

Greater Manchester's Clean Air Plan to tackle Nitrogen Dioxide Exceedances at the Roadside: Option for Consultation

Modelling Assumptions for the 'Option for Consultation'



Salford City Council



Oldham
Council

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Authorised by: Date:	Ian Palmer 31 st January 2020		

COVID-19 Pandemic Statement

This work has not considered the impact of the COVID-19 pandemic. Whilst we are continuing, where possible, to develop the Greater Manchester Clean Air Plan, the pandemic has already had an impact on our ability to keep to the timescales previously indicated and there may be further impacts on timescales as the impact of the pandemic becomes clearer.

We are also mindful of the significant changes that could result from these exceptional times. We know that the transport sector has already been impacted by the pandemic, and government policies to stem its spread. The sector's ability to recover from revenue loss, whilst also being expected to respond to pre-pandemic clean air policy priorities by upgrading to a cleaner fleet, will clearly require further thought and consideration.

The groups most affected by our Clean Air Plan may require different levels of financial assistance than we had anticipated at the time of writing our previous submission to Government.

More broadly, we anticipate that there may be wider traffic and economic impacts that could significantly change the assumptions that sit behind our plans. We have begun to consider the impacts, and have committed to updating the government as the picture becomes clearer over time.

We remain committed to cleaning up Greater Manchester's air. However, given the extraordinary circumstances that will remain for some time, this piece of work remains unfinished until the impact of the COVID-19 pandemic has been fully considered by the Greater Manchester Authorities.

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1 Introduction

1.1 Overview

1.1.1 In July 2017 the Government published the UK plan for tackling roadside nitrogen dioxide (NO₂) concentrations. This set out how the Government would bring UK concentrations of NO₂ within the statutory annual limit of 40 micrograms per cubic metre (µg/m³) in the shortest possible time. The plan sets out several national and local measures that need to be taken.

1.1.2 Transport for Greater Manchester (TfGM) is playing a leading role in lowering emissions by implementing the Greater Manchester (GM) Clean Air Plan (CAP).

1.1.3 The CAP option which is being taken forward for consultation includes the following measures:

- A category C CAZ covering the whole of Greater Manchester in 2021, with temporary exemptions to 2023 for LGVs, minibuses, GM-licensed wheelchair accessible hackney cabs and private hire vehicles, and GM-registered coaches;
- Measures to promote sustainable journeys and invest in electric vehicle charging infrastructure for taxis and a try-before-you-buy electric taxi scheme;
- Funds to upgrade the bus fleet; and
- Funds for Taxi, PHV, LGV and HGV operators to upgrade their vehicles, plus Loan/Finance measures.

1.1.1 This document summarises the key modelling assumptions for the consultation package.

2 Summary of Modelling Responses

2.1 Introduction

2.1.1 Tables 2-1 to 2.3 provide a summary by year, by vehicle type, of the main modelling assumptions that have been used within the assessment of the consultation package.

2.1.2 The background to these assumptions is set out in detail in the Local Plan Transport Model Forecasting Report (T4) and the associated Appendix A (Behavioural Response Cost Models and Demand Sifting Tool).

2.1.3 Specific assumptions regarding vehicle type and year are identified in the footnotes accompanying the tables but there are also overarching assumptions as follows:

- Vehicle supply is not a constraint;
- Access to finance is not a constraint; and
- Vehicle pricing is not affected by the implementation of this, or any other, clean air proposal.

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Table 2-1 Summary of Modelling Assumptions - 2021

Vehicle Type	Charge Level	Funding Provision	Behavioural Response			
			Pay Charge	Change Mode	Cancel Trip	Upgrade
Private Car	n/a	n/a	n/a	n/a	n/a	n/a
Taxi - Private Hire ⁽¹⁾	£7.50 ⁽²⁾	£3,000 ⁽³⁾	11.4%	0.0%	4.3%	84.3%
Taxi - Hackney ⁽⁴⁾	n/a	n/a	n/a	n/a	n/a	n/a
Light Goods Vehicle (LGV)	n/a	n/a	n/a	n/a	n/a	n/a
Heavy Goods Vehicle (HGV)	£60.00	7.5t - £2,500 ⁽⁵⁾ 18t - £3,500 ⁽⁵⁾ 26t - £4,500 ⁽⁵⁾ 32t - £5,500 ⁽⁵⁾ 44t - £4,500 ⁽⁵⁾	2.7%	0.1%	0.0%	97.2%

Notes:

- (1) Assumed that all PHVs are non-WAV and therefore in scope for a charge; in practice there are around 100 WAV PHVs licensed in GM.
- (2) Discounted weekly charge of £37.50 applied to owner-driver PHVs licensed in GM.
- (3) Eligibility criteria to apply for funds:
- GM licensed;
 - SME only;
 - Requires vehicle scrappage; and
 - Average value of £3,000 reflects funding offer of £2,000 for a compliant ICE vehicle and £4,000 for a zero emission vehicle.
- (4) Assumed that all Hackney are WAV (wheelchair accessible vehicle); in practice there are around 300 non-WAV hackney cabs licensed in GM.
- (5) Eligibility criteria to apply for funds:
- GM registered;
 - SME only; and
 - Requires vehicle scrappage.

Table 2-2 Summary of Modelling Assumptions - 2023

Vehicle Type	Charge Level	Funding Provision	Behavioural Response			
			Pay Charge	Change Mode	Cancel Trip	Upgrade
Private Car	n/a	n/a	n/a	n/a	n/a	n/a
Taxi - Private Hire	£7.50 ⁽¹⁾	£3,000 ⁽²⁾	15.8%	0.0%	0.4%	83.8%
Taxi - Hackney	£7.50	ZEC - £10,000 ⁽³⁾ Retrofit - £5,000 ⁽³⁾	25.7%	0.0%	0.0%	74.3%
Light Goods Vehicle (LGV)	£10.00	£3,500 ⁽⁴⁾	12.2%	3.4%	0.0%	84.5%
Heavy Goods Vehicle (HGV)	£60.00	7.5t - £2,500 ⁽⁵⁾ 18t - £3,500 ⁽⁵⁾ 26t - £4,500 ⁽⁵⁾ 32t - £5,500 ⁽⁵⁾ 44t - £4,500 ⁽⁵⁾	4.8%	0.0%	0.0%	95.2%

Notes:

- (1) Discounted weekly charge of £37.50 applied to owner-driver PHVs licensed in GM.
- (2) Eligibility criteria to apply for funds:
 - GM licensed;
 - SME only;
 - Requires vehicle scrappage; and
 - Average value of £3,000 reflects funding offer of £2,000 for a compliant ICE vehicle and £4,000 for a zero emission vehicle.
- (3) Eligibility criteria to apply for funds:
 - GM licensed; and
 - Requires vehicle scrappage.
- (4) Eligibility criteria to apply for funds:
 - GM registered;
 - SME only; and
 - Requires vehicle scrappage.
- (5) Eligibility criteria applied to apply for funds:
 - GM registered;
 - SME only; and
 - Requires vehicle scrappage.

Table 2-3 Summary of Modelling Assumptions - 2025

Vehicle Type	Charge Level	Funding Provision	Behavioural Response			
			Pay Charge	Change Mode	Cancel Trip	Upgrade
Private Car	n/a	n/a	n/a	n/a	n/a	n/a
Taxi - Private Hire	£7.50 ⁽¹⁾	£3,000 ⁽²⁾	17.7%	0.0%	0.0%	82.3%
Taxi - Hackney	£7.50	ZEC - £10,000 ⁽³⁾ Retrofit - £5,000 ⁽³⁾	27.6%	0.0%	0.0%	72.4%
Light Goods Vehicle (LGV)	£10.00	£3,500 ⁽⁴⁾	13.6%	0.0%	0.0%	86.4%
Heavy Goods Vehicle (HGV)	£60.00	7.5t - £2,500 ⁽⁵⁾ 18t - £3,500 ⁽⁵⁾ 26t - £4,500 ⁽⁵⁾ 32t - £5,500 ⁽⁵⁾ 44t - £4,500 ⁽⁵⁾	1.9%	0.0%	0.0%	98.1%

Notes:

- (1) Discounted weekly charge of £37.50 applied to owner-driver PHVs licensed in GM.
- (2) Eligibility criteria to apply for funds:
 - GM licensed;
 - SME only;
 - Requires vehicle scrappage; and
 - Average value of £3,000 reflects funding offer of £2,000 for a compliant ICE vehicle and £4,000 for a zero emission vehicle.
- (3) Eligibility criteria to apply for funds:
 - GM licensed; and
 - Requires vehicle scrappage.
- (4) Eligibility criteria to apply for funds:
 - GM registered;
 - SME only; and
 - Requires vehicle scrappage.
- (5) Eligibility criteria applied to apply for funds:
 - GM registered;
 - SME only; and
 - Requires vehicle scrappage.