1. Introduction

1.1 The report details the timetable and the next steps required to progress the Outline Business Case of the Greater Manchester Clean Air Plan.

2. Background

2.1 Studies have shown associations of nitrogen dioxide (NO2) in outdoor air with adverse effects on health, including reduced life expectancy. Regular exposure to high concentrations of NO2 may lead to asthma or greater risk of respiratory problems. It can also make existing respiratory problems worse and cause coughing, wheezing or difficulty breathing. Children and older people are particularly vulnerable to the effects. Road transport is responsible for 80% of NO2 concentrations at the roadside, of which diesel vehicles are the largest source.

2.2 The UK Plan for tackling roadside nitrogen dioxide concentrations (hereafter referred to as the ‘National Plan’) (DEFRA, July 2017) identified 29 local authorities, including seven in Greater Manchester, with areas likely to exceed the statutory NO2 annual mean EU Limit Value of 40 µg/m3 (the EU Limit Value) beyond 2020. In March 2018, 33 more local authorities were defined as having “shorter-term NO2 problems” - including Oldham.

2.3 The Government’s National Plan compels these local authorities to follow a specified process to develop plans for implementing measures to deliver compliance with the EU Limit Value in the ‘shortest possible time’. This process and timetable is summarised in the table below, including the status in Greater Manchester. Each output of the feasibility study, for example the Strategic Outline Case, the Outline Business Case and the Full Business Case, is assessed by Government via the Joint Air Quality Unit (JAQU).
### 2.4 Process and timetable for producing GM Clean Air Plan

<table>
<thead>
<tr>
<th>Deadline</th>
<th>Activity</th>
<th>GM status</th>
</tr>
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<tbody>
<tr>
<td>March-April 2018</td>
<td>Submit Strategic Outline Case (SOC) to Government</td>
<td>Submitted</td>
</tr>
<tr>
<td>June 2018</td>
<td>Submit initial evidence of GM NO2 concentrations and determine target areas for action</td>
<td>Submitted: awaiting JAQU confirmation</td>
</tr>
<tr>
<td>July 2018</td>
<td>Submit Oldham feasibility study to Government</td>
<td>Submitted</td>
</tr>
<tr>
<td>31 December 2018</td>
<td>Submit Outline Business Case (OBC), including preferred option.</td>
<td>Feasibility study underway</td>
</tr>
<tr>
<td>31 December 2018</td>
<td>Submit Full Business Case (FBC) unless public consultation required*</td>
<td>Feasibility study underway</td>
</tr>
<tr>
<td>2019</td>
<td>Public consultation (as required) Bid for Clean Air Fund implementation monies</td>
<td>n/a yet</td>
</tr>
<tr>
<td>By 2021</td>
<td>Measures to be implemented</td>
<td>n/a yet</td>
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*If public consultation is needed, the FBC is to be submitted as soon as possible after the OBC.

2.5 The FBC will act as the GM Clean Air Plan. It will include measures to achieve compliance, and mitigation measures to support communities affected by the compliance measures. The plan must be implemented by 2021 or the shortest possible time to deliver compliance with the EU Limit Value.

2.6 UK Government guidance identifies charging Clean Air Zones (CAZ) as the measure it is able to model nationally which will achieve statutory NO2 limit values in towns and cities in the shortest possible time. Local authorities must subsequently consider charging Clean Air Zones as their benchmark measure for implementation, unless they identify alternatives that are at least as effective at reducing NO2 and deliver compliance as quickly.

2.7 Government specifies four classes of charging Clean Air Zone:

- **Class A:** Buses, coaches, taxis and private hire vehicles.
- **Class B:** Buses, coaches, heavy goods vehicles (HGVs) taxis and private hire vehicles.
- **Class C:** Buses, coaches, HGVs, large vans, minibuses, small vans/light commercials, taxis and private hire vehicles.
- **Class D:** Buses, coaches, HGVs, large vans, minibuses, small vans/light commercials, taxis and private hire, cars, motorcycles/mopeds.
3. Greater Manchester’s Approach To Developing A Clean Air Plan

3.1 TfGM has been coordinating the GM feasibility study on behalf of the GMCA and the ten GM local authorities, working closely with Districts, who remain legally responsible for compliance.

3.2 The purpose of taking a GM-wide approach was to avoid introducing measures in one part of the conurbation that simply displace NO2 concentrations to other locations, and to ensure that (as far as possible) the eventual GM Clean Air Plan complements other GM-wide strategies including the existing GM Air Quality Action Plan and GM Low Emission Strategy.

3.3 A GM Clean Air Plan Senior Leadership Steering Group (Steering Group) is responsible for guiding the feasibility study, briefing senior officers and elected members in their respective organisations and securing local approvals. Members include Directors or Assistant Directors from each GM local authority and senior representatives from Highways England, Public Health England, AGMA, Local Partnerships and TfGM.

Process to Outline Business Case

3.4 Government requires local authorities to collect ‘Initial Evidence’ of the NO2 exceedances in each local authority area to determine target areas for action. The Initial Evidence identifies road links which are forecast to exceed the EU Limit Value beyond 2020, including destination links, radial links and those with a close relationship with the Strategic Road Network (the motorway network managed by Highways England).

3.5 The subsequent review process, called ‘Target Determination’, involves confirming the specific reductions in NO2 concentrations required for each area of forecast exceedance with Government. GM submitted its evidence at the end of May and is awaiting the outcome of this process.

3.6 Once Target Determination is complete, information on the reductions in NO2 concentrations required in each local authority area, and the likely changes needed to achieve these will be available.

3.7 The GM Strategic Outline Case included a shortlist of potential measures for reducing NO2 concentrations to legal limits within the shortest possible time (see Appendix 1). The shortlist was refined with the Districts using JAQU guidance, and the two primary success criteria:

(i) the reduction of local air pollutant NO2 (and other substances including PM10, PM2.5) concentrations to below the EU Limit Values; and

(ii) the ability to be delivered at least as quickly as a charge-based Clean Air Zone could.
3.8 As Government has identified charge-based Clean Air Zones as the benchmark measure, the modelling process used to identify a preferred option to achieve compliance in the shortest possible time in GM is required to focus on this measure first.

3.9 The Steering Group is currently also developing a programme of public awareness raising about air quality issues affecting GM, working with colleagues in Public Health and across the ten Districts. This will commence during early autumn 2018 to build greater public awareness and understanding of the GM air quality issue and associated impacts. Under the identity of ‘Clean Air GM’, this will build on past public engagement activity, for example the Clean Air Day, and aim to educate key audiences about air pollution, the health impacts, and what they can do to make a difference.

4. Early Measures Funding: Expanding Greater Manchester’s Electric Vehicle Network

4.1 GM successfully applied for Government Early Measures Funding to implement work to address NO2 concentrations in the conurbation in the run up to finalising and implementing the GM Clean Air Plan.

4.2 The proposal was developed with and agreed by all ten GM Local Authorities and focussed on expanding the Greater Manchester Electric Vehicle (GMEV) Network and a Communications and Engagement Programme.

4.3 There are currently 2,234 registered plug-in vehicles in GM, whilst nationally Ultra-Low Emission Vehicles (ULEVs) form 2.9% of all new car sales. The projected increase in sales of ULEVs and current market dynamics and incentives indicate the need for a considerable uplift in rapid charging provision in GM to support growing demand.

4.4 The UK Climate Change Commission has set a target for 60% of all car sales to be ULEV by 2030, and 100% by 2040, at which point Government anticipates no petrol/diesel vehicles will be sold. This equates to a target of 9% ULEV sales by 2020 and 32% by 2025. In GM this would mean additional unit sales of 6,300 vehicles in 2020 and 25,600 by 2025 (not including vehicles travelling to GM).

4.5 The Early Measures funding will facilitate expansion of the GMEV Network, including rapid charging infrastructure, by delivering up to 48 new public rapid charging points (24 dual headed posts).
4.6 Deployment will be targeted using a selection process developed by TfGM and the Districts, and agreed by the Steering Group. Selection is expected to consider the following factors:

- known areas of poor air quality;
- locations with a prevalence of journey origin-destinations where ULEV vehicles can reduce emissions; and
- locations with advanced plans for EV installation.

4.7 GM will also appoint Electric Vehicle Network suppliers and operators to confirm viable sites for rapid charger installation.

4.8 TfGM will also work with the Local Authorities to develop and deliver a comprehensive engagement programme for encouraging the uptake of ULEVs that also supports the GM Clean Air Plan.

4.9 This will target businesses and their staff, residents and visitors to:

- raise awareness and use of the GMEV Network and new charging infrastructure;
- increase sales of ULEVs;
- increase confidence and knowledge in the GMEV Network; and
- increase confidence in ULEVs by addressing barriers like range, performance, choice, cost and charging.

4.10 Targeted promotion and bespoke support will be delivered to over 600 businesses in the Business Travel Network, and via business intermediaries. TfGM will also liaise with the Energy Saving Trust to identify potential synergies with their fleet review work. Communications and engagement will be prioritised to match areas with EV charging infrastructure and vehicle usage, and journeys with poor air quality.

4.11 The Early Measures programme will be completed by September 2019, although communications and engagement activity could be extended beyond this date subject to funding.
5. **Recommendations**

5.1 The GM LEP is recommended to:

(i) note the progress in producing the Outline Business Case for the GM Clean Air Plan;

(ii) note the Early Measures funding awarded to GM to increase the charging infrastructure for Electric Vehicles and incentivise their uptake, as part of the Greater Manchester Clean Air Plan.

Simon Warburton

Transport Strategy Director, TfGM
### Appendix 1: Shortlisted of potential measures for tackling NO₂ in GM

| Clean Air Zone: Class B, C or D. Different geographical areas/ time restrictions being modelled | Class B: Buses, coaches, HGV, taxis and PHV  
Class C: Class B + large vans, minibuses, small vans and light commercials  
Class D: Class C + cars, motorcycles/mopeds |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Differential parking charges</td>
<td>For example: different charges for times of day, vehicle type, car sharers and could include workplace parking levy</td>
</tr>
<tr>
<td>Retrofit or upgrade public transport fleet</td>
<td>Retrofit or upgrade to higher Euro standard</td>
</tr>
<tr>
<td>Increase public transport capacity</td>
<td>Looking at specific routes where most impact will be made</td>
</tr>
<tr>
<td>Switch bus/HGV/LGV fuelling stations or GM fleet to GtL fuel</td>
<td>Using GAS-To-Liquid fuel as an alternative to diesel</td>
</tr>
<tr>
<td>Electric vehicle incentivisation</td>
<td>Increase Electric Vehicle uptake through infrastructure or financial incentives</td>
</tr>
<tr>
<td>Retrofit or upgrade LA fleet</td>
<td>Move to EV or higher Euro standard by changing procurement policy</td>
</tr>
<tr>
<td>Congestion Deal – increase capacity</td>
<td>Review existing junction improvement plans to understand potential benefit for specific junctions and look at making changes sooner</td>
</tr>
<tr>
<td>Congestion Deal – encouraging alternatives</td>
<td>Encouraging alternative travel choices through road space reallocation</td>
</tr>
<tr>
<td>Congestion Deal – network management</td>
<td>Changes to traffic signal timing to optimise flows, to reduce congestion</td>
</tr>
</tbody>
</table>
| Private hire and taxi alternative fuels | Incentivise PHVs to change to EV/ULEV vehicles and/or free top up at taxi charge points, increasing EV infrastructure  
Retrofitting and increasing LPG refuelling infrastructure for taxis |
| Communications campaigns | Increased awareness of health and cost benefits for public for different modes of transport or around a particular community/schools |
| Travel choices/Active Travel programme - engagement | Working with employers and individuals to encourage sustainable travel choices and build awareness of the options available |
| Active travel programme - infrastructure | Increase the options available to cycle and walk through an enhanced infrastructure programme |