

Bath & North East Somerset Council

MEETING:	Climate Emergency and Sustainability Policy Development & Scrutiny Panel		
MEETING DATE:	27 June 2022	EXECUTIVE FORWARD PLAN REFERENCE:	
		E	
TITLE:	Bath Clean Air Plan 2021 update		
WARD:	All		
AN OPEN PUBLIC ITEM			
List of attachments to this report:			
Bath Clean Air Zone Annual Support Summary 2021			
Bath Clean Air Zone Annual Monitoring Report 2021 with supporting appendices			

1 THE ISSUE

- 1.1 Poor air quality is the largest known environmental risk to public health in the UK. Investing in cleaner air and doing more to tackle air pollution are priorities for the UK government, as well as for Bath and North East Somerset Council (B&NES). B&NES has monitored and endeavoured to address air quality in Bath, and the wider B&NES area, since 2002.
- 1.2 In 2017, the Council was directed to introduce a Clean Air Zone (CAZ) to expedite the reduction of nitrogen dioxide concentrations in the centre of Bath and achieve compliance with government objectives in the shortest time possible and by 2021 at the latest. The CAZ was launched on 15 March 2021.
- 1.3 This report reviews the performance of the CAZ during its first year of operation and the progress which has been achieved in improving air quality throughout the city.
- 1.4 The report provides an update on the formal assessment of the scheme in 2021 by the Joint Air Quality Unit (JAQU, a joint department between DEFRA and DfT) and the progress achieved in fulfilling the Ministerial Directions served upon the council by central government.

2 RECOMMENDATIONS

The Panel is asked to:

- 2.1 Note the report and accompanying presentation at the Panel meeting and discuss the performance of the CAZ during the first year of operation.

3 THE REPORT

3.1 The Bath Clean Air Zone was launched on the 15 March 2021 and on receipt of air quality data from the first year of operation, JAQU are assessing whether the council has fulfilled the requirements of the three Ministerial Directions served since 2017, and achieved the required reductions in harmful nitrogen dioxide pollution in the shortest time possible.

3.2 Since the introduction of the CAZ the council has produced quarterly reports providing information on air quality, traffic flows and investigations into concerns of traffic displacement, which have now been brought together in an annual Bath Clean Air Zone Monitoring Report 2021. This annual report also provides additional data collected as part of the monitoring and evaluation plan, which was submitted as part of the CAZ Full Business Case in 2019.

3.3 The full Annual Report (and supporting appendices) is attached and is accompanied by a Summary Report which highlights the important points and messages. The key outcomes around the improvements in air quality are:

- Despite the impacts of Covid and Cleveland Bridge closure, nitrogen dioxide (NO₂) concentrations in the CAZ **reduced by 21% since the baseline year, 2019**. This is despite traffic flows in Bath largely returning to those seen pre-pandemic.
- There were three monitoring locations in Bath that, whilst having an overall reducing trend in concentrations, did not meet the annual limit value of 40 µg/m³. They are:

Walcot Parade 2 (43.1 µg/m³), Wells Road (42.6 µg/m³), and Dorchester Street (40.5 µg/m³).

The council awaits confirmation from JAQU as to how these sites will be treated in their formal assessment of the scheme, as these monitoring locations have been historically located and do not accord with the Air Quality Standards Regulations 2010 upon which the Ministerial Directive was issued and JAQU base their formal assessment.

All of these sites do, however, sit within the scope of the Local Air Quality Management Framework monitoring regime and therefore remain an ongoing concern for the council.

- Air quality and traffic flows have been monitored outside of the CAZ to determine if the zone has simply displaced traffic and associated emissions, and findings show that nitrogen dioxide concentrations in urban area outside of the CAZ but within Bath, Bathampton and Batheaston **reduced by 22% since 2019**.

3.4 An appendix, providing nitrogen dioxide concentrations data on all monitoring locations in 2021, both within the CAZ and outside of the zone, can be found in Appendix 3 to the Annual Report.

3.5 Appendix 2 of the Annual Report provides updates on the investigations which have been carried out in response to concerns about potential displacement of chargeable vehicles, which may be trying to avoid the zone. A range of monitoring methods have been used as part of these investigations, including the deployment of automatic traffic counters and temporary ANPR (automatic recognition number plate) cameras to provide specific information on the compliance status of vehicles travelling along a particular part of the road network.

Of the 17 investigations, 7 locations have been determined as having no displacement impacts, 2 locations will be reviewed following the full re-opening of Cleveland Bridge, 2 locations have further monitoring in progress and 6 locations require ongoing monitoring at this stage.

3.6 From the launch of the scheme, the council has been keen to maintain awareness around driver behaviour, including the request not to idle engines unnecessarily. Bespoke signage has been produced and an online toolkit is now being developed so that educational material reinforcing the messages around anti-idling, can be downloaded and used by community groups.

3.7 The performance of the Bath Clean Air Zone scheme is being closely scrutinised by the JAQU in collaboration with Ipsos UK and the Institute for Transport Studies (ITS) based at the University of Leeds. In May 2022, a [Central Evaluation Report](#) was published on the impact of Local NO₂ Plans which provided insight on the first 6 months of data from the operation of the Bath scheme (March 2021- October 2021), as well as updates on the other live schemes in Birmingham and Portsmouth. Accepting that this is a very early-stage analysis, this report supports our local findings and key outcomes are:

- NO₂ levels in Bath have decreased since the CAZ was implemented. Taking into account COVID restrictions and the Cleveland Bridge closure, alongside an analysis of air quality in comparable locations, the suggestion is that the observed improved air quality can be partially attributed to the CAZ introduction.
- Evidence suggests that the CAZ has been successful in encouraging the enhancement of vehicle compliance. While COVID is the main driver for the observed fluctuations in the volume of traffic in the CAZ area in Bath, an analysis of the composition of the fleet driving into the CAZ area highlights a clear move toward compliant vehicles across all vehicle types.

- A comparison between air quality data in the B&NES CAZ and that in control sites in Reading, Oxford and Worthing suggests that improvements in air quality in Bath may be causally related to the B&NES CAZ. However, a longer time series of quality assured measurements is needed to improve the confidence and certainty of this conclusion.
- Following the CAZ introduction on March 15, 2021, there is no significant deviation in the weekday traffic flow trends (incrementally increasing January to July 2021) at any of the eight Automatic Traffic Counter (ATC) sites, whether outside the CAZ (three sites) or within (five sites). This suggests the CAZ launch had a minimal impact on the aggregate level of traffic inside and outside the CAZ area.

4 STATUTORY CONSIDERATIONS

4.1 The council has received a total of three separate Ministerial Directions throughout the development of the CAZ scheme, which require the council to fulfil its statutory duty to achieve compliance with the relevant air quality standards by 2021 at the latest and in any case, in the shortest time possible.

4.2 The formal assessment by JAQU as to whether the council has 'achieved success' with the Ministerial Directions is currently in progress. JAQU have provided the following points for information:

- JAQU understands that local monitoring shows that Bath is making good progress towards achieving legal compliance for Nitrogen Dioxide levels.
- JAQU is currently assessing the evidence that they have collected which will be independently reviewed.
- A report summarising JAQU's assessment of this evidence will be published in the autumn alongside assessments of other Local Authorities' plans.

4.3 Being ambitious in achieving compliance with air quality standards across Bath and the wider North East Somerset area, will result in widespread public health improvements and compliments the wider projects around decarbonisation and promoting more sustainable methods of travel.

5 RESOURCE IMPLICATIONS (FINANCE, PROPERTY, PEOPLE)

5.1 To reiterate, the purpose of enforcing the CAZ is to improve air quality and public health by bringing about sustainable behaviour change to reduce the number of highly polluting vehicles coming into the city. A summary of the financial position in 2021/22 is shown in the table overleaf:

	Zone Entry Charges £(M)	Penalty Charge Notices £(M)	Grant funding £(M)	Total £(M)
Income	2.62	2.96	2.02	7.62
Operating costs	2.48			2.48
Net surplus				5.14

5.2 Since launch, the CAZ scheme has generated £5.67 million from zone entry charges and penalty charge notices (to the end of March 2022) which is expected to drop year on year as behaviour change becomes embedded. Of this revenue, £2.70 million was generated via charges paid on time and those paid upon receipt of penalty charge notices. A further £2.97 million has been generated through fines for late payment.

5.3 The operational costs for the scheme in the first year amounted to £2.48M of which c£2.02M were offset against grant income.

5.4 Of the remaining surplus, £3.35M has been added to the smoothing and decommissioning reserves to cover future year costs and £2.5M is being allocated over the next two years to the City Region Sustainable Transport Settlement Fund (CRSTSF) (£1.79M allocated in 2021/22). The scheme is now at the point where smoothing reserves have been fully covered and surplus is being generated (assuming, that predicted future costs do not increase).

	Smoothing and decommissioning reserves £(M)	CRSTSF £(M)	Total £ (M)
Allocation of surplus in 2021/22	3.35	1.79	5.14

6 RISK MANAGEMENT

6.1 A risk assessment related to the issue and recommendations will be undertaken, in compliance with the council's decision-making risk management guidance.

7 CLIMATE CHANGE

7.1 Whilst CO₂ (carbon dioxide) is currently regarded as a climate change gas rather than a pollutant, it is anticipated that improving awareness about vehicle emissions will help facilitate the outcomes of local transport policies, reducing vehicle-related CO₂ emissions as well as NO₂ and particulate matter pollution.

8 OTHER OPTIONS CONSIDERED

8.1 None; this is an update report on the performance of the CAZ scheme in it's first year of operation.

9 CONSULTATION

9.1 Consultation has been carried out with the council's s.151 Officers, Director of Place Management, as well as the Cabinet Members for Climate Emergency and Sustainability and Transport.

Contact person	<i>Cathryn Brown, Clean Air Zone Manager 01225 477645</i>
Background papers	
Please contact the report author if you need to access this report in an alternative format	