

Air Quality: Reducing Roadside Nitrogen Dioxide

SUMMARY

- 1.1 In 2015 Derby was identified by DEFRA, along with four other cities, as needing to take early action to improve roadside nitrogen dioxide (NO₂). Initially, the Government direction required local authorities to implement chargeable access restrictions by 2020.
 - 1.2 In July 2017 the Government launched a revised National Air Quality Plan for NO₂ emissions. This plan set out that Local Authorities should develop local measures to achieve compliance. The locally developed scheme had to be submitted to the Secretary of State for approval. If approval was given, then the Council would be legally obliged to implement the scheme.
 - 1.3 A Ministerial Directive was issued on 19 December 2017, requiring the Council's Full Business Case to be submitted to the Secretary of State before 15 September 2018. The Minister sent the Council a letter on 10 September, requesting that the Full Business Case be submitted by 30 November 2018. In response to this letter, and in advance of the 15 September deadline (set in December 2017), the Council submitted a progress update to the Minister and provided a letter which explained the specific issues of meeting the extremely challenging date and that the Council was accelerating the work with the aim of delivering a Full Business Case as soon as possible.
 - 1.4 The process of building Derby's local measures has included developing scheme options for submission to the Secretary of State which gave rise to three options. These were set out in a public consultation which closed on 24 September 2018.
 - 1.5 This report seeks approval for a preferred option, which is to implement traffic management measures, focused on reducing roadside NO₂ on Stafford Street. This addresses the specific exceedance without any charges for road users. This report also seeks approval for the submission of a bid to the Clean Air Fund (CAF) for ambitious projects, aimed at delivering a wider benefit on NO₂ reduction. Subject to approval of the preferred option, the report also seeks approval to carry out a further consultation on the detailed measures that would be required.
 - 1.6 The report also sets out recommendations in relation to delegated approvals to ensure that the Full Business Case can be submitted to the Secretary of State at the earliest opportunity.
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RECOMMENDATIONS

- 2.1 To note the consultation outcomes detailed in paragraphs 4.3 to 4.9 below.
- 2.2 To approve Option 1 – traffic management measures focussed on Stafford Street to address the specific exceedance without any charges for road users - as the preferred option for further development in accordance with the minimum modelling requirements which will provide further detailed analysis and, subject to the results of this work, to form the basis of the submission of a Full Business Case to meet the legal duty in relation to the NO2 reduction.
- 2.3 To approve further consultation on the preferred option and the use of the result as part of development of the business cases required by Government.
- 2.4 To authorise the further development of an equality impact assessment, expanding on the assessment attached to this report, and for its outcome to be taken into account as part of development of the Full Business Case.
- 2.5 To delegate approval to the Strategic Director for Communities and Place in consultation with the Cabinet Member for Regeneration and Public Protection and the Strategic Director of Corporate Resources, having taken account of the outcomes of recommendations 2.3 and 2.4, to submit appropriate and required documentation to including the bid for funding to deliver the preferred option, at the earliest possible date, and if the funding bid is successful, to accept the funding on behalf of the Council.
- 2.6 To delegate approval to the Strategic Director for Communities and Place in consultation with the Cabinet Member for Regeneration and Public Protection and the Strategic Director of Corporate Resources, to submit a Clean Air Fund bid and if this bid is successful to accept the funding on behalf of the Council.

REASONS FOR RECOMMENDATIONS

- 3.1 The recommendations will allow the Council to progress work on the refinement of the preferred option and accelerate progress towards presenting a Full Business Case, securing funding and the delivery of NO2 reductions in the quickest possible time.
- 3.2 Recommendation 2.6 will allow the Council to develop a Clean Air Fund bid alongside the Full Business Case, to seek funding for additional measures to mitigate the impact of NO2 across more of the city.

SUPPORTING INFORMATION

4.1 The Revised National Air Quality Plan (July 2017)

Since this plan was released the Council has been working within the constraints of the minimum modelling requirements. These are set by DEFRA to develop local solutions to reduce NO₂ levels to below 40 micrograms per cubic meter of air at the points where the Government model identified it was above:

The solutions proposed in relation to these identified area(s) of exceedance must:

- a) deliver compliance with the legal limit for NO₂
- b) in the quickest possible time
- c) be at least as effective as the predicted modelled benefits of a chargeable access restriction

4.2 Detailed modelling work as well as analysis from a series of tests has pinpointed Derby's exceedance to one area – Stafford Street. As a result a specific plan has been developed to reduce NO₂ in Stafford Street to below the legal limit.

4.3 Public Consultation

The Council launched public consultation on 30 July 2018 on three options:

Option 1 – focused on traffic management measures to address the specific exceedance without any charges for road users

Option 2 – proposed a charge for drivers of non-compliant vehicles if they entered a zone within the inner ring road

Option 3 – proposed a charged for zone for non-compliant vehicles if they entered a zone within the outer ring road. This option is the baseline model required by Government for other proposals to be tested against.

The consultation closed on 24 September.

4.4 Approximately 2500 responses were received through the website. The majority

(73.6%) favoured Option 1. Appendix 3 includes the full consultation statistical report and Appendix 4 includes the comments received and the council officer's responses. The proposed consultation on the preferred option along with the on-going development of the project concluding in the Full Business Case will provide the additional detail requested in the majority of comments. The development of the CAF bid will also describe the measures proposed to provide wider benefits and promote travel choices.

4.5 Option one – targeted traffic management, with no vehicle charges (Indicated as the Council's preferred option)

| Does it meet 3 tests of the July 2017 National Plan? | |
|---|--|
| a) deliver compliance with the legal limit for NO2 b) in the quickest possible time c) be at least as effective as the predicted modelled benefits of a chargeable access restriction | a) Yes - specifically addresses exceedance b) Yes - at least 12 months quicker than options 2 and 3 c) Yes |
| What was the consultation response? | 73.6% supported option 1 |
| Other considerations | |
| <ul style="list-style-type: none"> • Restricts the amount of vehicles able to use Stafford Street by using traffic control restraints – therefore there will be an impact on traffic movements • Current testing demonstrates however that no other areas will exceed the NO2 limits as a result of the proposed scheme for Stafford Street. • May attract criticism that it does not do enough to improve the wider issue of air quality and promote the uptake of sustainable travel • The most simple, defined scheme to implement and a proportionate response to a single area of exceedance • The consultation included some suggestions of additional measures - a Clean Air Incentive Scheme and Low Emission Vehicle Initiatives - however the potential wider impacts may not have been recognised in the consultation responses | |

4.6 Option Two – charged clean air zone inside the inner ring road

| Does it meet 3 tests of the July 2017 Plan? | |
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| a) deliver compliance with the legal limit for NO2 b) in the quickest possible time c) be at least as effective as the predicted modelled benefits of a chargeable access restriction | a) No – this is not guaranteed as it relies on other measures achieving specific targets b) No - At least 12 months longer than option 1 c) No |
| What was the consultation response? | 27.5% supported option 2. |
| Other considerations | |

- Greater economic impact as approximately 60% of private cars in Derby are non-compliant so could be subject to an additional charge for entering the city centre
- Commuters or visitors living outside of the city and who regularly visit the city would be affected
- Could have a greater benefit on the wider air quality issue and could result in some drivers changing their vehicles
- Would expect to have a high impact on public awareness of NO2
- Delivery of NO2 compliance would be based on an assumption of the distribution of benefits from behaviour or vehicle change

4.7 **Option Three – charged clean air zone inside the outer ring road (the base case against which other options will be assessed)**

| Does it meet the 3 tests of the July 2017 Plan? | |
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| a) deliver compliance with the legal limit for NO2 b) in the quickest possible time c) be at least as effective as the predicted modelled benefits of a chargeable access restriction | a) yes b) No - will take at least 18 months to implement c) Yes - this is the base model |
| What was the consultation response? | 17.1% supported option 3. |
| Other considerations | |
| <ul style="list-style-type: none"> • Potentially the biggest impact on air quality across the widest area of the city • The most complex scheme to implement and not a proportionate response to a single area of exceedance • Economic impacts for individuals and businesses are most significant - approximately a third of Derby residents would live within the zone | |

4.8 **Clean Air Zone**

Recent discussions with DEFRA have confirmed that it is not a legal requirement to implement a Clean Air Zone (CAZ). It has always been clear that a CAZ could include a chargeable access restriction but could be implemented without charges for drivers. The implementation of a CAZ without charging would probably require a wide ranging policy for the area within the zone. The recommended preferred option does not propose a CAZ but the option does mean that the assessment of development proposals will have to demonstrate that the beneficial impact of the preferred option is not undermined (see Legal Implication – Appendix 1).

4.9 Clean Air Fund

Whilst the current legal duty is to address the identified area of exceedance in Stafford Street, the broader concerns about air quality cannot be dismissed. It is proposed that the targeted traffic management measures to address the Stafford St compliance are supported by wider measures that could have an impact across the city that would be developed as part of a parallel funding bid process. The Clean Air Fund offers this opportunity to bid for funding to support a Clean Air Incentive Scheme (assistance to switch to cleaner vehicles), a scheme to accelerate electric vehicle charge points, incentives to revolutionise the delivery of goods and further support for sustainable and active travel.

4.10 Delivering the Full Business Case

The Council has been encouraged to deliver a Full Business Case by the end of November. The speed at which the remaining modelling and results can be produced dictates that a full submission cannot be made by this date. In addition to be able to submit a Full Business Case, the Council must have consulted on the preferred option.

4.11 Consultation on the preferred option

A further consultation is proposed, subject to the approval of Option 1 as the preferred option, to set out more detail of the traffic management plan for Stafford Street. The plan will include changes to the traffic signal timings at the junctions at each end of Stafford Street to control the volume of traffic using the specific street. In addition there will be a need to implement a new urban traffic management and control system across a wider area of the city, which will optimise traffic flow on adjacent routes. It is also likely that physical changes will be required to specific junctions to support the traffic signal changes and provide some mitigation for traffic using alternative routes. Details will also be provided the current predicted change to traffic flows. The proposed solution will not produce NO₂ exceedance points on other roads. The project will continue to be developed and further detailed test will be made as part of the development of the Final Business Case. The further consultation would also set out additional measures to be included in the Clean Air Fund bid which aims to have a wider beneficial impact.

OTHER OPTIONS CONSIDERED

- 5.1 A range of options have been considered and modelled as part of the minimum modelling process set out by DEFRA. Appendix 2 is a table showing the process of option development.
- 5.2 The testing process led to the development of the three options for public consultation which are identified and described in this report.
- 5.3 The initial feasibility work examined options for removing NO₂ emissions by radical interventions, such as total closure of specific roads. Such measures have been considered by other Local Authorities and DEFRA has asked us to list these and show consideration. These may be effective but are not considered to be practical or deliverable solutions for Derby.

This report has been approved by the following officers:

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| Legal officer Financial officer Human Resources officer Estates/Property officer Service Director(s) Other(s) | Olu Idowu, Head of Legal Services Amanda Fletcher, Head of Accountancy Verna Bayliss, Acting Director of Planning and Transportation |
| For more information contact: Background papers: List of appendices: | Nigel Brien 01332 641833 nigel.brien@derby.gov.uk None Appendix 1: Implications Appendix 2: Developing the Options comparison table Appendix 3: Consultation Report Appendix 4: Summary Consultation findings and response Appendix 5: Equalities Impact Assessments |

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| IMPLICATIONS |
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Financial and Value for Money

- 1.1 DEFRA has undertaken to provide funding to the five Air Quality exceedance cities outside London to meet the cost of the development and implementation of measures to reduce roadside NO₂. The current cost of delivering the modelling requirements and developing the business case is expected to be approximately £900k. This has been entirely funded by DEFRA.
- 1.3 Any further development costs and the full implementation costs will be included in the Full Business Case and the bid for funding from the Clean Air Fund. These detailed bids for funding are still being developed. The full cost of the project delivery will be presented in the bids, with the expectation that Government will provide all of the funding. At the moment there is no clarity about the long-term revenue implications related to the implementation of any schemes but an estimate will be provided as part of the bid development so that any future risk is identified.
- 1.5 The recommended preferred option will be tested for value for money and an economic analysis is required as part of the submission to government.

Legal

- 2.1 At the moment there is no information about what will happen if we fail to meet the timetable or the deadline for implementation of measures.
- 2.2 The Full Business Case will require adequate and appropriate consultation and approval. There is also a need to further develop an equality impact assessment of the preferred option. This will be developed as the project progresses and additional detailed information becomes available. This report seeks approval to meet these requirements and appropriate delegations to allow the Council to meet Government deadlines and deliver reduction in NO₂ in the quickest possible time.
- 2.3 The approval and implementation of the recommended preferred option is likely to lead to an obligation not to undermine the impact of the scheme (paragraph 4.8 in the main body of the report refers). The full implications and the impact on the additional assessment of development proposals in the area where measures are implemented will require further assessment. It is also anticipated that the Council will have to provide a statement to assure Government that we have acknowledged that we will have to provide protection for area and the implemented scheme.
- 2.4 There is uncertainty over the implications of leaving the EU and the threat of future legal action against the government.

Personnel

- 3.1 This project has implications for various Council services including procurement, fleet management, licensing and planning.
- 3.2 It is probable that additional staff resources will be required to deliver the specific elements of the project. The project will need to be delivered in the quickest possible time to achieve this additional external assistance will be required to implement the proposals in the Full Business Case and the Clean Air Fund. The Council will be bidding for the full personnel costs to deliver this work.

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- 4.1 None directly arising from this report.

Equalities Impact

- 5.1 The recommended preferred option will be subject to a process for assessing the equalities impact as part to the submission of a Full Business Case and Clean Air Fund bids. An EIA for each of the options in the consultation is attached as Appendix 5. The EIA for the preferred option will be developed further and finalised before the submissions are made and full consultation and involvement will take place with our 50+ Forum and Equality Hubs as well as our Learning Differences Partnership Board and Employee Networks

Health and Safety

- 6.1 The Council wants to do everything it can reasonably do to protect the health and wellbeing of people who live, work or visit the City. The recommended preferred option, along with proposals for initiatives funded from the Clean Air Fund, seek to achieve compliance in Stafford Street and provide widespread improvements in roadside NO2 levels across the city.
- 6.2 The Full Business Case requires a health assessment as part of the submission.

Environmental Sustainability

- 7.1 The project will need to include a range of options to help promote environmental sustainability. The Council is already investing in some of these initiatives such as active travel, low emission vehicles, and travel planning. The Full Business Case and the Clean Air Fund bid will seek to build on programmes already being delivered.

Property and Asset Management

- 8.1 There are implications with Derby City Council's vehicle fleet and the Council is expected to show that it is taking a lead.

Risk Management and Safeguarding

- 9.1 The project will eventually result in general health benefits, but it may have some impact on local people and businesses.

Corporate objectives and priorities for change

- 10.1 This project will contribute towards the objectives of the Council Plan.