GMCA GREATER MANCHESTER COMBINED AUTHORITY

Date: 11 January 2019

Subject: Greater Manchester Clean Air Plan: Update January 2019

Report of: Councillor Alex Ganotis, Greater Manchester Green City Lead and Leader of Stockport Metropolitan Borough Council

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PURPOSE OF REPORT

The purpose of this report is to provide an update on progress in the preparation of a GM feasibility study into the options available, subject to full funding by Government, to address NO_2 exceedances, and to outline a broad direction of travel in relation to next steps and decision-making.

RECOMMENDATIONS:

Members are recommended to:

note the report, setting out the implications of work so far led by the Greater Manchester Clean Air Plan Senior Leadership Steering Group;

note the further work that is now proposed to be undertaken to ensure that the future Clean Air Plan is agreed against a clear understanding of the impacts on growth and inclusion across the city region; and

note the changes to the Plan development schedule that this will bring.

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Comments and/or recommendation from the relevant Overview & Scrutiny Committee

Risk Management – see Section 6

Legal Considerations – See Section 6

Financial Consequences – Revenue – n/a

Financial Consequences – Capital – n/a

BACKGROUND PAPERS:

- 14 December 2018, report to GMCA: Clean Air Update
- 30 November 2018, report to GMCA: Clean Air Plan Update
- 26 October 2018, report to GMCA: GM Clean Air Plan Update on Local Air Quality Monitoring
- 15 November 2018, report to HPEOS Committee: Clean Air Update
- 16 August 2018, report to HPEOS Committee: GM Clean Air Plan Update
- UK plan for tackling roadside nitrogen dioxide concentrations, Defra and DfT, July 2017

TRACKING/PROCESS		
Does this report relate to a major strategic decision, as set out in the GMCA Constitution		No
EXEMPTION FROM CALL IN		
Are there any aspects in this report which means it should be considered to be exempt from call in by the AGMA Scrutiny Pool on the grounds of urgency?	No	
TfGMC	Overview & Scrutiny Committee	
10 January 2019	10 January 2019	

DRAFT

1. INTRODUCTION: AIR QUALITY IN GREATER MANCHESTER

1.1 Poor air quality is one of the largest public health issues facing the UK. Whilst air quality has been generally improving over time, particular pollutants that are not generally visible to the naked eye, remain a serious concern in many urban areas. These are oxides of nitrogen (NOx), principally nitrogen dioxide (NO_2), and particulate matter (PM). NO_2 is formed from burning fossil fuels and contributes to the formation of photochemical smog. Particulates are formed from tyre friction, burning fuels that create smoke, construction, industry and other processes. Although non-transport sources of NOx are significant, road transport is responsible for some 80% of NO_2 concentrations at roadside, of which diesel vehicles are the largest source.

1.2 Long-term exposure to elevated levels of particulate matter (PM2.5, PM10) and NO_2 may contribute to the development of cardiovascular or respiratory disease, and may reduce life expectancy[1]. The youngest, the oldest, those living in areas of deprivation, and those with existing respiratory or cardiovascular disease are most likely to develop symptoms due to exposure to air pollution[2,3]. One of the issues highlighted recently is that people walking or cycling are exposed to lower levels of air pollution compared to drivers and passengers inside vehicles travelling along the same urban route. Cars take in emissions from surrounding vehicles and recirculate pollutants within the confined 'cabin' space, exposing occupants to higher levels of air pollution[4].

1.3 Current assessments by Public Health England estimate the health and social care costs across the England due to population exposure to air pollution will be £5.3 billion by 2035 for diseases where there is a strong association with air pollution, or £18.6 billion for all diseases with evidence of an association with air pollution5.

1.4 Improving air quality has been one of the key ambitions for Greater Manchester for some time. The Greater Manchester Strategy (Oct 2017) states Greater Manchester should be 'a place at the forefront of action on climate change with clean air and a flourishing natural environment' including by 'reducing congestion and improving air quality'. Action is already underway under the Greater Manchester Low Emissions Strategy and Air Quality Action Plan, which introduced measures to reduce air pollution as a contributor to ill-health; increase behaviours that lower emissions by 2025; and support the Government to meet EU thresholds for key pollutants at the earliest date.

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[1] Air Quality – A Briefing for Directors of Public Health (2017), https://www.local.gov.uk/air-quality-briefing-directors-public-health

[2] Air Quality – A Briefing for Directors of Public Health (2017), https://www.local.gov.uk/air-quality-briefing-directors-public-health

[3] RCP and RCPCH London, Every breath we take lifelong impact of air pollution (2016), https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution

[4] F. de Leeuw et al., Assessment of personal exposure to particulate air pollution during commuting in European cities—Recommendations and policy implications, Science of the Total Environment. 2014; 785-797.

[5] https://www.gov.uk/government/news/new-tool-calculates-nhs-and-social-care-costs-of-air-pollution

1.5 Greater Manchester has also signed up to become a World Health Organisation (WHO) 'BreatheLife' city, with the associated aim of achieving WHO air quality targets by 2030. Through the C40 Fossil Fuel Free Streets Declaration in June 2018, Greater Manchester also committed to transitioning to a zero-emission bus fleet by 2025.

1.6 Greater Manchester has also set targets for CO_2 emission reduction that exceed national ambitions – a reduction of 48% by 2020 (based upon 1990 levels). Greater Manchester road transport accounts for 31% of carbon dioxide emissions in the city-region. Greater Manchester's local authorities have also committed to eliminating fossil fuels by 2050 in a 100% clean energy pledge.

1.7 However, whilst these targets, strategies and action plans aim to improve air quality and pollution in Greater Manchester in the round, the specific breaches of the statutory Limit Values for NO_2 has prompted a series of court rulings and national Air Quality Plans that have implications for local authorities.

1.8 Since 2017 Greater Manchester (GM) has been acting as required by the direction from Government to conduct a feasibility study to assess measures for reducing NO_2 concentrations in areas where legal limits are expected to be exceeded beyond 2020. This will culminate in a series of business cases for introducing the measures identified through a Clean Air Plan.

2. POLICY BACKGROUND

2.1 Because of their harm to human health, regulations set legal Limit Values for concentrations of certain pollutants in ambient air. The European Ambient Air Quality Directive (2008/50/EC) incorporates WHO air quality standards into European Law, which was implemented into UK law by the 2010 Air Quality Standards Regulations (SI. 2010 No. 1001). The 2010 regulations set legally binding limits for concentrations of major air pollutants that affect human health, including NO_2 and particulates. Regulation 26 of the 2010 Regulations requires the Secretary of State to draw up and implement a national air quality plan so as to achieve the relevant limit or target value within the "shortest possible time". The EU has recently re-stated its aim to achieve full compliance with existing air quality standards 'by 2020 at the latest'[6].

2.2 Since 2010 the UK has been in breach of legal Limit Values for NO_2 concentrations in major urban areas. The Greater Manchester Urban Area Zone is one of 37 monitoring zones across the UK where the Department for the Environment, Food and Rural Affairs (Defra) modelling of annual mean NO_2 concentrations predicts levels that exceed statutory Limit Values. GM meets the EU Limit Values for all other pollutants.

[6] https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:52013DC0918

2.3 The EC Directive requires any breach to be addressed by an Air Quality Plan that will reduce concentrations to legal Limit Values in the "shortest possible time".

3. UK AIR QUALITY PLANS

3.1 Since 2010 the UK Government has produced three successive Air Quality Plans to reduce NO_2 by requiring local authorities to reduce emissions from road transport[7].

3.2 Environmental campaigning law firm ClientEarth has successfully challenged these Air Quality Plans in the UK High and Supreme Courts for failing to include the actions necessary to achieve NO_2 Limit Values "in the shortest possible time". The Courts have clarified that any steps taken must not just be possible but likely to meet the required values.

3.3 Each successful legal challenge has increased the number of local authorities directed to take action, with over 60 local authorities now under a direction:

- 2015: Birmingham Derby, Leeds, Nottingham and Southampton.
- 2017: 23 local authorities – including Bolton, Bury, Manchester, Salford, Stockport, Tameside and Trafford.
- 2018: 33 further local authorities, including Oldham.

3.4 Government wrote to the seven GM local authorities directing them to produce a feasibility study as set out in the Environmental Act 1995 (Feasibility Study for Nitrogen Dioxide Compliance) Air Quality Direction 2017.

3.5 It should be noted that this direction relates only to the roads that local authorities are responsible for, and does not direct local authorities to assess or act to reduce NO_2 concentrations on the Strategic Road Network or motorways managed by Highways England.

3.6 Defra and the Department for Transport (DfT) have defined the feasibility study process local authorities are following in the 'Clean Air Zone Framework' (Defra, 2017) and the 'UK plan for tackling roadside nitrogen dioxide exceedances' (Defra and DfT, 2017) – referred to herein as the National Plan. Government also set up the Joint Air Quality Unit (JAQU) to deliver the National Plan by closely guiding local authorities through the feasibility study process.

3.7 The study must produce a series of business cases for assessing and implementing the relevant measures. The Government has allocated £255 million Implementation

[7] Each plan has been subject to legal challenge in both European and national courts, and following several warnings the UK Government was referred to the European Court of Justice (CJEU) in May 2018, for repeatedly failing to take the necessary action to address NO_2 levels. The CJEU can fine Member States that breach legal levels of certain pollutants. The UK High Court and Supreme court have also separately ruled that the Government's actions to address air quality are illegal in that they did not contain the scale or urgency of action required to bring NO_2 concentrations below legal levels "within the shortest possible time".

Funding and £220 million for a Clean Air Fund. Local authorities will be allocated Implementation Funding based on their Final Business Case. Local authorities will bid to the Clean Air Fund for support to help local people, businesses and other groups to switch to cleaner vehicles or make alternative travel choices. The proposals put forward in the business cases will therefore be conditional upon sufficient funding being provided by Government.

3.8 It should be noted that Oldham Council were under a separate Direction (Environmental Act 1995 (Feasibility Study for Nitrogen Dioxide Compliance) Air Quality Direction 2018) which they complied with by the production of their feasibility study submitted to JAQU in July 2018. No further direction was issued to Oldham as the Government acknowledged in its supplemental plan[8] that the exceedance identified in Oldham was being considered as part of the Greater Manchester plan. Rochdale and Wigan Council's, whilst not compelled to act by a Ministerial direction, are participating in the Greater Manchester wide approach to address exceedances which have been identified. Our collective action to develop a regional-wide Clean Air Plan has been accepted by the government as we work with JAQU through the feasibility study process and no further ministerial directions have been issued. The funding requests included in the business cases would be on a Greater Manchester wide basis and therefore include funding for the implementation of any proposals across all ten GM local authorities.

3.9 Government compels local authorities with NO_2 exceedances to follow a specific process, set out in detailed, statutory guidance, to develop their Clean Air Plans.[9]

3.10 Government has also published a Clean Air Zone Framework which sets out the principles for the operation of Clean Air Zones in any cities which decide, or are required, to do so.

3.11 The guidance states that, "the Framework identifies the outcomes that Clean Air Zones are expected to deliver:

a. Immediate action to improve air quality and health by delivering the statutory NO_2 limit values within the shortest possible time;
b. Supporting local growth and ambition (decoupling growth and pollution); and
c. Accelerating the transition to a low emission economy."[10]

3.12 The statutory guidance issued by Government states that, "it is for local authorities to develop innovative local plans that will achieve statutory NO_2 limit values within the shortest possible time.

[8] Supplemental Plan to the UK plan for tackling roadside nitrogen dioxide concentrations DEFRA and DfT October 2018
[9] UK Plan for tackling roadside nitrogen dioxide concentrations, DEFRA and DfT, July 2017
[10] UK Plan for tackling roadside nitrogen dioxide concentrations, DEFRA and DfT, July 2017, p.34

3.13 In particular, this guidance states that "government has identified Clean Air Zones that include charging as the measure it is able to model nationally which will achieve statutory NO_2 limit values in towns and cities in the shortest possible time."[11]

3.14 Government specifies four classes of Clean Air Zones that apply penalties to different types of vehicle that are classified as non-compliant because they fall below particular euro emission standards[12]. Cleaner vehicles are unaffected.

- 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.

3.15 The associated emissions standards are as follows:

- Euro 3 for motorcycles, mopeds, motorised tricycles and quadricycles.
- Euro 4 for petrol cars, vans, minibuses and other specialist vehicles.
- Euro 6 for diesel cars, vans and minibuses and other specialist vehicles.
- Euro VI for lorries, buses and coaches and other specialist heavy vehicles.

3.16 In relation to a local plan, guidance states that, "a plan will only be approved by government, and this be considered for appropriate funding support, if it can show that:

a. It is likely to cause NO_2 levels in the area to reach legal compliance within the shortest time possible (and provides a route to compliance which reduces exposure as quickly as possible);
b. The effects and impacts on local residents and businesses have been assessed, including on disadvantaged groups, and there are no unintended consequences;
c. Proposals that request UK government funding support demonstrate value for money; and
d. The local measures have been carefully analysed using detailed local evidence and local air quality modelling tools and analysis methods, improving on the analysis at national level."[13]

3.17 In summary, the government guidance referred to above is highly prescriptive.

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[11] UK Plan for tackling roadside nitrogen dioxide concentrations, DEFRA and DfT, July 2017, p.30, 31

[12] A vehicle's Euro emission standard, is shown in the vehicle registration document – also known as a V5C.

[13] UK Plan for tackling roadside nitrogen dioxide concentrations, DEFRA and DfT, July 2017, p 32

3.18 It requires a specific focus on just one air pollutant, NO_2, and it requires relevant local authorities to consider and benchmark their feasibility plans against charging Clean Air Zones, although it has not required that part of the highway network under its control, namely Highways England, to adopt the same approach.

3.19 Furthermore, whilst the guidance also refers to other matters relating to air quality and wider public policy, the reality is that it is primarily informed by UK law and EU Directives relating to reducing NO_2 emissions to EU Limit Values, and securing this in the shortest possible time is the primary indicator of whether a Clean Air Plan will be compliant.

3.20 Accordingly, the timescales for developing, agreeing and implementing a plan to reduce NO_2 exceedance areas are extremely challenging.

3.21 These are the result, to a greater or lesser extent, of government failing to take early action to meet the EU's attainment deadline for NO_2 compliance by 2010, and failing to take effective action through the five year extension period it agreed with the EU in the period 2010 - 2015.

4. ASSESSING THE OPTIONS FOR GREATER MANCHESTER

4.1 Transport for Greater Manchester (TfGM) has been coordinating a GM feasibility study on behalf of the GMCA and the ten Greater Manchester local authorities. TfGM has been working closely with all the local authorities, who remain legally responsible for reducing NO_2 to legal Limit Values.

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

4.3 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 local authority and senior representatives from Highways England, Public Health England, AGMA, Local Partnerships and TfGM.

4.4 Much work has already been undertaken, including for example the local air quality analysis which identified areas of NO_2 exceedances in all ten of the GM local authorities. This was reported to GMCA in October 2018 – Update on Local Air Quality Modelling – where it was set out that GM's local modelling to date predicts stronger concentrations of NO_2 in locations across Greater Manchester.

4.5 At this stage, no decisions have been taken over the precise mix of measures that will be needed to tackle GM's NO_2 exceedances. However, over the summer a process of refining measures and developing a range of options that combine the

measures in different ways has been undertaken to understand the type and scale of intervention needed to reduce NO_2 to within legal Limit Values in the "shortest possible time" across Greater Manchester.

4.6 These different options are being assessed in terms of their air quality impact (and timeframe of this impact), technical feasibility, cost-benefit and their socio-economic impact. This assessment is currently ongoing and its outcomes will be presented in the Outline Business Case document and will be brought forward to the Combined Authority and all ten councils.

4.7 As has been previously been reported as a precursor of any future Clean Air Plan, the Mayor on behalf of the GM local authorities set out to the Secretary of State for the Environment the specific actions needed to support Greater Manchester. These include:

- Clear arrangements and funding to develop workable, local vehicle scrappage / upgrade measures;
- Short term effective interventions in vehicle and technology manufacturing and distribution, led by national Government with local authorities;
- Replacement of non-compliant buses; and
- A clear instruction to Highways England with regard to air pollution from the strategic highway network in Greater Manchester.

5. GREATER MANCHESTER'S DIRECTION OF TRAVEL

5.1 The work undertaken to date indicates that a package of measures that includes some form of charging Clean Air Zone is highly likely to be necessary to comply with government guidance and legal rulings to reduce NO_2 to within legal Limit Values in the "shortest possible time" across Greater Manchester.

5.2 As previously reported the Government has set out a framework for charging Clean Air Zones (CAZ). Clean Air Zones differ from Congestion Charging systems because of their very different objectives and time-spans. The objective of any penalty in a CAZ is for all vehicles which drive in a Clean Air Zone to have engines which comply with emissions standards. A CAZ does not seek to reduce the number of vehicles on roads. This also means as vehicles are upgraded the number of penalties levied reduces and are therefore relatively short-term and only apply to non-compliant vehicles. Under a Congestion Charge, the requirement to pay applies to all vehicles, is enduring, and creates a long-term revenue stream. In contrast a CAZ in in its later years should not generate surpluses as vehicles become cleaner.

5.3 On this understanding GMCA has ruled out congestion charging.

5.4 Greater Manchester has a longstanding track record in taking a balanced approach to policy development to promote sustainability, inclusion and growth. Therefore, whilst respecting the strategic importance of addressing pollution and attendant

impact on public health to better understand all the implications, further work in relation to the feasibility study is required. This work has been requested to ensure in developing our plans to deliver air quality improvements we understand the impacts on growth and inclusion across the city region.

5.5 This will provide members with a fuller understanding of the effects and impacts on residents and businesses, to help to manage against wider policy conflicts from any potential options that include charging Clean Air Zones as per government guidance as well as any associated measures.

5.6 In particular, it will seek to further understand the impact that any penalty regime could have on lower income groups and the ability of residents in these groups to continue to access employment, public services and other key opportunities to improve their life chances. This will help to ensure that members have the fullest understanding available within the timescales to consider these implications alongside the legal obligations with regard to air quality.

5.7 The additional work to be undertaken will also help to inform the design of additional measures to ensure that vehicle renewal options can be best offered to those groups that may otherwise face future penalties. This has been a priority for Greater Manchester throughout, recognising the high dependence of the small business sector in particular on small diesel vehicles; the high volume of diesel engines across taxi and private hire fleets; and the need to ensure that an approach can be established with government and the bus industry that safeguards the availability of bus services.

5.8 It is absolutely vital however that GM has a reasonable and practicable plan for tackling roadside NO_2 concentrations; one that ensures that the areas of NO_2 exceedance that have been identified within GM reach levels of legal compliance, and that this is understood within the broader context provided for by guidance, as set out above.

5.9 The GM approach is unique insofar as it utilises existing governance and administrative arrangements to bring together ten local authorities and their highway networks, thereby permitting the development and the implementation of a co-ordinated plan to reduce roadside NO_2 concentrations that will benefit nearly three million people. Such a joined-up approach provides the potential for the most effective and swift reduction in emissions in areas across the whole of the city region.

5.10 However, given the requirement for any such plan to be agreed by each of GM's ten local authorities, and the requisite information to be provided that will allow a full and proper consideration of any necessary measures and their potential impacts, further time than that identified by government is required.

5.11 In addition, the different approach that government has adopted for its highways body, namely Highways England (who are responsible for the strategic (motorway) network) is problematic. This is particularly the case for GM, given the numerous

junctions and extremely close relationship between traffic flows on urban parts of the motorway network, such as the M60, and on the local highway network.

5.12 For example, it is unclear as yet the scale of the NO_2 problem identified by Highways England on the local motorway network, and its effects over a wider geographical area. There is also a lack of clarity what measures Highways England may be considering and their timescales for implementation, and therefore the extent to which these may benefit or potentially exacerbate NO_2 impacts on the local authority network.

5.13 Work will be undertaken to better understand Highways England activity in this regard, and to encourage much greater co-operation in relation to contributing to the GM plan.

5.14 The GM Clean Air Plan will ensure that Greater Manchester can address the nearer term issue of pollution in existing urban areas. Members will recognise that this is a crucial component in also safeguarding our urban areas as the strategic focus for future development, as will be set out in the revised draft Greater Manchester Spatial Framework. Without this continued focus, Greater Manchester would risk excessive dispersed development that would undermine both the existing air pollution challenge and longer-term carbon reduction objectives.

5.15 Undertaking this further work means that GM will be unable to submit its Outline Business Case (OBC) to government by the agreed deadline of 31 January 2019.

6. LEGAL RISKS AND IMPLICATIONS

6.1 Submission of OBC after the 31 January 2019 does not meet the ministerial direction which has been issued to seven of the ten GM local authorities. This could lead to a potential legal challenge against one or more the GM local authorities under a direction.

7. NEXT STEPS

7.1 The next step in the process set out by government is for GM local authorities to consider an Outline Business Case (OBC), which will assess the options for achieving compliance in GM and identify a 'preferred option', defined as being the proposed package of measures which achieves compliance in the shortest possible time, in accordance with the GM local authorities legal duties and public law principles. This work will be supplemented by the additional impact assessment referred to above.

7.2 Subject to approval by each of GM's local authorities, the OBC will be submitted to Government, who will confirm whether the proposals are accepted.

7.3 It is anticipated that a report about the OBC will be brought forward in Spring 2019 to the Combined Authority and all ten councils.

7.4 A non-statutory public conversation will follow the completion of the OBC to seek wide-ranging feedback on the options for achieving compliance in GM and the identified 'preferred option' whilst at a formative stage. The outputs from this initial engagement activity will be used to inform the ongoing detailed design of any scheme, and build understanding around the potential impacts of the 'preferred option' from a public and stakeholder perspective.

7.5 The outputs of this would inform the development of the scheme in the Full Business Case. For example Leeds reported that their outputs:

- Amended boundary of proposed CAZ;
- Used it to collect evidence to define their proposed exemption periods and discounts;
- Used it to collect evidence to define the financial support packages; and
- Used it to refine their penalty charges.

7.6 Recommendations are set out at the front of this report.

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