Place in consultation with the Leader of the Council and the Executive Member for Climate Change, Environment and Transport to submit to Government a Full Business Case to deliver a Category C Charging Zone as outlined in this report.
5. Where no existing authority exists under the LSOD, delegate authority to the Executive Director, Place, in consultation with the Executive Member for Climate Change, Environment and Transport, and with the Director of Financial and Commercial Services to approve such procurements and thereafter contract awards for any necessary infrastructure, goods and services required together with any other such steps to implement and meet the aims and objectives of the Clean Air Plan.

Background Papers:

WHO global air quality guidelines, September 2021

<https://www.who.int/publications/i/item/9789240034228>

The invisible threat: how we can protect people from air pollution and create a fairer, healthier society; British Lung Foundation and Asthma UK, February 2021

https://cdn.shopify.com/s/files/1/0221/4446/files/Invisible_Threat_FINAL_compressed.pdf?v=1612948799&_ga=2.175216866.1719479710.1633475143-418606468.1624021878

Clean Air Zone Outline Business Case – Acceptance of Further Grant Funding: Leaders Decision, 29 March 2019

<https://democracy.sheffield.gov.uk/mglIssueHistoryHome.aspx?lId=27888>

Air that is safe to breathe for all: Sheffield's Clean Air Zone Proposal, Cabinet report 21 November 2018,

<https://democracy.sheffield.gov.uk/documents/s33102/Clean%20Air%20for%20Sheffield%20-%20Final.pdf>

Sheffield City Council (2017) Clean Air Strategy,

<https://democracy.sheffield.gov.uk/documents/s29124/Clean%20Air%20Strategy%20Dec%20Cabinet%202.pdf>

Sheffield City Council (2018) Transport Strategy

<https://democracy.sheffield.gov.uk/documents/s31437/Transport%20Strategy%202.pdf>

Lead Officer to complete:-		
1	I have consulted the relevant departments in respect of any relevant implications indicated on the Statutory and Council Policy Checklist, and comments have been incorporated / additional forms completed / EIA completed, where required.	Finance: Ryan Keyworth
		Legal: Steve Eccleston and Henry Watmough-Cownie
		Equalities: Adele Robinson
<i>Legal, financial/commercial and equalities implications must be included within the report and the name of the officer consulted must be included above.</i>		
2	EMT member who approved submission:	Kate Josephs, Chief Executive
3	Executive Member consulted:	Cllr Douglas Johnson, Executive Member for Climate Change, Environment and Transport
4	I confirm that all necessary approval has been obtained in respect of the implications indicated on the Statutory and Council Policy Checklist and that the report has been approved for submission to the Decision Maker by the EMT member indicated at 2. In addition, any additional forms have been completed and signed off as required at 1.	
	Lead Officer Name: <i>(Insert name)</i>	Job Title: <i>(Insert job title)</i>
	Date: <i>(Insert date)</i>	

1.0 PROPOSAL

- 1.1 Air quality in Sheffield has exceeded required legal levels since 2010. In Sheffield air pollution contributes to the early deaths of around 500 people every year and particularly affects the long-term health of young people and those with existing health conditions. The Sheffield Clean Air Strategy 2017 stated that addressing the effects air pollution is a public health emergency.
- 1.2 In September 2021 the World Health Organisation released new Global Air Quality Guidelines that provide clear evidence of the damage air pollution inflicts on human health, at even lower concentrations than previously understood. The guidelines recommend new air quality levels to protect the health of populations, by reducing level of key air pollutants, some of which contribute to climate change.

1.3 Current Legal Requirement and relevant background information

- 1.3.1 In 2017 Sheffield City Council (SCC) and Rotherham Metropolitan Borough Council (RMBC) were jointly Directed by Government to reach legally compliant annual average Nitrogen Dioxide (NO₂) levels by 2021. Specifically, this required us to take action to address Nitrogen Dioxide emissions from road transport.
- 1.3.2 In November 2018 Sheffield City Council (SCC) Cabinet approved the submission of an Outline Business Case (OBC) to Government, for a Clean Air Plan (CAP) which included a category C + charging Clean Air Zone (CAZ) in central Sheffield. The CAZ C + zone would charge non-complaint (older than Euro 6 Diesel and Euro 4 Petrol) HGVs, LGVs, buses, coaches, with the added '+' requirement that taxis needed to be Ultra Low Emission standard, along with wider traffic management measures, the majority of which were to be delivered at key air quality hotspots in Rotherham. It is now feasible to align the taxi fleet standard with that within the Governments [national CAZ Framework](#). Therefore, it is no longer necessary for taxis to be of Ultra Low Emission standard to achieve the aims of the CAP. Consequently, the proposals have been amended, with more detail on the reasoning contained further in this report.
- 1.3.3 Government finally approved the OBC in February 2020 and issued a Ministerial Direction¹ under which SCC are legally obliged to implement a CAZ C charging Clean Air Zone with additional measures, to achieve compliance in 2021 and to submit a Full Business Case (FBC).
- 1.3.4 The Direction and grant award decision (see below) pre-dated the 16th March (national lockdown) and were before the enactment of the Coronavirus Act 2020, meaning that the implications of pandemic management policies had not been considered in setting the submission dates.
- 1.3.5 In April 2020 Government's Joint Air Quality Unit announced that the introduction of Clean Air Zones would be delayed as a result of the pandemic and at that time it was expected that the introduction of Clean Air Zones would be no earlier than January 2021. We have continued to liaise closely with Government and the Joint Air Quality Unit.

1.4 Grant funding awarded in 2020

- 1.4.1 Alongside the Legal Direction received in February 2020, Government awarded grant funding for implementation of the CAP proposals, funding of this type would

¹ Environment Act 1995 (Sheffield City Council and Rotherham Metropolitan Borough Council) Air Quality Direction 2020

usually be released after the approval of a Full Business Case so this was unexpected.

- 1.4.2 JAQU awarded £23,967,436 to deliver Sheffield and Rotherham’s Clean Air plans. £3.5m has been allocated from the **Implementation Fund** and £20.4m from the **Clean Air Fund**. The **Implementation Fund** is ring-fenced to measures required to reach annual compliance i.e. charging zone and road schemes. The **Clean Air Fund** is a competitive fund that provides funding to mitigate the economic impact for people that are most disproportionately affected by the introduction of the charging clean air zone, see award values in Table 1. Clean Air Fund – Financial Support Measures below.

1.5 Clean Air Fund grant funding:

- 1.5.1 Sheffield and Rotherham have been in discussions with JAQU to retain the full funding allocation awarded March 2020 and have provided evidence to support and justify the requirement for financial support for fleet in the city to upgrade.
- 1.5.2 Further detailed work including market research and stakeholder engagement has been undertaken to develop the proposals since the grant award. We have also been able to review updated fleet profiles to understand how different vehicles have upgraded since the CAP work commenced in 2017 and have some insight into the success of comparative measures where Clean Air Zones have already been launched.
- 1.5.3 Our financial support packages have been updated and it is considered that the measures will provide a significant benefit to those drivers that are most impacted by the proposed Category C Clean Air Zone. These measures, outlined in the table below, will be included in the proposed consultation.
- 1.5.4 We are seeking JAQUs approval to vary the funding allocations to provide the required flexibility of the financial support measures to best meet our local needs. Final assessment of the CAF funding allocations for the different support packages will be informed by the consultation. Allocations will be further reviewed dependant on uptake when the schemes go live from early 2022.
- 1.5.5 Grants and loans to support upgrades are proposed to be set at the following levels and will be administered from mid-2022 onwards:

Table 1. Clean Air Fund – Financial Support Measures

Vehicle Type	Potential Support	Potential total expenditure
Wheelchair Accessible Hackney Carriage Taxis	Up to £10k grant Or Interest free loan	£3.3m
Private Hire Vehicles	Up to £3k grant Or Interest free loan	£2.5m
Vans	Up to £3.5k grant Or Interest free loan	£5.1m

Lorries	Up to £16k grant	£3.5m
Buses & Coaches	Up to £16k grant	£2.6m

1.5.6 The support will be allocated according to eligibility criteria to help those drivers most affected by the introduction of the charging zone.

1.6 **Implementation Fund award:**

1.6.1 Funding of £3.5m was also awarded from the Implementation Fund for the delivery of the 'compliance measures', which includes all of the infrastructure costs of installing and implementing the Clean Air Zone and traffic management schemes in Rotherham.

1.6.2 JAQU have confirmed that further Implementation Fund monies can be accessed at FBC stage. Final detailed design and delivery costs are currently being compiled as part of the FBC.

1.7 **CAP review work**

1.7.1 A review of the Sheffield & Rotherham Clean Air Plan was publicly announced by SCC in September 2020. The review considered both the potential implications of the time that had elapsed since the OBC had been submitted and the implications of Covid-19.

1.7.2 ***Covid-19 implications:***

In February 2020 the implications of the national pandemic were emerging and national lockdown in the UK was announced on the 16th March 2020. Different periods of lockdown restrictions continued at a national and local level through 2020 and at the start of 2021. The implications on travel were significant and this brought about associated improvements in air quality.

In close liaison with JAQU the potential medium- and long-term implications of Covid-19 on travel and transport were reviewed. However, towards completion of our analytical review, we were advised in a letter from Ministers in February 2021 that due to the significant uncertainties associated in forecasting these impacts that no Covid-19 related impacts should be considered as part of our review.

From our monitoring of road traffic, it is clear that a number of key routes across the city are now back, or close to, pre-pandemic volumes and along with this are aligned increases in air pollution.

1.7.3 ***Wider information accounted for within the review:***

Given the time that had passed since the submission of the OBC in December 2018 more recent roadside air quality monitoring data was available. This included data from a number of new monitoring locations introduced at the start of 2019 at areas of interest identified in the OBC where previously no monitored information was available. Whilst air quality monitoring in 2020 was clearly impacted as a result of the pandemic, in liaison with JAQU it was agreed that the evidence base would be updated using new pre-pandemic data where previously the OBC had relied solely on modelled data.

In addition, where changes to the road network had occurred the transport model was updated to reflect these changes. These include the junction improvements at Bridgehouses and the changes across the City Centre including proposals that form part of the broader Connecting Sheffield Transforming Cities scheme.

1.7.4 **Other considerations relating to the pandemic:**

The pandemic is unprecedented in modern times and the impacts are still being observed and cannot be fully understood at this time.

Whilst the Government has made a number of financial packages available to businesses and the self-employed, the Local Authority is very aware that the pandemic has and continues to impact on people's lives in different ways.

As far as was possible during the pandemic, stakeholder engagement took place with key stakeholders who would be most economically impacted by the CAZ charges. Feedback has been incorporated into the detailed CAF funding mitigation packages put to JAQU to strengthen the case for financial support for Taxi, HGV, LGV, buses and coaches to upgrade to compliant vehicles.

1.8 Taxi Standards:

- 1.8.1 A key implication arising from the February 2020 funding award and the economic implications of the pandemic has been in relation to the higher ULEV standards that we proposed as the minimum compliance standards for Hackney Carriages and Private Hire Vehicles (PHV). This proposed that Hackneys would be required to be either Electric Vehicles or retrofitted to Liquid Petroleum Gas (LPG), and PHVs would have to be Euro 4 Petrol Hybrid or better. The national CAZ compliance standards are Euro 6 Diesel or Euro 4 Petrol.
- 1.8.2 Our local licensing standards have successfully achieved a fully wheelchair accessible Hackney Carriage fleet in Sheffield. However, the availability of appropriate electric wheelchair accessible Hackney Carriage vehicles is limited. At the time of our consultation in Summer 2019 there were only two models of vehicle suitable, and this remains the case. The cost of these vehicles is significant, particularly given the limited second-hand market, and production was adversely impacted because of the pandemic.
- 1.8.3 As such, it is considered that the implications of moving to an ULEV minimum compliance standard for taxis at this time would be too onerous and within our review we have tested the implications of moving to the national CAZ compliance standards. Our assessment has confirmed that a Category C Charging Clean Air Zone with Euro 6 Diesel and Euro 4 Petrol standards for Hackney Carriages and PHVs achieves compliance.
- 1.8.4 Whilst it is recommended moving to the national compliance standards for taxis, the aspiration remains to help those who can, to move to an electric vehicle. As part of our package of financial support measures we will be offering a higher level of funding for taxi drivers to upgrade to an electric vehicle (up to £10k for a Hackney Carriage and £3k for a PHV).
- 1.8.5 Wider supply chains continue to be disrupted in variable ways leading to limited availability of compliant vehicles and some other materials such as highway infrastructure required for the charging zones. The project team continue to engage with suppliers to understand these impacts and how they might ultimately affect the deliverability of the CAP. Exemptions to daily clean air charges will be offered to drivers who are in the process of upgrading but are suffering from supply chain constraints.

1.9 CAZ Exemptions:

- 1.9.1 The National Clean Air Zone Framework² sets out a number of exemptions to charging that apply at a national level and therefore need to be included in every Clean Air Zone.
- 1.9.2 The national framework also outlines the ability for Local Authorities to consider local exemptions and the circumstances in which these may be considered appropriate. In providing exemptions it must be shown that these do not affect the ability for an area to achieve compliance in the shortest possible time. A breakdown of the exemptions currently proposed is presented in Appendix 1.

1.10 Current Position:

- 1.10.1 Following the February 2020 Ministerial Direction Sheffield City Council (SCC) are legally obliged to implement a Category C charging Clean Air Zone along with wider traffic management measures, to achieve compliant levels of annual average NO₂ in 2021, and to submit a full business case to Government.
- 1.10.2 Although air quality across the city improved in 2020 as a result of the lower traffic levels during periods of lockdown, there are still locations where compliant levels of air quality are not met. Without intervention Sheffield has locations that are currently predicted to remain in exceedance until 2025.

1.11 The recommended proposal:

- 1.11.1 The Clean Air Plan proposal is to progress a CAZ C charging zone in Sheffield in conjunction with traffic management measures and the delivery of the financial support measures for people to upgrade to compliant vehicles.
- 1.11.2 Updated evidence has shown that the CAZ C zone is the option most likely to achieve compliance within the shortest time. The predicted year for achieving compliance is currently 2022 based on an anticipated implementation of the scheme by September 2022³.
- 1.11.3 Fleet upgrades observed since 2017 (OBC evidence base) mean that the ultra-low emission ‘+’ standard for taxis previously proposed is no longer required to reach compliance. It is now proposed that the CAZ compliance standard for Hackney Carriage and Private Hire Vehicles (PHV) in all CAZ options is Euro 6 Diesel or Euro 4 Petrol.
- 1.11.4 Note that the CAZ C charging zone remains as that consulted on in 2019 with the exemption that the taxi vehicle standards have changed and are now in line with the National Government CAZ Framework.

Clean Air Zone Boundary	The area bounded by, and including, the Inner Ring Road and all roads within it. This is the same CAZ boundary as proposed within the consultation undertaken in Summer 2019.
Times of Operation	24 hours a day, 7 days a week.

²

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863730/clean-air-zone-framework-feb2020.pdf

³ Subject to approval of FBC and joint SCC and JAQU agreement on the overall ‘readiness’, including that the Central Charging Portal and national Vehicle Checker is fully available.

	Anticipated implementation September 2022.
Vehicles affected	<ul style="list-style-type: none"> • Licensed Hackney Carriage • Licensed Private Hire Vehicles • Bus • Coach • Minibus • LGV • HGV
Proposed daily charge (single charge even if making multiple trips) for non-compliant vehicles (i.e. those vehicles older than Euro 6 Diesel and Euro 4 Petrol)	<p>£50 - HGV, Coaches and Buses</p> <p>£10 – LGV, Minibus, Licensed PHV, and Licensed Hackney Carriage</p>
Wider traffic management measures required ⁴	<p>Northbound only Bus Gate on Arundel Gate from a point north of Novotel access.</p> <p>Anti-idling enforcement at Bus Stops on Arundel Gate.</p>

1.12 **Consultation:**

1.12.1 Consultation on the detailed CAP proposals is planned to commence at the start of November 2021. The method and form of consultation will broadly follow the consultation undertaken in Summer 2019 with the primary consultation questions hosted on citizen space with updated information on the scheme proposals available on the Clean Air Sheffield section of the Council's website.

1.12.2 The additional information provided will include:

- Information about the charging zone
- The different support packages to mitigate the impact on those most affected by providing financial support to upgrade to a compliant vehicle.
- National and local exemptions

1.12.3 Meetings will be held with key stakeholder groups. Specific questions will be included for businesses, taxi drivers and the general public.

The consultation will be used to inform the final position on proposed exemptions and where possible in refining aspects of the final financial support packages.

⁴ It should be noted that as part of the joint Sheffield and Rotherham CAP that Rotherham MBC will be taking forward a range of traffic measures.

1.13 Full Business Case and Implementation:

- 1.13.1 A Full Business Case (FBC) needs submitting to JAQU as soon as is practicably possible, therefore it is recommended that the authority to submit the FBC to Government is delegated to the Executive Director of Place, in consultation with the Executive Director of Resources and Executive Member for Climate Change, Environment and Transport. The FBC will only be finalised following full consideration of the consultation findings.
- 1.13.2 Implementation of the zone and delivery of the financial mitigation packages will continue to be progressed (as per the February 2020 Direction) alongside the consultation and finalisation of the FBC utilising the grant funding previously received from Government.
- 1.13.3 Siemens successfully tendered for the infrastructure work required for the charging zone including supply, installation and maintenance of Automatic Number Plate Recognition cameras. This contract must be entered into by the 31st October 2021 as the framework under which it was tendered expires on that date. Failure to do so would mean a new tender process carrying risks of increased costs, potential supply issues and delay to the timescales set out in this report. Following a short preparation period, the installation process is planned to commence in November 2021.
- 1.13.4 It should be noted that following a Cabinet decision in March 2021⁵ Rotherham MBC are progressing the statutory consultations and procurement required for the delivery of their compliance measures which comprise of a number of traffic management schemes in Rotherham. RMBC will also need to approve the joint Sheffield and Rotherham CAP FBC prior to submission to Government.

1.14 Broader action on Air Pollution and Carbon emissions from Transport

- 1.14.1 In line with our legal direction, our Clean Air Plan focuses on tackling Nitrogen Dioxide (NO₂) from road traffic in the shortest time possible. Approximately 50% of NO₂ comes from tailpipes of the city's vehicles. In addition, 27% of the city's overall Carbon emissions (CO₂e) comes from transport, which is the biggest overall contributor in Sheffield.
- 1.14.2 Whilst the Clean Air Plan measures are essential to achieve current legal limits, addressing air pollution more fully and tackling transport's role in responding to the Climate Emergency is fundamentally an issue of how we live and how we choose to move around the city. In June 2018, Sheffield City Council agreed a new [Transport Strategy](#) which created a long-term vision for transforming the city's infrastructure to make it easier to travel around Sheffield by the most sustainable modes, prioritising the delivery of improved infrastructure for walking and cycling and ensuring that public transport is integrated, faster and more reliable.
- 1.14.3 Through the development of the recent [Pathways to Zero report](#) we know that the action required will need to result in an overall reduction in vehicle trips; with a significant switch to active and public transport away from private cars; and that all remaining motorised vehicles will need to be upgraded to electric or other zero emission fleet to deliver our Net Zero ambitions. This will be reflected in the upcoming 10 Point Plan for Climate Action
- 1.14.4 There are a number of significant projects that we have delivered to contribute towards these outcomes, and further improvements are planned through our Connecting Sheffield programme, which will be expanded should a number of

⁵ <https://modern.gov.rotherham.gov.uk/documents/s130236/Report%20-%20CAZ%20Scheme%20Approval.pdf>

current funding bids to Government be successful. These infrastructure projects sit alongside the continued delivery of wider initiatives including, but not limited to: training, support, and bike loans to enable active travel; EV van and taxi trial schemes; the roll out of public EV Charging; work to develop the Bus Service Improvement Plan (BSIP) and Enhanced Bus Partnership with SYMCA partners.

- 1.14.5 Delivery of projects to improve conditions within local communities will also be essential and measures we are progressing include: Low Traffic Neighbourhoods, to reduce rat running and create safe and accessible streets; School Streets, to reduce traffic and emissions outside schools and encourage people to walk, scoot or cycle; continued delivery of the citywide commitment to 20mph speed limits in residential areas.

1.15 Next Steps

- 1.15.1 Subject to the recommendations of this report being endorsed, officers will:

- Finalise consultation information so that this can commence at the start of November 2021.
- Continue to develop the implementation and contract arrangements required to deliver the CAZ and other CAP measures.
- Prepare FBC documentation for submission to Government.
- Make arrangements to distribute funds to support those businesses, individuals and organisations who need to upgrade their vehicle to become compliant.

2. HOW DOES THIS DECISION CONTRIBUTE?

- 2.1
- Contributes towards meeting the legal obligation
 - Contributes towards protecting public health and making a positive impact on those who are vulnerable to roadside pollution including working drivers.
 - Contributes positively towards net-zero targets
 - Contributes towards achieving the corporate objectives within the One Year Plan

3.0 HAS THERE BEEN ANY CONSULTATION?

- 3.1 Public consultation the CAP including a category C '+' (higher ultra-low emission standard for taxis) was undertaken between the 1st July and 26th August 2019 covering both Sheffield and Rotherham. The [consultation reports](#) can be viewed on the SCC website.
- 3.2 Additional stakeholder engagement with business and other impacted groups / individuals was undertaken during 2020 and into early 2021, this provided some essential insights to inform the development of the mitigation measures.
- 3.3 As covered in Section 1, further consultation on the detailed proposals is scheduled to commence in November 2021.

4.0 RISK ANALYSIS AND IMPLICATIONS OF THE DECISION

4.1 Equality of Opportunity Implications

- 4.1.1 **Health Impact Assessment summary:** The Clean Air Zone, if successful in reducing NO₂ will improve Sheffield's air quality which should directly impact on cardiovascular and respiratory health of residents. The CAZ is only for nitrogen

dioxide reductions and other air pollutants are not covered – these pollutants such as fine dust (PM₁₀ and PM_{2.5}) will continue to be produced by less polluting vehicles as they are a result of wear and tear on the vehicle and road surface. Therefore, a modal shift to active travel and mass transit would be needed to deliver overall air quality improvements. Those switching from car use to active travel (particularly walking, cycling, running, scooting, skateboarding) are likely to be healthier as they will be more likely opportunistically to achieve physical activity targets of 30 minutes, 5 times a week as part of their commute⁶

4.1.2 **Equality Impact Assessment summary:** Air pollution can be harmful to everyone, some people are more vulnerable than others because they are exposed to higher levels of air pollution in their day to day lives, live in a polluted area, or are more susceptible to health problems caused by air pollution. The most vulnerable people face all of these disadvantages. Overall, the introduction of a charging Class C CAZ, which brings about compliance with legal levels for nitrogen dioxide, will have positive health benefits for all and in particular for those people in the following protected characteristic groups:

- Age: Children and the elderly are most at risk
- Disability: Those with respiratory or cardio-vascular conditions are specially at risk
- Pregnancy and Maternity: Unborn babies are at risk and there is increased risk of miscarriage.

Addressing Sheffield's air pollution challenge should bring benefits to communities across the whole city, particularly as some of the most significant polluters (buses, taxis, LGVs) drive around and through neighbourhoods in every part of Sheffield.

As vehicle fleets are upgraded and replaced in response to the CAZ, the NO₂ concentrations around the whole road network should improve at a faster rate than without action. Changes in the automotive industry and shift toward hybrid and electric vehicles and away from diesel should continue to bring reductions in air pollution to communities and neighbourhoods in Sheffield.

The CAP proposals involve significant change but are intended to bring positive health and wellbeing outcomes for all communities and particularly those most exposed to the harmful levels of NO₂. There are economic impacts resulting from the CAZ charges which have been considered, and the financial support measures have been developed to mitigate these as much as possible. Consideration is needed to protect people with limited mobility to mitigate potential impacts on essential services such as accessible taxis or buses.

The EIA will continue to be updated and will be published again after the consultation analysis work is completed.

4.2 **Financial and Commercial Implications**

DEFRA and DfT have awarded grant funding of which the key features (not exclusive) are summarised below. The Grant Manager will need to read, understand and comply with all of the grant terms and conditions and ensure that there are no ongoing, unfunded costs when the grant funding ends.

⁶ <https://travelwest.info/essential-evidence/no-186-active-travel-physical-activity-evidence-review>
<https://travelwest.info/essential-evidence/119-walking-to-work-does-it-contribute-to-increasing-total-physical-activity-time>

4.2.1 **Revenue CAZ Grants**

1. NO2 PLAN - Implementation of Measures Grant (No 31/4039): £1.302m

- Detailed budget headings for grant expenditure are identified in the grant offer letter
- Implement local plan to reach legal NO2 compliance in the shortest possible time.

2. NO2 Plan - Clean Air Fund Grant (No 31/4038): £12.628m

- Support individuals/businesses affected by the local plan to reach legal NO2 compliance in the shortest possible time (projects to be supported are identified in the grant offer letter).

For both CAZ revenue grants the following conditions also apply:

- Any unused funding is to be used for delivering air quality improvements and/or supporting individuals and businesses affected by local air quality plans.
- Any project changes must be discussed with JAQU asap and substantial changes may require a variation

4.2.2 **Capital CAZ Grants.**

3. NO2 Plan - Clean Air Fund (No 31/4051): £7.785m

- Support individuals/businesses affected by local plan to reach legal NO2 compliance in the shortest possible time (projects to be supported are identified in the grant offer letter).
- JAQU will provide 5% of EV charge points funding to RMBC at the time payment is made.

4. NO2 Plan – Implementation Fund Grant 2020 (No 31/4052): £2.209m

- The grant will fund Rotherham Road Schemes.
- Implement local plan to reach legal NO2 compliance in the shortest possible time.
(As per OBC September 2019 - CAZ Class C).

For both CAZ capital grants the following conditions also apply:

- Unused funding to be used for delivering air quality improvements and/or supporting individuals/ businesses affected by local air quality plans.
- Changes to any element of the project must be discussed with JAQU as soon as possible and any substantial change may require a variation
- The grant may be used only for the purposes that a capital receipt may be used for in accordance with regulations made under section 11 of the Local Government Act 2003.
- Failure to comply with any of the conditions will lead to grant clawback

For note:

If any risks to the ability to meeting compliance as set out in the legal direction are identified JAQU must be notified as soon as possible and in advance of the reporting periods. Actions taken to mitigate will need agreed with JAQU.

Grants are made on the basis of information in the OBC and require delivery in line with the information provided (Implementation of a class C charging CAZ and additional measures as soon as possible to achieve compliance in 2021).

4.2.3 **Other**

The resource implications of the introduction of the clean air plans will be set out in the Full Business Case. The introduction of the zone, other compliance measures and payment of support will be funded via the grant allocations. The on-going costs associated with the operation of the zone will be funded through the surplus charging income generated.

Any surplus income generated after covering the costs of the operation of the zone can only be used for re-investment in sustainable transport schemes in the city and cannot be used for any other purpose.

All procurement activity identified in the Final Business Case will comply with Public Contract Regulations 2015.

4.3 **Legal Implications**

4.3.1 Under Part IV of the Environment Act 1995, Local Authorities are required to have regard to any national strategy on clean air which is published by the Secretary of State; and to review and assess air quality in their areas and to report against objectives for specified pollutants of concern, to the Department for Environment, Food and Rural Affairs (DEFRA). The Secretary of State, in exercise of the power conferred by section 85(5) of the Environment Act 1995, Directed that SCC and Rotherham on 24 February 2020:

1. Must take steps to implement the local plan for NO₂ compliance for the areas for which they are responsible.
2. Must ensure that the local plan for NO₂ compliance is implemented so that;
 - (a) compliance with the legal limit value for nitrogen dioxide is achieved in the shortest possible time, and by 2021 at the latest;
 - (b) exposure to levels above the legal limit for nitrogen dioxide are reduced as quickly as possible.
3. Must prepare a full business case for the areas for which they are responsible.
 - (a) The full business case must be submitted to the Secretary of State as soon as possible and by 24 March 2020 at the latest and must describe (Schedule 1) the implementation of a Charging Clean Air Zone class C with complementary measures.

Under section 85(7) of the Environment Act it is the duty of a local authority to comply with a Direction given to it.

4.3.2 In November 2018 this Authority approved the submission of the Outline Business Case to Government and it was anticipated that the Full Business Case would be submitted thereafter. The submission of a FBC has not proved possible as set out in this report.

4.3.3 Action to manage and improve air quality is a legal requirement. SCC has received a Ministerial Direction during the development of the proposed CAZ scheme. The effect of which is that the Council must fulfil its statutory duty to achieve compliance with air quality standards by 2021, at the latest and in any case, in the shortest time

possible, by the implementation of the CAZ C charging scheme as mandated. Compliance with that deadline has not so far proved possible as set out within the report. The Authority's failure to submit the FBC and implement the mandated CAZ C charging scheme within the prescribed deadlines imposes a serious risk to the Council and gives rise to potential legal challenges by way of judicial review. There is also the risk that any grant funding already provided to SCC such funds could be recovered by Government, by way of clawback.

4.4 Other Implications

4.4.1 *Impact on individuals*

Poor air quality is responsible for about 3% of all illness and just less than 5% of deaths in Sheffield. There is no bodily process that isn't accelerated by one form of pollution or other. In assessing impact, it is also important to consider the role of pollutants both causing and accelerating the progress of a disease. The estimates are probably underestimates as the science is continually developing and we are continually learning more about the negative health impact of air quality.

There are a significant number of children who are having their life course influenced by something which isn't in their control, and we know the impact of air pollution is regressive - people of low income exposed to greatest pollutants. Pre-existing conditions (for example asthma or cardiovascular disease) make people more prone to the impacts of pollution, those conditions are more common in more deprived communities, combined with pollution per se being higher in more deprived communities.

Increasingly we are seeing that particulates (PM – particulate matters) and black carbon can get into the placenta and into unborn babies, and we know children are also more sensitive to the negative impacts in terms of the impact on developing brains, lungs, immune system (moving it to a more allergic / inflammatory prone phenotype). We are beginning to see a different type of asthma with more, late onset non allergic asthma. We are also beginning to see more very early onset wheezing in very young babies.

The [coroner report](#) on the death of Ella Kissi-Debrah where air pollution was directly attributed to the death of this girl notes that this is will not be the last time such a case is heard.

4.4.2 *Public health policy*

Whilst it is perhaps inevitable that national policy is driven by compromise There are no circumstances in which air pollution could be seen as a good thing. The distinction between legal limit and safe can't be underscored enough. There isn't a "safe" limit from a public health perspective. The World Health Organisation (WHO) set out a dramatically reduced limit for emissions linked to fossil fuels, the recommended NO₂ limit is lowered from 40 µg/m³ to 10µg/m³. It has also lowered the recommended limits for average annual PMs.

The WHO stated that on PM2.5 Almost 80% of deaths related to PM2.5 could be avoided if the current air pollution levels were reduced to those proposed in the updated guideline. Some of the new guideline values look feasible for the UK to meet, within this decade, if clean technologies work as hoped and implementing net zero progresses at pace.

Nitrogen dioxide (NO₂) for example is already starting to fall as older vehicles retire and battery electric vehicles increase in number; there is the prospect of largely eliminating this as a cause of harm in the medium to long-term.

Of note WHO devoted significant space to the most vulnerable in society; underscoring that the risks of air pollution are not evenly distributed. Meeting the public health challenge will need both population shift and effort to protect the most vulnerable. A 1 ug change across a population will have a significant impact. The implications are the need to shift social norms, make an environment that supports non car modes of travel and set out changes that we can all make supported by the right environment.

5. ALTERNATIVE OPTIONS CONSIDERED

- 5.1 In assessing options, the primary success factor required by Government is ensuring 'compliant levels of Nitrogen Dioxide (NO₂) emissions within the shortest time'. The Full Business Case (FBC) appraisal process will follow HM Treasury guidance and be consistent with the approach taken at OBC.

Post Covid 19, remodelling work was undertaken to establish whether any alternative CAZ approaches would be sufficient to meet the legal obligations. A CAZ C continues to be the model most suited to achieving compliance within the shortest time and this remains the requirement mandated by Government. No other form of CAZ is permissible without Ministerial consent.

A set of technical documents detailing the analytical modelling work will be submitted to Government, forming part of the Full Business Case. These documents are currently being drafted and will be submitted to the JAQU for review by their technical assurance panel prior to FBC submission. Further detail will be published on the SCC Clean Air website after JAQU technical review process is completed.

6.0 REASONS FOR RECOMMENDATIONS

- 6.1 The recommended proposal is predicted to reach legal compliance within the shortest time to achieve the outcome of protecting public health by minimise exposure to harmful NO₂ pollution.
- 6.2 Other recommendations within this report are included to ensure that in the CAP actions can be progressed as quickly as possible to achieve the outcome above.

Appendix 1: Clean Air Plan Proposed Exemptions - V1.00

This page is intentionally left blank