

Report to CABINET

Air Quality Feasibility Study

Portfolio Holder:

Councillor Arooj Shah, Cabinet Member for Neighbourhood Services

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Reason for Decision

Oldham Council have been mandated by government to review options available to bring forward nitrogen dioxide emissions compliance on an identified link of road in Oldham as soon as possible. A Cabinet decision is therefore required to approve, in principle, the preferred option(s) to achieve this to ensure the council is legally compliant with the directive which has been served.

Recommendations

To approve, in principle, the preferred option(s) to bring forward nitrogen dioxide compliance in the shortest possible timeframe to ensure legal compliance.

Air Quality Feasibility Study**1 Background**

- 1.1 Air quality has become an increasingly important and high profile topic over the last decade and local authorities have a range of statutory and public health responsibilities in this area.
- 1.2 Nitrogen dioxide and particulate matter are the emissions of most concern as their detrimental impacts on public health are now beginning to be fully understood and so - largely driven by court cases brought by the environmental lobbying group, Clientearth - in July 2017 the government published a plan for tackling roadside nitrogen dioxide in the UK, to bring concentrations within the statutory limits in the shortest possible time.
- 1.3 Based on air quality modelling data which predicts future non-compliance, the plan expanded the number of local authorities already legally required to take action to 28 in total (plus London), including 7 authorities in Greater Manchester - Manchester, Bolton, Bury, Stockport, Salford, Trafford and Tameside.
- 1.4 Oldham, Wigan and Rochdale were not identified as being in scope in this 'second wave' however, it was collectively agreed a regional approach including Oldham and Rochdale would be taken and led by Transport for Greater Manchester (TfGM) on behalf of the Greater Manchester Combined Authority (GMCA).
- 1.5 TfGM representing the 10 authorities have since been working on a wide package of measures to improve air quality across the conurbation.
- 1.6 However, in February 2018 the High Court found that a further 45 local authorities (a 'third wave') were at risk of not meeting the nitrogen dioxide pollution levels on specific road links within their administrative boundaries by 2021. As such a ruling was made that each authority must produce a plan to achieve compliance as soon as possible.
- 1.7 Oldham was identified in this 'third wave' of authorities. Therefore, we have received a ministerial directive to carry out a feasibility study to examine which measures – if any- can bring about nitrogen dioxide compliance in the shortest time possible on the stretch of road that has been identified as being in exceedance. This will involve modelling the impacts of different measures, however if none of the measures show compliance Oldham would *not* be required to take forward as part of this directive.
- 1.8 In this respect, it should be noted that a recently published LGiU "Joint Parliamentary Report on Air Pollution" highlights the following:

"Local authorities have a choice – to take a similar approach to national government in introducing measures that target minimum legal compliance in specific geographies (specific roads for example), or, to enshrine air quality as a fundamental pillar of their urban planning, transport & health approach. Reaching minimum compliance will lower, but not eliminate, the figure of up to 40,000 deaths a year attributable to air pollution. The legal limits being exceeded are even less stringent than World Health Organisation (WHO) limits. Therefore a wider approach, that embeds air quality across policy domains, is one which will yield the greatest benefit for local citizens, for whom air population is an increasingly important topic."

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- 1.9 The stretch of road cited in the Oldham Directive is the A62 by-pass which runs from King Street roundabout to the traffic lights at Mumps – see Appendix 1 & 2 for maps and details of levels of exceedance.
- 1.10 As such, Oldham is in the unique position of working across AGMA to meet target levels for 2020 and a separate directive working on different data to meet target levels by 2021.
- 1.11 This presents a series of practical difficulties and therefore working closely with the Department for the Environment & Rural Affairs (DEFRA), it has been agreed that we will take a local approach focusing on the stretch of road identified by the government to respond to the individual directive placed against Oldham but recognizing that more detailed work is ongoing through TfGM to support the regional approach which has a greater likelihood of improving air quality across the region.
- 1.12 We have responded to the mandate and made clear our concerns regarding the limited value of the individual exercise Furthermore, the timescales for the two approaches are different with both being extremely challenging and legally binding. However, the TfGM response must be benchmarked again a charge based Clean Air Zone and is working to the later timeframe.
- 1.13 Furthermore, we have highlighted developments with TfGM's regional modelling work and early indications which show that there may be higher emissions and/or additional links identified across the wider conurbation than originally anticipated, but that figures are still being refined and are subject to change so in order to meet the timescales associated with 'second wave' authorities, the focus of Oldham's feasibility study will be restricted to the stretch of road identified in our directive.
- 1.14 The implications of the more detailed modelling work undertaken by TfGM will be picked up in the joint AGMA response.
- 1.15 JAQU (Joint Air Quality Unit – the unit set up between DEFRA and the Department for Transport (DfT) to deliver the national plan) were receptive to this rationale and understanding Oldham's unique position are now exploring with their legal advisors whether Oldham can be treated as an exception and our involvement in the TfGM approach will be accepted as a more appropriate response.
- 1.16 However, given the legal parameters and pressure faced by the government and the tight timeframe, we will need to proceed with the local feasibility study and response until we are given an alternative instruction, and focus on alignment and working in partnership with TfGM.

2 Current Position

- 2.1. The feasibility study requires Oldham develop a list of measures which will bring about nitrogen dioxide compliance in the shortest possible time as well as setting out a preferred measure, as follows:

Part	Title	What is required	Deadline
Part 1	Understanding the problem	Information about the source of emissions and make-up & destination of traffic on the location in scope.	Monday 30 th April (submitted)
Part 2	Developing a long list	A list of measures that could in	Monday 30 th

	of measures for addressing the exceedances	theory be implemented to bring about compliance in the shortest possible time. The measures given in Oldham's submission were taken directly from TfGM's work to ensure alignment.	April (submitted)
Part 3	Assessing deliverability/feasibility and delivering a short list	Refining the long list based on whether the measures are practically feasible and deliverable to have impact within the required timeframe (e.g. it would not be practically feasible to introduce cycle lanes on a dual-carriage way.)	Thursday 31 st May (submitted)
Part 4	Evidencing the short listed measures to identify options that could bring forward compliance	Modelling the shortlisted measures to establish whether they would actually have the necessary impact e.g. incentivizing the uptake of electric vehicles may be practically feasible, but if there is only a 1% take up, this will not reduce emissions sufficiently to achieve compliance. It is possible that once modelled, no measures can be taken forward.	Friday 29 th June (submitted)
Part 5	Setting out a preferred option	Measures that, once modelled, are shown to have impact, must then be assessed against further criteria (e.g. VFM). Again, it is possible that once assessed, there will not be a preferred option.	Tuesday 31 st July

2.2 Oldham have submitted Parts 1, 2, 3 & 4 in line with the required deadlines, summarized as follows:

2.3 **Part 1/The problem:** Part 1 confirms that there is only one location identified in Oldham as being in scope for this feasibility study which is the A62 by-pass around the town centre. The main source of emissions are diesel cars (including taxis), followed by LGVs and then HGVs. According to the modelled data, buses and motorcycles are not significant contributors to the emissions on this stretch of road. One of Oldham Council's main fleet-bases is nearby (Moorhey Street depot) as well as a large estate of commercial units (Derker) and a large Metrolink stop at (Oldham Mumps). Traffic flow data shows us that between 10-23% of trips are to or from the town centre. However, other than that, there is no clear pattern identifying a significant trip generator/source of traffic. Taking these considerations into account suggests that general reduction measures around car emissions will be most likely to have an impact on this stretch of road.

2.4 **Part 2/Long list of measures:** Part 2 lists approximately 40 measures, broken down into interventions that have already been implemented since 2015 (which is the baseline for the modelled data), are due to be implemented soon and new measures (taken directly from TfGM's work to ensure alignment). The measures already implemented or planned are predominantly 'soft measures' based on encouraging people to cycle or walk. 'Soft

measures' are very difficult to model and evidence the impacts of, therefore we have *not* attempted to show that these measures impacted so significantly on nitrogen dioxide emissions on the road link in scope that they have achieved compliance.

- 2.5 **Part 3/Initial shortlist of measures** – Part 3 addresses the long list of new measures suggested and discounts many of them for reasons of deliverability (e.g. a vehicle scrappage scheme was in the long list but has been discounted as not being practically feasible to implement within the timescales).
- 2.6 It is important to stress that the requirement at this stage is purely to assess the deliverability of the measures in the long list to see whether they would be practically feasible and could be implemented in a timescale that would bring about compliance.
- 2.7 In essence, this is a shortlist of measures with a reasonable potential to have the necessary impact but will be refined through a local modelling process (see Part 4 below). It is expected that this modelling process will result in only one or two measures that will actually bring about compliance - although there is the potential that this exercise will show that no measures will bring about compliance in the required timescales.
- 2.8 For example, incentivising Oldham staff to switch to electric vehicles may have a positive impact on nitrogen dioxide emissions on the link of road in scope however, if it is anticipated that only 2% of staff would take up this offer, this would not have sufficient impact to improve nitrogen dioxide emissions to the required levels. This does not mean that Oldham Council should not offer such a scheme to staff, rather that it would not be taken forward as a proposal through the mandated feasibility study.
- 2.9 **Part 4/refined shortlist of measures** – Part 4 has taken the shortlist and modeled the emissions reductions associated with each one of the measures. This exercise establishes which (if any) of the measures meets the 'Primary Critical Success Factor' i.e. to reduce nitrogen dioxide emissions to compliant levels within the shortest possible time.

Aligned with TfGM's work, the shortlist of measures which have shown compliance through initial modelling are:

- Incentivise drivers of light goods vehicles and cars to switch to electric vehicles
 - Incentivise Oldham Council and partner staff to switch to electric vehicles.
 - Renewal, upgrading and further expansion of the electric vehicle charging point network in Oldham.
Improve Local Authority Fleet to electric and/or low emissions through a procurement policy
 - Incentivise private hire vehicles (taxis) to switch to electric vehicles
 - Communications campaigns/awareness raising of health and cost benefits of different modes or around a particular community/schools and programmes to support.
- 2.10 However, further refinement of this modelling work is still required to establish definitively which, if any, of these measures will bring about compliance.
- 2.11 **Part 5/Preferred option(s):** Part 5 will take the shortlisted measures and assess them against a range of 'Secondary Critical Success Factors' including considerations such as value for money, distributional impacts, strategic and affordability.

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- 2.12 As above, the latter stages of this exercise (modelling and assessment against refined criteria) could result in no measures being taken forward and that this will be an acceptable position as long as our assumptions and calculations are clearly evidenced and justified.
- 2.13 It should be noted that we have not been asked to take into account the costs associated with any of the proposed measures until the final part of the study and have been given to understand that for any measures taken forward, funding will be available to implement.
- 2.14 Cabinet decision is therefore needed to approve, in principle, the above shortlist from which the preferred option(s), if any, which will be submitted to JAQU to meet the legal deadline on Tuesday 31st July.

3 Options/Alternatives

- 3.1 Option 1 – approve, in principle, the shortlist from which the preferred option(s) will be selected (if any) to bring forward nitrogen dioxide compliance in the shortest possible timeframe as determined by Oldham’s local feasibility study. This option would ensure we are legally compliant with the directive we have been served.
- 3.2 Option 2 – do not approve the shortlist from which the preferred option(s) will be selected (if any) to bring forward nitrogen dioxide compliance in the shortest possible timeframe as determined by Oldham’s local feasibility study. This option risks non-compliance with a legal mandate from government and associated consequences.

4 Preferred Option

- 4.1 Option 1.

5 Consultation

- 5.1 None required for any of the shortlisted measures.

6 Financial Implications

- 6.1 At this stage, it is difficult to quantify the amount of funds that will be required to support the incentivisation proposal’s mentioned in paragraph 2.6. Once a clear proposal is agreed with regards to what the incentive will be, financial modelling of scenarios can be prepared. The models will forecast the uptake that will be required in order to meet the national targets and therefore the costs that will be incurred. These can then be discussed in a further report to Members.
- 6.2 The costs relating to additional charging points can be quantified once further detail is obtained with regards to location and quantity required. It is estimated that a full installation of each charging point is estimated to cost in the region of £10k.
- 6.3 The existing council fleet replacement policy is to purchase via prudential borrowing and spread the cost over the useful life of the vehicle, this is typically 7 years. A further detailed report will have to be presented to Members in order to refine and change the policy. There are currently 10 electric vehicles in the council’s fleet that are used by the district partnership and first response teams.
- 6.4 A full plan will be needed for signal optimization and a breakdown of costs will also be required from unity colleagues.

6.5 Once a detailed campaign programme is drawn out the implications around delivering and the cost impact, for example on headcount and marketing materials will need to be fully detailed in order to calculate the overall costs.

6.6 No funding exists within the current MTFS to address the measures outlined in paragraph 2.6. It is expected that funding sources will be a combination of Council resources, revenue and capital, dependent on works carried out and external provider partners such as TfGM, GMCA and various Government bodies such as the Department of Transport, dependent on available grants

Sadrul Alam, Finance Manager

7 **Legal Services Comments**

7.1 7.1 EU legislation sets out limits on levels of permitted outdoor air pollution and the UK is currently in breach of the EU 2008 Directive on ambient air pollution for nitrogen dioxide concentrations. The government's attempts to comply with the Directive have been rejected several times by the courts as inadequate and as a result, there is the possibility that fines could be imposed on the UK by the Court of Justice of the EU for failure to comply with the Directive. Under the Localism Act 2011, the UK government could ask local authorities to pay some/all of any such fines.

7.2 Under section 85 of the Environment Act 1995, if it appears to the government that air quality standards or objectives are not being achieved within the area of a local authority, the government may give directions to the local authority requiring it to take such steps as may be specified in the directions and it is the duty of the local authority to comply with any direction given to it.

(Alan Evans, Group Solicitor (Environment))

8. **Co-operative Agenda**

8.1 Oldham is a lead authority for the environment and low carbon across Greater Manchester, supporting our ambitions for an inclusive economy. It is therefore important that we collaborate to improve air quality across the region, whilst also taking a local approach which responds to the Government's mandate, which will seek to improve the air quality within this particular locality.

(Heather Moore, Strategy, Partnerships and Policy Manager (Corporate))

9 **Human Resources Comments**

9.1 There are no human resource implications for employees within this report.

However, promotion of incentivizing council staff to switch to electric cars would have a positive impact on the objective of meeting nitrogen dioxide emissions compliance. This would therefore form part of the review of the preferred option to encourage staff to support the directive.

(Stewart Hindley, People Services Business Partner)

10 **Risk Assessments**

10.1 N/A

11 **IT Implications**

11.1 None.

12 **Property Implications**

12.1 None.

13 **Procurement Implications**

13.1 The only procurement implications associated with these proposals are in relation to the measure “Improve Local Authority fleet to electric and/or low emission through a procurement policy.” However, if this measure is taken forward, any implications and comments will be picked up as part of the OJEU procurement process which will involve Cabinet sign off or through a delegated decision, rather than as part of this air quality feasibility study. (Rosie Barker, Waste Management).

14 **Environmental and Health & Safety Implications**

14.1 Environmental considerations included within the body of the report. No health & safety implications.

15 **Equality, community cohesion and crime implications**

15.1 None.

16 **Equality Impact Assessment Completed?**

16.1 No – N/A

17 **Key Decision**

17.1 No

18 **Key Decision Reference**

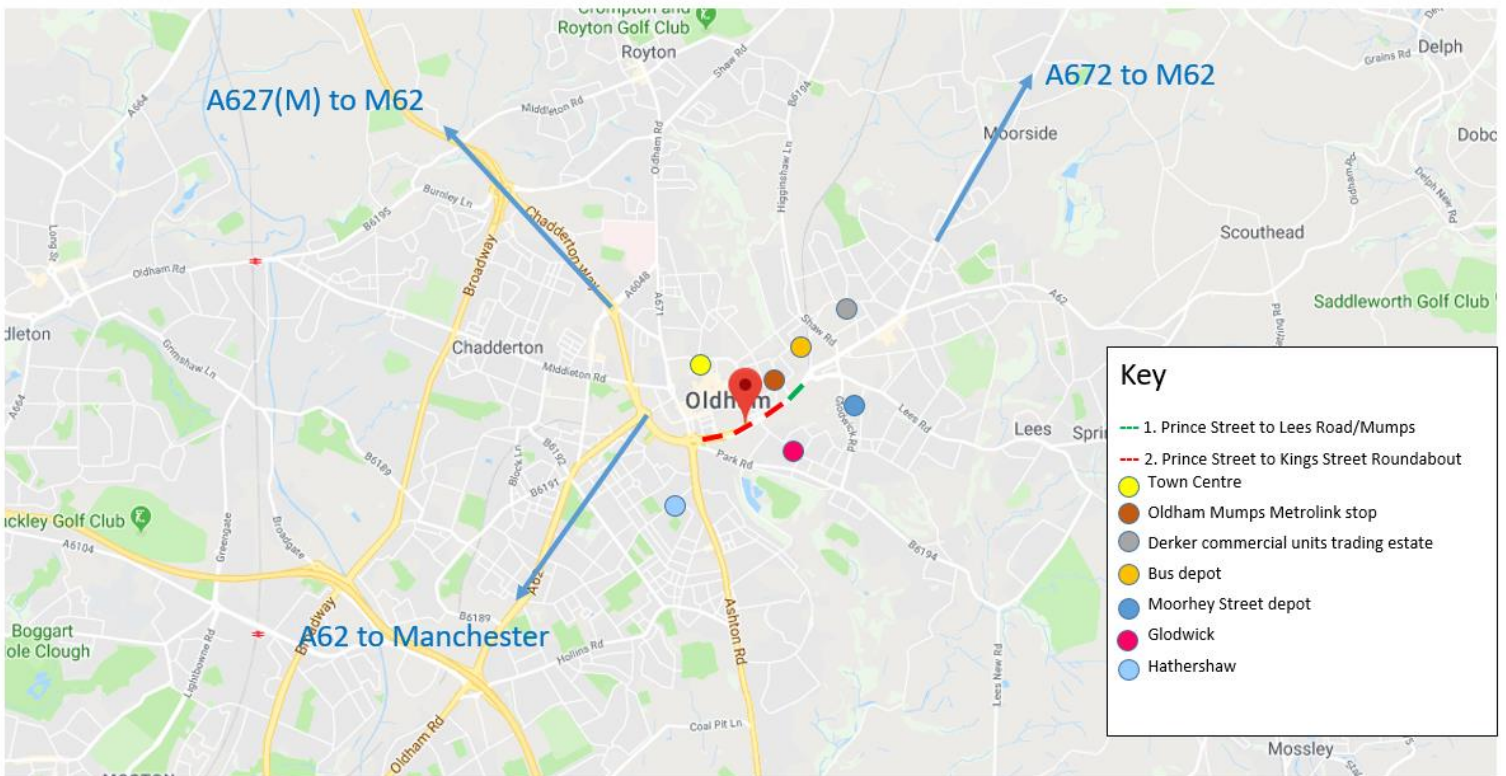
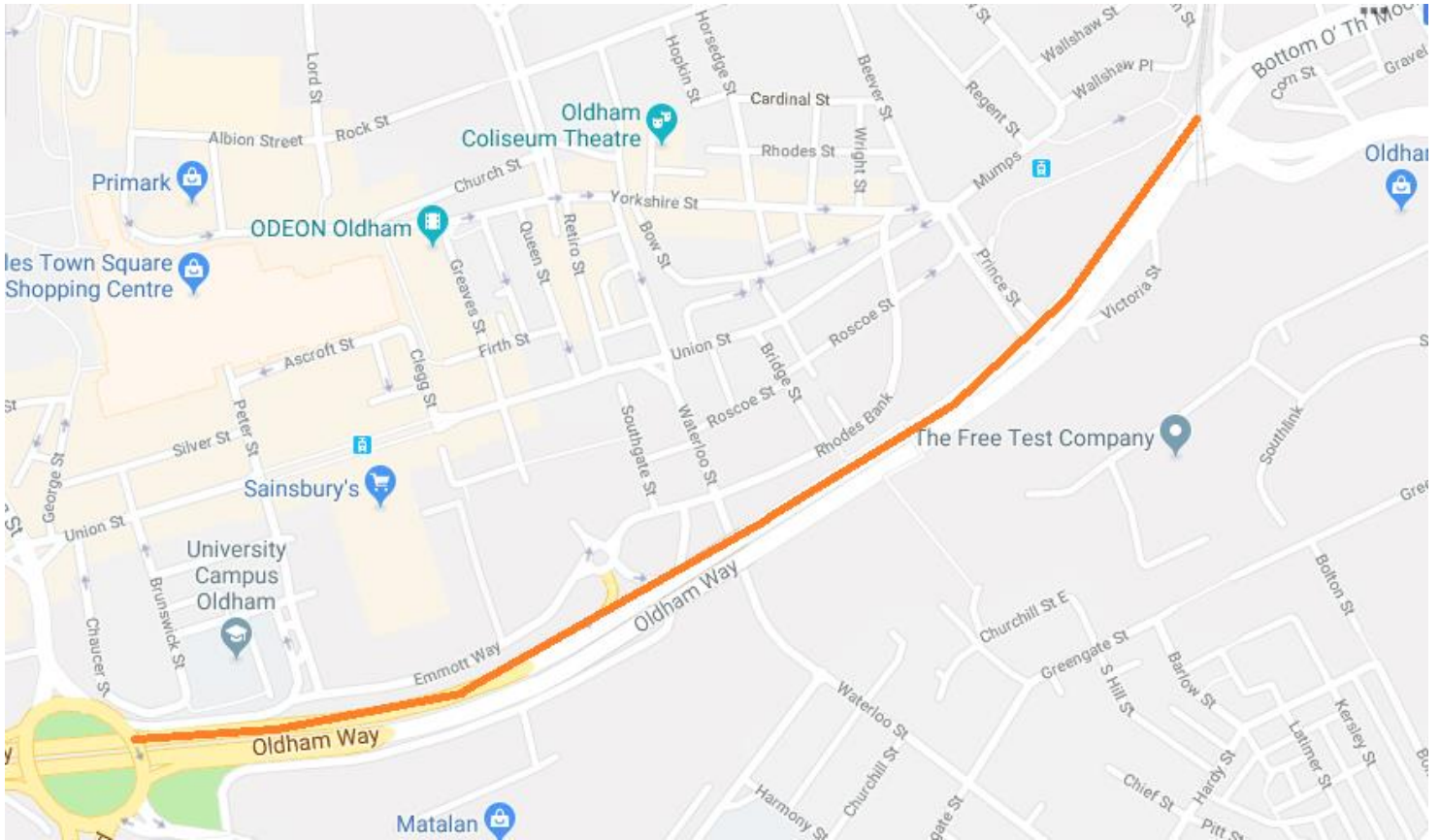
18.1 N/A

19 **Background Papers**

19.1 None

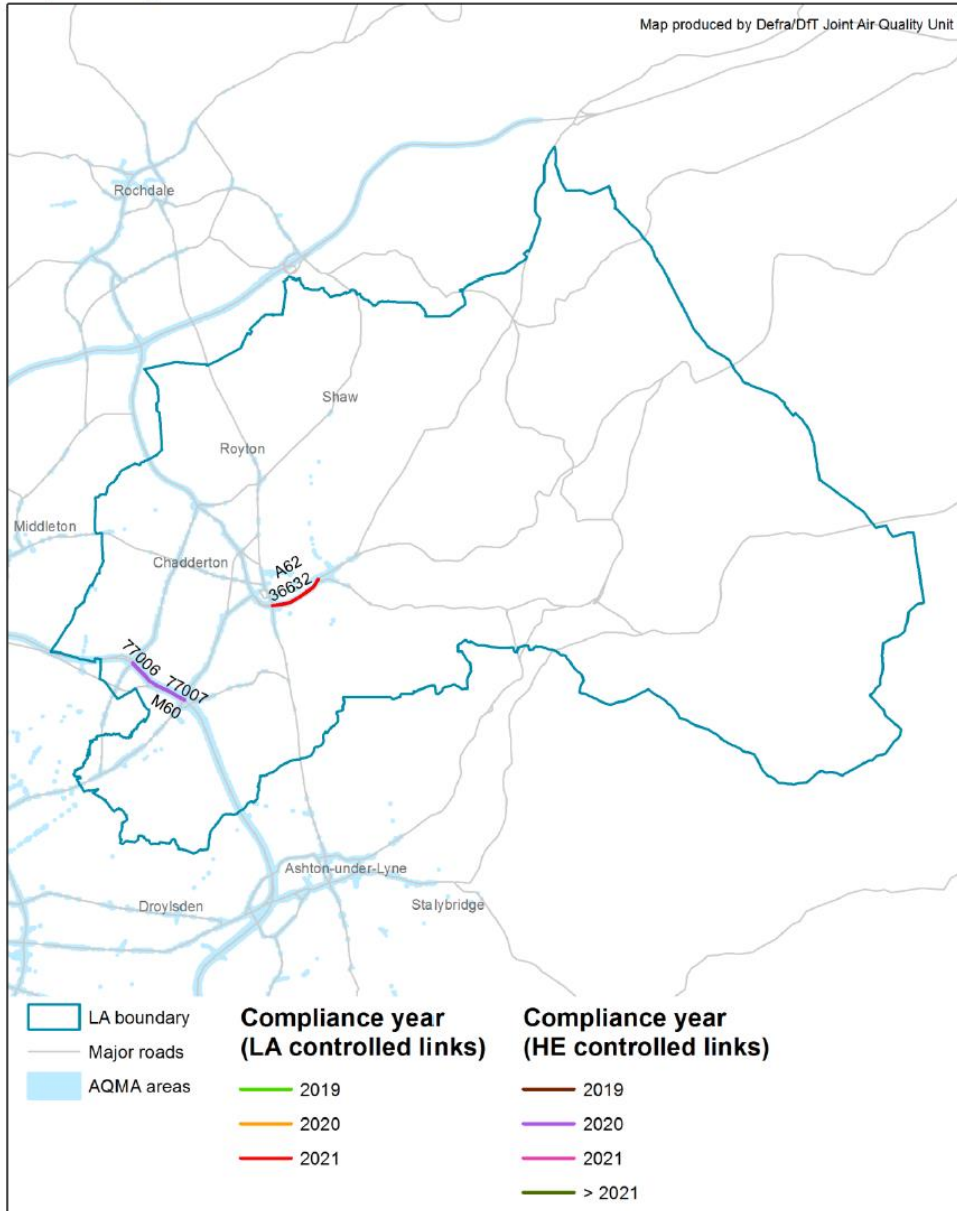
20 Appendices

20.1 Appendix 1: 3 x maps to show location of road in scope and surrounding area



Oldham Council

Map of Projected Exceedances



20.2 Appendix 2: Emissions exceedance data for Oldham road links

Oldham Council

Table of Projected Exceedances

Road(s) in exceedance	Census ID	Annual mean nitrogen dioxide concentration. All figures are provided in $\mu\text{g}/\text{m}^3$ and $40 \mu\text{g}/\text{m}^3$ is the statutory annual mean limit value for NO_2 .					Source apportionment for total NO_x 2015 (figures may not sum to 100% due to rounding)
		2017	2018	2019	2020	2021	
A62	36632	47	45	43	41	38	5% Regional background, 11% Urban background (non-traffic), 12% Urban background (traffic), 31% Diesel cars, 7% Petrol cars, 18% Diesel LGVs, 0% Petrol LGVs, 11% HGvr, 3% HGva, 2% Buses
M60 (Highways England managed)	77006	46	44	42	40	38	5% Regional background, 10% Urban background (non-traffic), 19% Urban background (traffic), 27% Diesel cars, 3% Petrol cars, 25% Diesel LGVs, 0% Petrol LGVs, 6% HGvr, 5% HGva, 0% Buses
M60 (Highways England managed)	77007	47	45	43	40	38	5% Regional background, 11% Urban background (non-traffic), 21% Urban background (traffic), 26% Diesel cars, 3% Petrol cars, 22% Diesel LGVs, 0% Petrol LGVs, 7% HGvr, 5% HGva, 0% Buses