

Maldon District Council in partnership with
Essex County Council

Air Quality Action Plan 2020 - 2025

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

June 2020

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Foreword

I am very pleased to introduce our 2020-2025 Air Quality Action Plan. It sets out how the Council will contribute towards improving air quality in Maldon.

While air quality has improved significantly since the smog of the 1950s and 1960s, poor air quality continues to significantly affect people's health at significant public cost. There are real opportunities for us to proactively address the health impacts of air quality. Over the past year we have completed the Full Council Transformation programme which will deliver savings of £1.8m over three years. We must continue to transform the way we live and work, be more sustainable and reduce our contribution to poor air quality. You might have seen that the latest Quality of Life survey by the Halifax has reported that Maldon District is the fifth best place to live in the UK. The survey was put together based on 26 different factors that home buyers may look when choosing a home. These include safety, access to green space, wellbeing, lifestyle and affordability.

This action plan sets out how we will work towards meeting national air quality objectives for nitrogen dioxide. We can't achieve this alone. Air Quality sees no boundaries and so we need to work with residents and businesses, other councils, and various partnerships and charities. Working together we will continue to change the way we all live, travel and do business to make Maldon one of the cleanest districts and most attractive places to live, work and visit.

The recent health emergency has reinforced the significant link between COVID-19 recovery, respiratory health and fitness, and the planned Active Travel measures will help us become more resilient in the future.

*Councillor A S Fluker
Leader of the Council*

Position	Name	e-Signature	Date
Leader of the Council	Cllr A S Fluker		
Deputy Leader of Essex County Council Cabinet Member for Infrastructure	Cllr K P Bentley		

Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality on Market Hill in Maldon District Council between 2020 – 2025.

The plan has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part, and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³. Maldon District Council is committed to reducing the exposure of people in Maldon to poor air quality in order to improve health.

We have developed actions that can be considered under eight broad topics:

- Alternatives to private vehicle use
- Freight and delivery management
- Promoting low emission transport
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management
- Vehicle fleet efficiency

Our priorities are reduction of emissions through the implementation of a Clean Air Zone and enforcing the 7.5t weight restriction on Market Hill, Policy and Infrastructure measures to develop a Maldon Transport Strategy, and promoting Smarter Choices

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

using educational packages and behavioural change opportunities to encourage modal shift.

In this AQAP we outline a progressive approach to how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Maldon's direct influence.

During the delivery of the plan, air quality will continue to be monitored and new measures developed where necessary. This plan is a live document and will be formally reviewed every five years, while progress on individual measures will be reported within Maldon District Council's Air Quality Annual Status Report.

Responsibilities and Commitment

This AQAP was prepared by the Environmental Health Department of Maldon District Council and the Scientific Team of Chelmsford City Council with the support and agreement of the following officers and departments:

Council Members:

- Cllr Fluker – Leader of the Council, Chair of the Air Quality Steering Group and ward member for Southminster.
- Cllr Channer – Vice-chairman of the Council, ward member for Mayland (also ECC Divisional Member but not appointed to the group on that basis).
- Cllr White - Ward member for Purleigh
- Cllr Durham - Ward member for Wickham Bishops and Woodham
- Cllr Morley - Ward member for Tolleshunt D'Arcy
- Cllr Harker – Ward member for Heybridge East
- Cllr Nunn – Ward member for Maldon North - First attended as Steering Group Member on 24th June 2020
- Cllr Mayes – Ward member for Maldon North - First attended as Steering Group Member on 24th June 2020

Council Officers and External Contributors:

- Richard Holmes – Director of Service Delivery
- Paul Dodson – Director of Strategy, Performance and Governance
- Lead Specialist, Community
- Strategy Theme Lead Officer
- Tim Savage – Senior Scientific Officer, Chelmsford City Council
- Katie Pudney – Senior Transportation and Infrastructure Planner, Essex County Council
- Tracy Farrell – Environmental Protection
- Essex County Council Transportation and Infrastructure
- Essex County Council Integrated Passenger Transport Unit

This AQAP has been approved by:

- Maldon District Council’s Strategy and Resources Committee
- Members at Full Council
- Essex County Council

This AQAP will be subject to an annual review, appraisal of progress and reporting to the Strategy and Resources Committee. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Maldon District Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Environmental Health at: Maldon District Council, Princes Road, Maldon, CM9 5DL.

Email: esr@maldon.gov.uk

Table of Contents

Executive Summary	i
Responsibilities and Commitment.....	ii
1 Introduction	1
2 Summary of Current Air Quality in Maldon DC.....	2
3 Maldon District Council’s Air Quality Priorities.....	3
3.1 Public Health Context.....	4
3.2 Planning and Policy Context.....	4
3.3 Source Apportionment.....	5
3.4 Required Reduction in Emissions.....	6
3.5 Key Priorities	9
4 Development and Implementation of Maldon DC AQAP.....	15
4.1 Consultation and Stakeholder Engagement.....	15
4.2 Steering Group.....	17
5 AQAP Measures	19
Appendix A: Response to Consultation	30
Appendix B: Reasons for Not Pursuing Action Plan Measures	37
Appendix C: Options Assessment.....	38
Appendix D: Detailed Public Consultation Response.....	36
Glossary of Terms	50
References	52

List of Tables

Table 3.1 – Market Hill Average Vehicle NO _x Emissions by Vehicle Type (2018).....	5
Table 3.2 - Required Reductions of NO ₂ Concentrations.....	8
Table 3.3 - Scenario Modelling.....	10
Table 4.1 - Consultation Undertaken.....	14
Table 4.2 - Steering Group Work.....	16
Table 5.1 – Air Quality Action Plan Measures.....	20

List of Figures

Figure 1 - Market Hill NO _x Emissions by Source Type (2018) (%).....	5
Figure 2 –Market Hill Exceedances Mapped into Zones.....	7
Figure 3 - Modelled Change in Annual Average NO ₂ Concentrations for Scenario 4.....	11
Figure 4 – Modelled Annual Average NO ₂ Concentrations for Scenario 4.....	12
Figure 5 – Map of Clean Air Zone.....	13

1 Introduction

This report outlines the actions that Maldon District Council will deliver between 2020-2025 to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting the health and quality of life of residents and visitors to the local authority's administrative area.

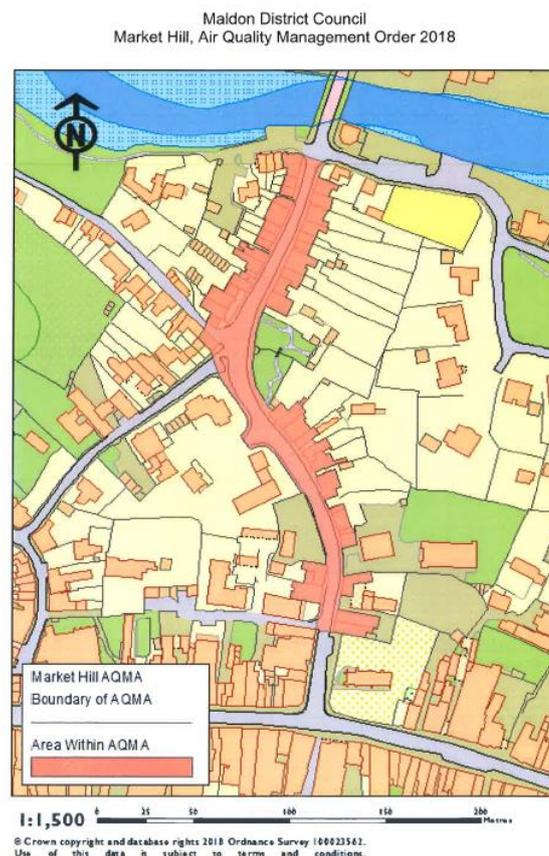
It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This Plan will be reviewed every five years at the latest, and progress on measures set out within this Plan will be reported annually within Maldon District Council's air quality Annual Status Report which will be submitted to Defra and published on the council's web site.

2 Summary of Current Air Quality in Maldon District Council

Air Quality within Maldon District Council is generally good and has been monitored and reported to Defra in line with the Local Air Quality Management regime since 1997.

An Air Quality Management Area (LAQM), covering one street in Maldon was declared in December 2018. The area was designated in relation to the likely breach of the nitrogen dioxide annual mean and hourly objectives as specified in the Air Quality Regulations 2000. The council is required to publish a plan following declaration, laying out the measures it will take to achieve the required objective in the shortest time.



All of the historic documents which support this plan, along with detailed source apportionment and modelling studies, can be found on the Council's website, https://www.maldon.gov.uk/info/20099/pollution/9148/air_quality

3 Maldon District Council's Air Quality Priorities

The Council has three outward-facing strategic themes of Place, Community and Prosperity. These are underpinned by an organisational focus on Performance and Value. Under the theme of "Place" the council strives to protect and improve the environment for residents and visitors, through the following outcomes:

- Open spaces maintained for the enjoyment of all
- Improved air quality
- Partnership working to protect our countryside and coastline
- Sound and tested environmentally friendly initiatives delivered

The council balances this with the need for sustainable growth and new infrastructure.

Under the theme of "Community" the council strives for healthy, safe and vibrant communities through the following outcomes:

- Working with communities and partners to support our health and wellbeing priorities: obesity, mental health, social isolation and loneliness, and older people's health
- Partnership working to safeguard vulnerable adults, children and families
- Effective engagement to support strong and resilient communities

Under the theme of "Prosperity" the council supports local businesses and attracts new ones through the following outcomes:

- Delivery of strategic employment sites in accordance with the Local Development Plan
- Partnership working to provide an Enterprise Centre
- Rural business and diversification supported
- Tourism supported and encouraged
- Efficient and effective engagement with businesses

3.1 Public Health Context

The prevalence of asthma in the East of England, is 6.2% of the population (Source PHE). In terms of hospital admissions for asthma, the data is available at Essex County level, and there were 6,347 admissions in 2016/17. (Source Asthma.org.uk)

Although this AQAP has not been prepared due to an exceedance of PM2.5, this indicator in the Public Health Outcomes Framework provides further impetus to join up action between the various local authority departments which impact on the delivery of air quality improvements. This plan also addresses the issue of childhood obesity by promoting modal shift to Active Travel. Whilst Public Health sits with County Council, Maldon District Council employs a Health Improvement Officer who supports the Maldon Livewell Partnership Board whose purpose is:

To improve health and wellbeing in the Maldon district through developing and implementing a Maldon District Health and Wellbeing Strategy 2019-2023 which:

- targets resources at areas of greatest need;
- promotes healthy and active lifestyles and resilient communities and;
- focuses on the wider determinants of health.

3.2 Planning and Policy Context

The Action Plan has been developed with due regard to existing Council strategy, policy and corporate priorities:

- Maldon Local Development Plan
- Maldon and Heybridge Central Area Masterplan
- Corporate Plan 2019/23
- Maldon District Design Guide: Assessing Air Quality and Emissions Impacts from Developments

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within the AQMA in Maldon.

A source apportionment exercise was carried out on behalf of Maldon District Council, by Cambridge Environmental Research Consultants (CERC), in 2019.

The study used the ADMS-Urban software to run an air quality dispersion model.

This identified that within the AQMA, the percentage source contributions were as follows:

Figure 1 - Market Hill NOx Emissions by Source Type (2018) (%)

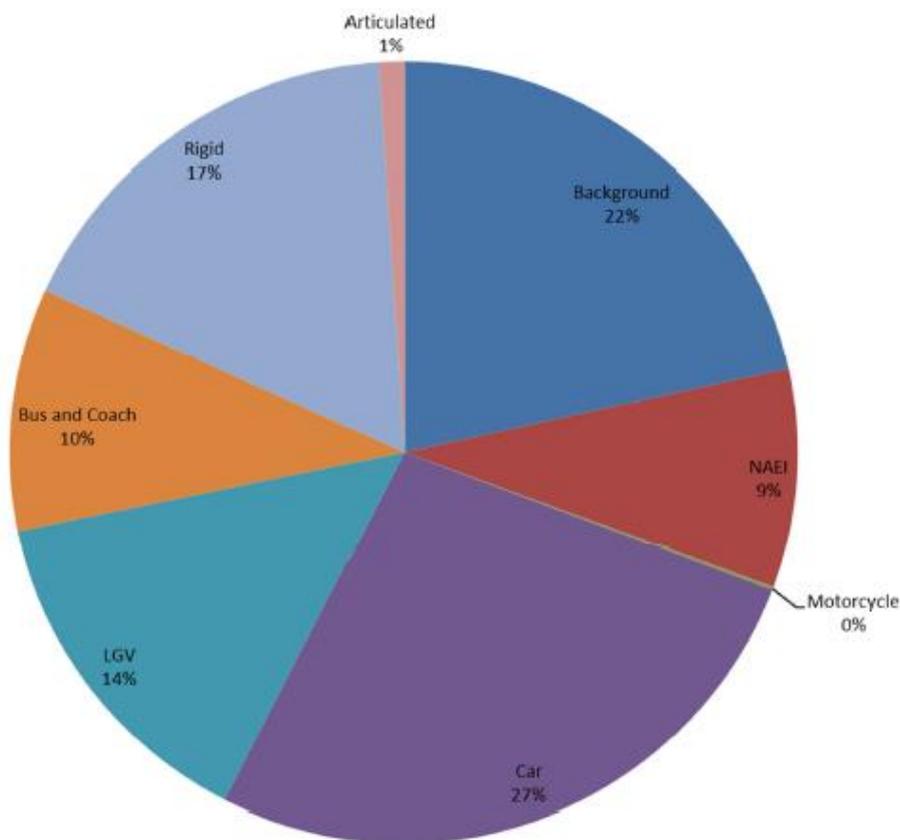


Table 3.1 Market Hill Average Vehicle NOx Emissions by Vehicle Type (2018)

Vehicle Type	Fleet Mix	Average NOx Emissions
Motorcycles	1.1%	0.1%
Cars	79.2%	39.4%
LGV	15.5%	21.1%
Bus	1.1%	14.1%
Rigid HGV	3.9%	23.9%
Articulated HGV	0.1%	1.4%

The source apportionment identifies that of the local vehicle fleet, cars make up 79.2% of the vehicular traffic but contribute to 39.4% of vehicle emissions.

Vehicles in the HGV category: Buses, Rigid HGV and Articulated HGV make up 5.1% of the vehicular traffic but contribute to an equal 39.4% of vehicle emissions.

The main measures presented in this air quality action plan focus upon the heavier vehicles which due to the gradient of Market Hill, emit pollution at a disproportionately high level.

However, it is important that action plan measures reduce pollution from all sources. In addition to interventions that tackle emissions from HGVs and buses, measures are presented to reduce emissions through the promotion of sustainable travel and the reduction of personal car use.

3.4 Required Reduction in Emissions

Monitored exceedances on Market Hill have been mapped into geographical zones to enable identification of the necessary improvements in localised air quality.

Figure 2 identifies the steep sections of the Market Hill AQMA mapped into three zones.

Figure - 2 Market Hill Exceedances Mapped into Zones

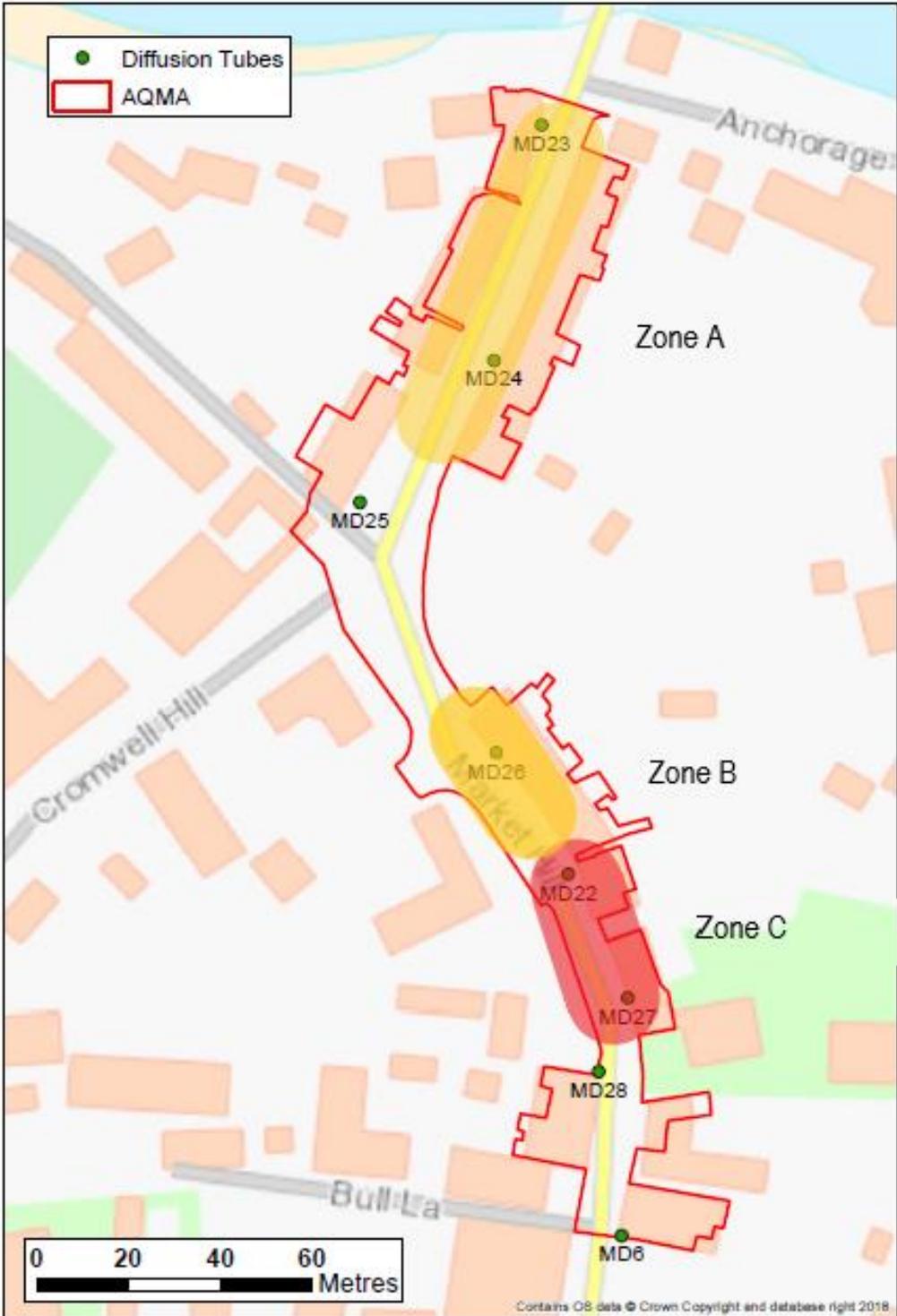


Table 2 identifies the reductions of NO₂ required to reach compliance with the Air Quality Objectives.

Table 3.2 - Required Reductions of NO₂ Concentrations

AQMA Exceedance Zone	Range of Monitored NO ₂ Concentrations (at relevant exposure)	Required Reduction of NO ₂ to reach compliance with Air Quality Objectives	Comments
Zone A	33.1 – 44.0 ug/m ³	4 ug/m ³	Street canyon location. Steep Gradient
Zone B	39.1 ug/m ³	No exceedance	Not a street canyon location No measured exceedances
Zone C	55.5 – 61.8 ug/m ³	22 ug/m ³	Significant street canyon. Steep gradient. Experiences congestion due to proximity of junction with Maldon High Street

The high concentrations that have been measured in Zone C of the AQMA require significant intervention to meet compliance meet the air quality objectives.

3.5 Key Priorities

Maldon District Council has the following priorities for the development and implementation of the air quality action plan:

Priority 1 – Reduction of Emissions

This priority is to implement direct interventions which reduce emissions on Market Hill so that measured concentrations of nitrogen dioxide meet the requirements of the National Air Quality Objectives.

Without direct interventions, it would not be possible to significantly improve the air quality on Market Hill.

These include the implementation of a voluntary Class D Clean Air Zone on Market Hill and High Street, Maldon.

The Clean Air Zone framework identifies the outcomes that Clean Air Zones are expected to deliver, aligned with three themes:

- supporting local growth and ambition (decoupling growth and pollution).
- accelerating the transition to a low emission economy.
- immediate action to improve air quality and health.

A Clean Air Zone defines an area where targeted action is taken to improve air quality and resources are prioritised and coordinated in order to shape the urban environment in a way that delivers improved health benefits and supports economic growth.

The Council will also set up a working group with local bus operators, to work together to improve emissions from buses, through timetable review and retrofitting initiatives.

In addition, the council will work with taxi operators to ensure that all private hire vehicles move towards meeting the EURO 6 standard in the shortest time possible.

Priority 2 – Local Policy & Infrastructure

A vital step regarding policy and infrastructure, is the development of a Transport Strategy for Maldon.

A Key initial action in this plan, is commissioning a transport destination and origin survey. This is essential to inform how the council and county council working together, can bring forward further emission reduction options, such as a bus gate or changes to traffic routing on major roads, within the Transport Strategy for Maldon.

The feasibility of a 20 mph speed restriction on Market Hill, identifying loading bay areas within the High Street and enforcement of the 7.5t weight restriction, are all high priorities to assess within a transport strategy, in order to bring about emission reductions.

Maldon District Council proposes to update strategies and policies in order to reduce emissions from Council activities and to encourage the use of low emission transport.

Priority 3 – Smarter Choices

Smarter Choices are “packages” of supplementary measures for the wider local area, comprising measures such as actions to improve public health, encourage healthy and active travel, marketing and information to encourage people to use sustainable transport. Many of these actions will be delivered to support Clean Air Day on 8th October 2020.

Consideration of Interventions

Feedback from the Councils community engagement event identified a number of preferred options from residents:

- Market Hill converted to a one-way only (downhill) route.
- Pedestrianisation of Market Hill

Based on the baseline modelling study and source apportionment the steering group considered the following options:

- Bus Gate
- Clean Air Zone
- Enforcement of weight restrictions

Scenario Modelling

The following scenarios were modelled:

- Exclusion of all HGV size vehicles on Market Hill with the exception of buses.
- One-way only (downhill / northbound route) along Market Hill.
- A bus gate operational on the southbound (uphill) direction between Anchorage Hill and Bull Lane between the hours of 7am and 7pm Monday to Friday excluding all vehicles except buses.

Table 3 identifies modelled air quality improvements for each scenario and whether air quality compliance would be achieved.

Table 3.3 - Scenario Modelling

Scenario	Air Quality Improvements	Air Quality Compliance Achieved?
Scenario 1 Enforcement of Weight Restriction	Medium	No
Scenario 2 One Way (Downhill) Route	High	Yes*
Scenario 3 A bus gate operational on the southbound (uphill) direction between Anchorage Hill and Bull Lane between the hours of 7am and 7pm Monday to Friday excluding all vehicles except buses.	High	Yes*
Scenario 4 Class B Clean Air Zone	High	Yes*

** within the acknowledged limitations of the dispersion modelling*

Scenario 4 Class B Clean Air Zone was modelled as achieving compliance with the air quality objectives. Modelled NO₂ concentrations show significant reductions compared to the base case but the intervention would not cause mass displacement of traffic.

Figure 3 Modelled Change in Annual Average NO₂ Concentrations for Scenario 4

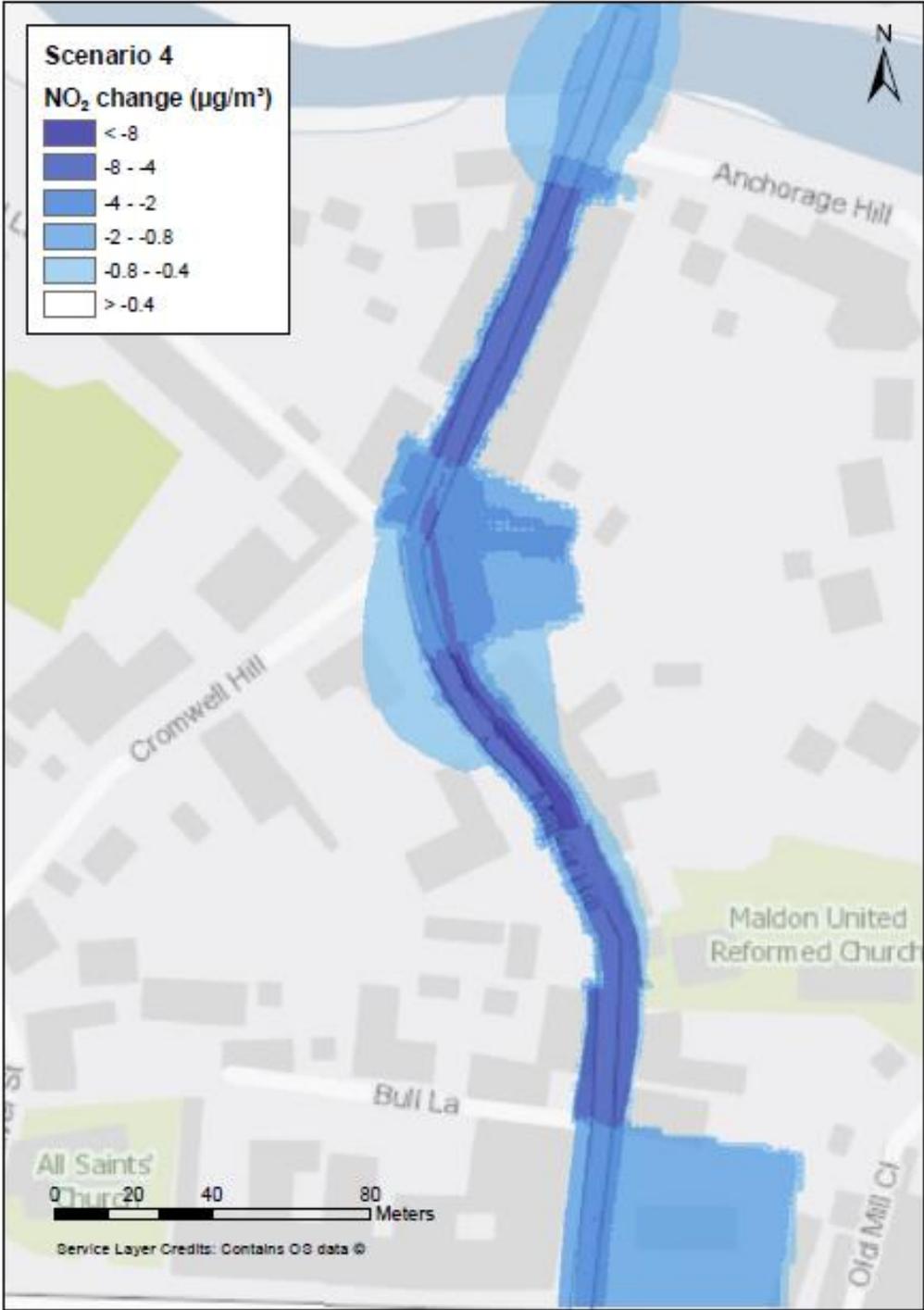
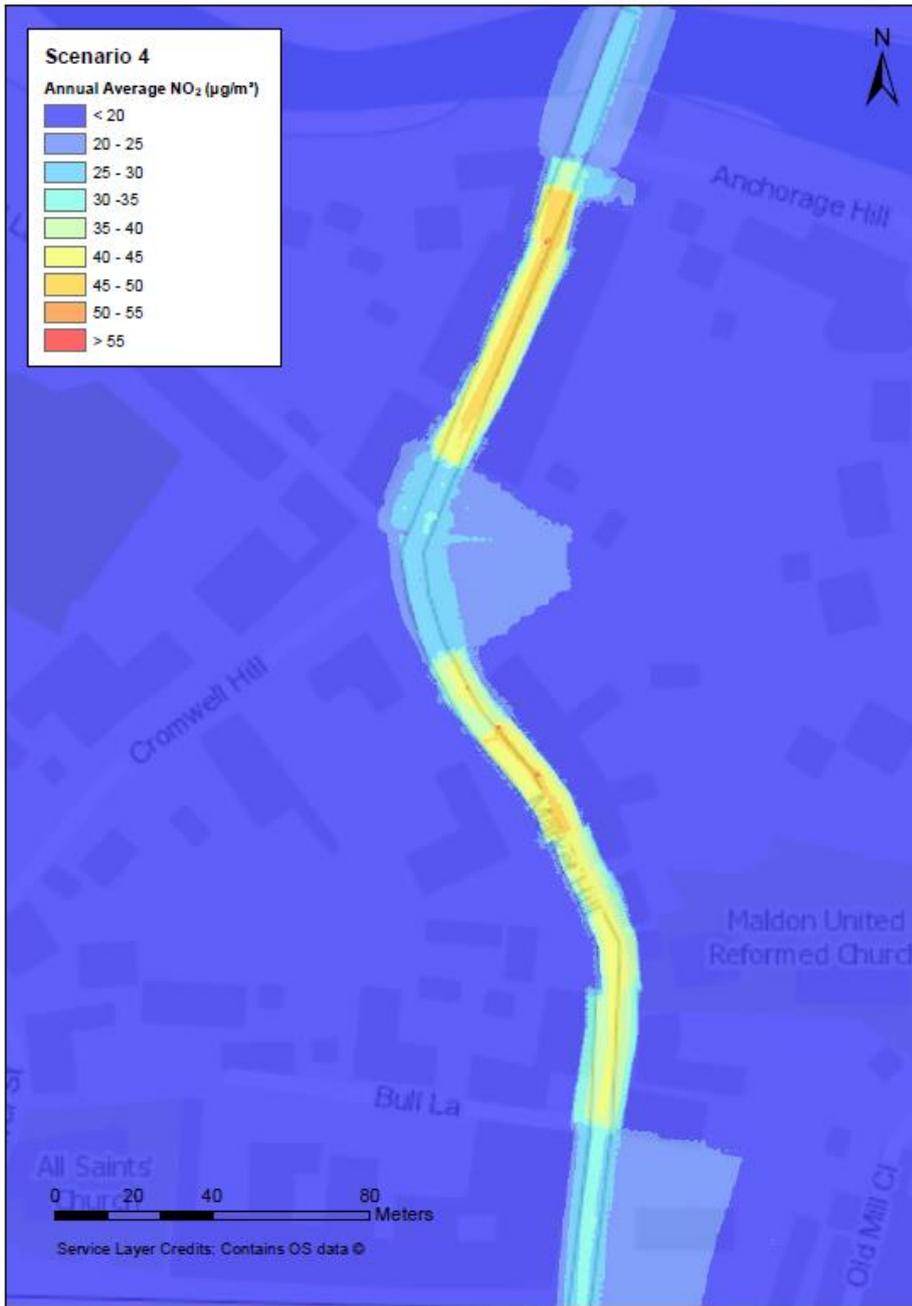


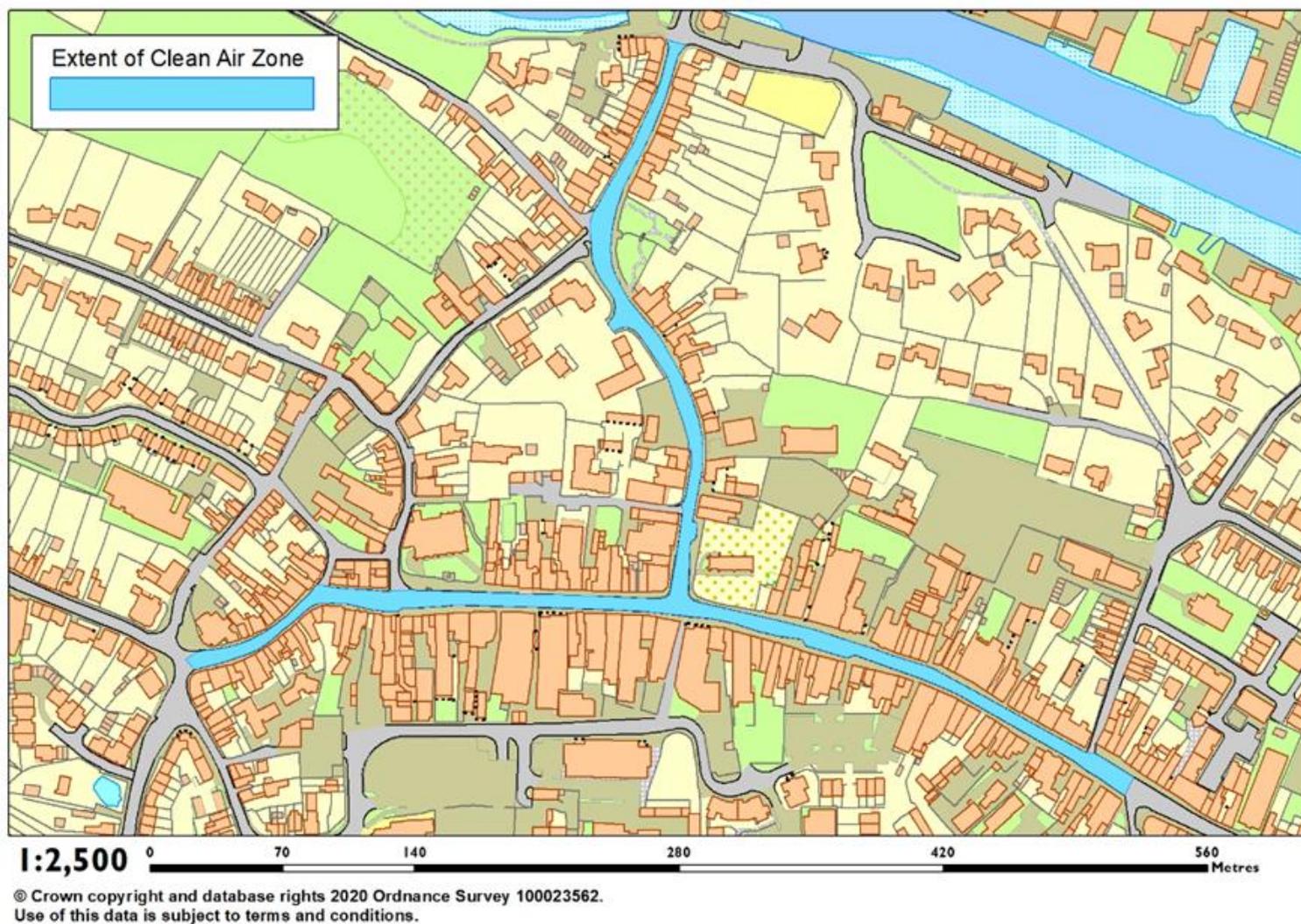
Figure 4 - Modelled Annual Average NO₂ Concentrations for Scenario 4



An options assessment for measures that have not been pursued and the reason for that decision is included on Appendix C.

The above reports, commissioned by Maldon District Council, demonstrate a significant allocation of resources to provide scientific data to inform strategies which can improve air quality in Maldon, and will be shared with Essex County Council to facilitate implementation of the Transport Strategy for Maldon.

Figure 5 - Proposed Voluntary Clean Air Zone



4 Development and Implementation of Maldon District Council's AQAP

4.1 Consultation and Stakeholder Engagement

In developing this AQAP, we have worked with other local authorities, in particular Essex County Council, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. In addition, we have undertaken the following stakeholder engagement:

- The Council's website – press release, dedicated page, and link from home page
- The Council's social media (Twitter / Facebook)
- Flyers distributed directly to households on Market Hill
- Flyers distributed directly to businesses on Market Hill and High Street
- Community Engagement Event 18th June 2019
- Drop in event (day time) during the consultation period at Maldon Town Hall 10th March 2020, 7:30am – 6pm
- Drop in event (evening) held at the Maldon Town Council Annual Meeting, 10th March 2020, 6:45pm – 7:45pm
- Meeting with Licensed hackney carriage and private hire operators, 5th March 2020, 11:30am at the Council Offices.

Table 4.1 – Consultation Undertaken

Yes/No	Consultee
Yes	The Secretary of State
Yes	Defra / LAQM
Yes	MP for Maldon (John Whittingdale)
Yes	The Environment Agency
Yes	Essex County Council (Public Health / Highways Authority)
Yes	All neighbouring local authorities
Yes	Licensed hackney carriage and private hire operators

Yes	Commercial bus operators
Yes	Essex Police
Yes	Burnham Chamber of Commerce
Yes	Maldon Town Council
Yes	Residents of Maldon
Yes	Businesses operating o Market Hill and High Street

The detailed responses to the consultation can be seen in Appendices A and D.

84% of respondents stated that air quality is a “Very important issue”, with 13% stating that it was an “Important issue”.

58% of respondents agreed with the overall approach of the plan, and the main response from those who did not agree, was that they wanted more action taken.

Many residents identified ways in which they already act to improve air quality such as walking and cycling (74 respondents), and not using vehicles for short journeys (72 respondents). Only 30 respondents reported using public transport. This information has been used to further develop actions within this plan.

4.2 Steering Group

An air quality steering group was set up to develop this Air Quality Action Plan.

The dates of the main meetings and dispersion modelling work are summarised below:

Table 4.2 - Steering Group Work

Event	Purpose	Outcome	Date of Meeting
Steering Group Inception Meeting	Initial discussion about the scope of air quality action plan	Request consultants undertake baseline modelling and source apportionment study	18 th December 2018
Baseline Dispersion Modelling & Source Apportionment Study	Data collection and undertake a dispersion modelling study to create a baseline that interventions can be modelled around Carry out a source apportionment study	Report reference FM1216/R4/19	N/A
Steering Group Meeting	Present baseline modelling and source apportionment	To undertake a community engagement event To undertake a review of waiting and loading TROs in the High Street	8 th May 2019
Community Engagement Event	To develop an understanding of the local communities preferred scenarios	N/A	18 th June 2019
Steering Group Meeting	To consider responses from the community engagement event and decide upon modelling scenarios	Steering group resolved to undertake modelling to identify potential improvements to the Market Hill pedestrian crossing and to model effective enforcement of the	10 th July 2019

		7.5t weight restriction	
Initial Scenario Modelling	Undertake modelling of: <ul style="list-style-type: none"> • effective enforcement of 7.5t weight restriction • one-way route • bus gate 	Report Reference FM1216/R6/19	N/A
Steering Group Meeting	Agree new Terms of Reference for a revised member / officer working group Consideration of scenario modelling works, constraints and future options	Prepare a draft action plan based on a hybrid package of measures forming a Clean Air Zone.	9 th October 2019
Further Scenario Modelling	Undertake modelling of: Class B Clean Air Zone	Report Reference FM1216/A1/20	N/A
Maldon District Council / Essex County Council Meeting	Proposed measures to be set out in the draft air quality action plan	Provisional agreement to the main measures to be set out in the draft air quality action plan	7 th January 2020
Steering Group Meeting	Measures to be set out in the draft air quality action plan	Revision of the action plan format	15 th January 2020
Steering Group Meeting	To consider approving the draft air quality action plan ahead of submission to the Strategy and Resources Committee to approve for formal consultation	The air quality action plan was approved for submission subject to a minor amendment	27 th January

In addition, officers have conducted meetings to discuss measures and development work which have been reported back to the steering group.

5 AQAP Measures

Table 5.1 details the Maldon District Council AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

NB: Please see future ASRs for regular annual updates on implementation of these measures

Table 5.1 – Air Quality Action Plan Measures

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
1	Development of a Transport Strategy for Maldon	Transport Planning and Infrastructure	Other	ECC	1 st Q +2020	4 th Q 2020	<p>Task 1 Maldon Destination Survey</p> <p>Task 2 Feasibility study for implementation of a bus gate / downhill only intervention on Market Hill</p> <p>Task 3 Feasibility Study of 20mph speed restriction</p> <p>Task 4 Identify potential locations for dedicated loading bays within Maldon High Street</p> <p>Task 5 Delivery of transport strategy</p> <p>Task 6 – Make High Street one way to free up space for safe pedestrian and cycle use</p>	<p>HIGH</p> <p>AQO met in combination with Action 2</p>	<p>Consultants have been retained to deliver destination / origin survey in October 2020</p> <p>(Previously March 2020 – delayed due to Covid-19 restrictions)</p>	<p>T1 – October 2020 T2 – January 2021 T3 – February 2021 T4 – March 2021 T5 – June 2021 T6 – 2020 – Covid-19 response / 2021 full implementation</p>	<p>The origin / destination survey is the essential first step.</p> <p>Delivery of the Transport Strategy will be summer 2021, and will need to pass through both ECC and MDC scrutiny committees and consultation</p>	<p>ECC Officer time and resources</p> <p>£18,000 for an origin and destination study – Funded jointly by ECC and MDC</p> <p>ECC have identified and committed funding from 2020/21 budgets to deliver the Transport Strategy.</p>

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
2	Voluntary Class D Clean Air Zone	Promoting Low Emission Transport	Clean Air Zone	MDC	Q3 2020	Q1 2021	<p>Task 1 - Apply for Defra Air Quality Grant funding to implement Voluntary CAZ</p> <p>Task 2 – Signage approved</p> <p>Task 3 - CAZ implemented</p> <p>Task 4 – Comms plan</p> <p>Compliance with the NO₂ Air Quality Objectives</p>	High AQO met in combination with Action 1		T1 Q3 2020 T2 Q3 2020 T3 Q1 2021 T4 Q1 2021	The Defra Air Quality Grant opens in October 2020	Signage approx. £3000 Defra AQ grant fund MDC Officer time and resources Promotion & Marketing
3	Set up working group with bus operators in Maldon	Vehicle Fleet Efficiency	Promoting Low Emission Public Transport	Commercial bus operators / ECC / MDC	Q3 2020	Q4 2020	<p>Quarterly meeting with bus operators</p> <p>Task 1 – Use data from e-ticketing systems to identify dead mileage</p> <p>Task 2 - Identify if single-decker buses can be used</p> <p>Task 3 – Review of ECC procurement process for new contracts on Market Hill to ensure compliant vehicles</p>	High	The Managing Directors of both Stephenson's and Go East Anglia have expressed an interest to engage with MDC to deliver AQ improvements	Quarterly meetings throughout the life of the AQAP, commencing Q3 2020 T1: Q4 2020 T2: Q4 2020 T3: 2021 (in line with the Transport Strategy for Maldon – Action 1)	Also see action 4	MDC Officer time and resources

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
4	Retrofitting of buses travelling on routes along Market Hill	Vehicle Fleet Efficiency	Vehicle Retrofitting Programmes	MDC			<p>Task 1. Meeting with bus operators (see action 3)</p> <p>Task 2. Submit grant bid to DfT</p> <p>All buses operating on market Hill to be of a Euro VI or retrofitted to CVRAS standard</p>	High		T2 will commence when DfT open the next round of funding for CBTF, or when other suitable grant funds open	Retrofitting buses with Selective Catalytic Reduction Technology (SCRT) approved by Clean Vehicle Retrofit Accreditation Scheme ensures that legacy fleet vehicles comply with CAZ standards	MDC Officer time and resources Funding streams from the Clean Bus Technology Fund from Department for Transport
5	Hackney Carriage & PHV Emissions Standards	Promoting Low Emission Transport	Taxi Licensing Conditions	MDC	Q3 2020	Q4 2020	<p>All licensed vehicles to be of a Euro VI standard or better, by 2022</p> <p>Task 1 Continue to work with the Operators through quarterly meetings</p> <p>Task 2 Licensing Policy to be updated</p>	Medium		<p>T1 Quarterly throughout life of plan</p> <p>T2 Q3 2020</p>	<p>Introduction of age and emission limits for Hackney carriage and Private Hire Vehicles</p> <p>Also see Action 10</p>	MDC Officer time and resources

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
6	Enforcement of 7.5t Weight Restriction on Market Hill	Transport Planning and Infrastructure	Other	ECC / MDC	Q4 2020	Q2 2021	<p>Task 1 – Complete review of methodology available to enforce weight restriction</p> <p>Task 2 – Engagement meeting with local businesses who use Market Hill</p> <p>Task 3 - Commencement of enforcement</p>	Medium	There is already an approved Traffic Order in place.	T1 – Q4 2020 T2 – Q1 2021 T3 - In line with adoption of the Transport Strategy for Maldon (Action 1)	The feasibility of using smart cameras will be examined but also alternatives such as writing to operators of vehicles / take up discussion with the DVSA and traffic commissioners into operating a pilot scheme for studying traffic movements and potential enforcement processes. Letter drops to nearby business parks. The feasibility of enforcement by Trading Standards and/or the commercial unit of Essex Police to be consulted	Officer time
7	Council Refuse & Recycling Vehicle Routing	Freight and Delivery Management	Route Management Plans	MDC	2019	2020	Quarterly compliance meeting with Head of Waste	Medium	Implemented	2020	Maldon District Council Refuse & Recycling Vehicles will not use Market Hill unless undertaking collection on Market Hill	N/A
8	Haulage Sat Nav Routing	Freight and Delivery Management	Strategic Routing for HGV's	ECC			Task 1 – write to SatNav providers to engage and plan improvements	Low		2020	Work with satnav providers to improve routing for haulage specific satellite navigation units	MDC Officer time and resources

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
9	Promotion of the existing 'free bus service' operated by Tesco under the terms of an S106 Agreement	Alternatives to private vehicle use	Bus based Park & Ride	MDC	Q2 2020	Clean Air Day 2020	Task 1- Engage with Tesco for current information relating to the service Task 2 – Monitor usage figures to identify Increased patronage	Low		T1 Q3 2020 T2 ongoing	The 288 bus service is a circular route incorporating Tesco, Maldon High Street and areas of Maldon and Heybridge	MDC Officer time and resources
10	Dedicated hackney carriage & PHV EV Charging Point to be provided in a town centre location	Promoting Low Emission Transport	Taxi emission incentives	MDC		Next QTP meeting to discuss location (see action 5)	Task 1 – Identify optimal location Task 2 – Submit grant application forms for EV charging	Average NO2 reduction will be estimated from EV usage		T1 Next QTP meeting – Q3 2020 T2 – Q4 2020	Dedicated charging point for incentivizing the uptake of ULEVs by hackney carriage and private hire operators	Officer time / Potential match funding tbc.
11	Update Maldon District Design Guide AQ document	Policy Guidance and Development Control	Low Emissions Strategy	MDC	Q3 2020		Task 1 – Draft Informative regarding S106 / CIL to include AQ criteria and Air Quality Neutral development. Task 2 – Prepare planning informative for NRMM Task 3 – draft AQ strategy for the District	Low		T1 & 2 - Q1 2021 T3 -Q3 2021	Development of an Air Quality & Low Emission Strategy for the district of Maldon	MDC Officer time and resources

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
12	MDC Team Talk	Policy Guidance and Development Control	Other Policy	MDC	Q3 2020	Q3 2020	AQ highlighted in MDC Team talk	Low			MDC officers will receive the CAD advice going out to residents and asked to support CAD by making pledges	MDC Officer time Use Global Action Plan resources
13	Council Vehicles Upgrade to Electric	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	MDC			Task 1 – Compile an inventory of council owned vehicles Task 2 – Review options to include AQ weighting within the council's procurement strategy	Low		T1 – Q4 2020 T2 – Q1 2021	Upgrading strategy for forward planning.	MDC officer time
14	Off road walking and cycling route from Heybridge to Maldon via Heybridge Creek	Promoting Travel Alternatives	Promotion of Cycling	MDC	Ongoing	TBC	KPIs to be confirmed with Planning Policy Officer leading on the project	Low		TBC	To implement ECC Maldon Cycle Action Plan for an off-road walking and cycling route from Heybridge to Maldon via Heybridge Creek). In accordance with the Maldon and Heybridge Central Area Masterplan SPD 'Movement and Connections Framework'.	Delivery will be part of the Maldon and Heybridge Central Area Masterplan project

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
15	Supermarket (Online Shopping) Deliveries in Maldon	Freight and Delivery Management	Route management plans	MDC			<p>Task 1 – Engage with Supermarkets in Maldon to understand current behaviour</p> <p>Task 2 – Report annually on number of Supermarket deliveries on Market Hill</p> <p>Task 3 – Assess potential to apply for grant funding to implement a low emission / last mile service</p>	LOW		<p>T1 – Q1 2021 T2 -Annual report in ASR T3 – Q2 2021</p>	<p>Work with supermarkets to consider opportunities to enable consolidation or options to divert routes</p> <p>In addition, identify opportunities for provision of click & collect style delivery system</p>	Officer time preparing grant bids and engaging with Supermarkets
16	Local Freight Hub	Freight and Delivery Management	Freight Consolidation Centre	MDC			<p>Task 1 – Review of successful freight consolidation centres</p> <p>Task 2 -Identify grant funding opportunities and partners</p> <p>Task 3 – Submit bid</p>	Low		<p>T1 – Q3 2020 T2 – Q3 2020 T3 - Tbc</p>	Identify and deliver opportunities for a zero-emission delivery system on Market Hill – to support Action 1	Officer time
17	Smart Delivery Bays	Freight and delivery management	Freight Partnerships for city centre deliveries	MDC			Task 1 – Literature Review of options for implementing Smart Delivery Bays	Low		T1 – Q1 2021	To support Action 1	Officer time
18	Clean Air Walking & Cycling Routes	Public Information	Via Leaflets & Internet	MDC	Q3 2020		Task 1 -Provide online information to residents and visitors about walking and cycling routes away from pollution hotspots to include social distancing pavement space advice	Low			See also Action 14	MDC Officer time and resources

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
19	Electric Vehicle Charging Points at Supermarkets	Promoting Low Emission Transport	Alternative refuelling infrastructure	MDC			<p>Task 1 – Survey local supermarkets re EV charge points and proposals</p> <p>Task 2 - map EV charging points in Maldon and promote via social media</p>	Low				
20	School Travel Plans for schools in Maldon	Promoting Travel Alternatives	School Travel Plans		2020	2020	<p>Task 1 – Prepare standard correspondence with all schools in Maldon on how to set up a school travel plan and offering support</p> <p>Task 2 – Invite schools to share their plans on CAD</p> <p>Task 3 – Access funding to support 0.5 officer to support implementation of this along with other complimentary measures, ie cycling proficiency tests for all children</p>	N/A		<p>T1 – By August 2020</p> <p>T2 Clean Air Day 8th October 2020</p>	Identify school run travel improvements at local schools through Modeshift Stars Education	ECC / MDC Officer time and resources
21	Park & Stride Initiative	Promoting Travel Alternatives	Promotion of Walking	MDC			Task 1 – provide Maldon schools with Walking Bus Toolkit utilising Promenade Park for starting point	Low		Clean Air Day 8 th October 2020	Utilise existing parking provision in Promenade Park to facilitate parking for “The School Run” to Maldon schools	Officer time

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
22	Provision of <i>air</i> TEXT Service for the Maldon district	Public Information	Other	MDC	2020	2020	Task 1- apply to Community Health and Wellbeing fund Task 2 – promote service	N/A		Clean Air Day 8 th October 2020	The <i>air</i> TEXT Service provides a free service for the public providing air quality alerts by SMS text message, email and voicemail	Initial setup £2000 Yearly subscription £1000 fund
23	Information on Domestic Fuel & Woodburning	Public Information	Via Leaflets	MDC	2020	2020	Task 1 - Mail drop addresses on Market Hill advice leaflet Task 2 – Promote through council website and social media	N/A		Clean Air Day 8 th October 2020	Deliver an educational message about the choosing the right fuel for domestic burning, how to operate fires and wood burning stoves optimally to reduce pollution	MDC Officer time and resources
24	Indoor Air Quality	Public Information	Via Leaflets	MDC	2020	2020	Task 1 – Distribute Indoor Air Quality Leaflet through website and social media	N/A		Clean Air Day 8 th October 2020	Providing information to residents about how to improve indoor air quality	MDC Officer time and resources
25	Short term study using real time air quality monitoring on Market Hill	Public Information	Other	MDC	2020	2020	Task 1 – Obtain quote for hiring equipment Task 2 - - apply to Community Health and Wellbeing fund	N/A		Clean Air Day 8 th October 2020	Identify pedestrian exposure to air pollution on Market Hill	MDC Officer time and resources £400 for the hire of two AirBeam2 analysers

Maldon District Council

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments	Resource Implications
26	Electric Bikes Trial	Promoting Travel Alternatives	Promotion of Cycling	MDC	2020	2020	<p>Task 1 – Apply for funding for E-bike trial through the Community Health and Wellbeing fund</p> <p>Task 2 – Apply for funding for E-bike trial via alternatively sourced funds tbc</p> <p>Task 3 – Engage with Halfords to promote free 48 hour E-Bike trial</p> <p>Task 4 – Promote cycle scheme to MDC employees</p>	N/A		<p>T1 – Q2 2020 T2 – Q2 2020 T3 – Q2 2020 (CAD) T4 – Q3 2020 (CAD)</p> <p>Clean Air Day 8th October 2020</p>	<p>Operate a short-term e-bike test ride and demonstration. The gradient of Market presents challenges for those wishing to cycle into the Town Centre via Market Hill. E-bikes can provide assistance on gradients to make the route accessible for all</p>	<p>MDC Officer time and resources Hire Costs TBC</p>

Appendix A: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
Defra	Statutory	<p>Approved plan. Requested improved evidence of impact of Class B CAZ.</p> <p>MDC response:</p> <ol style="list-style-type: none"> 1. Source Apportionment Study published 2. Prioritise the origin / destination survey (Action 1) to provide evidence base for CAZ 3. Amended AQAP (Action 2) from Class B to Class D CAZ, to include large van; minibus; small van/light commercial; cars.
Taxi Operators	<p>Business 1</p> <p>Business 2</p>	<p>Disagree with time frame for making vehicles compliant with EURO standards</p> <p>Disagree with time frame for making vehicles compliant with EURO standards</p> <p><i>“Until electric/hybrid vehicle development is much further advanced I think it is prudent to continue with diesel and petrol vehicles for the time being and not to set a firm date to NOT licence such vehicles”.</i></p> <p>MDC response:</p> <ol style="list-style-type: none"> 1. See amendment to Action 5 2. All licensed vehicles to be EURO 6 standard amended from 2021 to 2022, to allow reasonable time for compliance.

A.2 – Summary of Resident and Business Responses to on-line survey *full details Appendix D

Consultee	Category	Response	MDC follow up
Public – On line form	Residential	Would like improved cycling and pedestrian areas	see amendments to actions 14, 18, 20, 21, 26
Public – On line form	Residential	Would like 20 mph speed restriction on Market Hill	see amendments to action 1
Public – On line form	Residential	Would like one-way traffic on Market Hill	see amendments to action 1
Public – On line form	Residential	Would like 7.5t weight restriction and enforcement on Market Hill	see amendments to action 6
Public – On line form	Residential	Would like bus emissions reduced, buses diverted away from Market Hill to the by-pass, and a reduction in the number of empty buses	see amendments to action 3, 4, 9
Public – On line form	Residential	Would like restricted deliveries and loading on High Street	see amendments to action 16, 17

A.3 – Responses to online survey – Total responses 121

Questions 4-11 were only asked to those who answer “An Organisation or Business” to Q3. Full details of responses to question 16 are in **Appendix D**.

1. Please tell us your connection to Maldon

[More Details](#)

- Live in Maldon 90
- Work in Maldon 19
- Visit Maldon 9
- Study in Maldon 0
- Other 3



2. Please provide your postcode. This will be used to analyse where the responses have come from, and will not be used for any other reason.

[More Details](#)

115

Responses

Latest Responses

"CM9 6YT"

"CM9 6YS"

"Cm94de "

3. Are you responding as an individual, or on behalf of a business or organisation?

[More Details](#)

● Individual	111
● An organisation/Business	9



4. How many deliveries do you have each week?

[More Details](#)

● 0	1
● 1-3	2
● 4-7	0
● 8-10	2
● 10+	4



5. What time do your deliveries take place?

[More Details](#)

● 7am - 9am	1
● 9am - 3pm	8
● 3pm - 6pm	2
● Other time between 6pm - 7am	1



6. What vehicles make your deliveries?

[More Details](#)

8

Responses

Latest Responses

7. If deliveries were restricted to certain times (ie 6pm - 7am), would this cause your organisation/business issues?

[More Details](#)

● Yes	7
● No	1
● Don't know	0



8. If yes, please tell us more about these issues

[More Details](#)

6

Responses

Latest Responses

9. Would you be interested in taking part in a 'Last mile' delivery scheme, to reduce the number of delivery vehicles in the High Street? *'Last mile delivery schemes' refers to the final step of the delivery process to the end-user. This can range from a few blocks to 50 miles and involves the use of parcel or small package carriers to deliver products to consumers and businesses.

[More Details](#)

● Yes	3
● No	2
● Don't know	3



10. Do you have anything further to add about deliveries on the High Street?

[More Details](#)

6

Responses

Latest Responses

11. Any other comments about air quality, from a business perspective?

[More Details](#)

3

Responses

Latest Responses

12. How important do you think the issue of air quality is in Maldon?

[More Details](#)

● Very important	100
● Important	15
● Not important	4
● Don't know	0



13. What is your personal experience of dealing with poor air quality in Maldon

[More Details](#)

102

Responses

Latest Responses

*"Both grandchildren have had breathing difficulties as young babies ...
"Walking around the area"*

14. Do you agree with the overall approach described in the plan?

[More Details](#)

● Yes	69
● No	49



15. If you don't agree with the approach described in the plan, please explain why not

[More Details](#)

47

Responses

Latest Responses

"Needs to go further to address pollution levels sitting in the next tier ..."

16. Please describe the top 3 actions that you think should be taken to address air quality in the District. These can be measures included in the plan or new ideas.

[More Details](#)

109

Responses

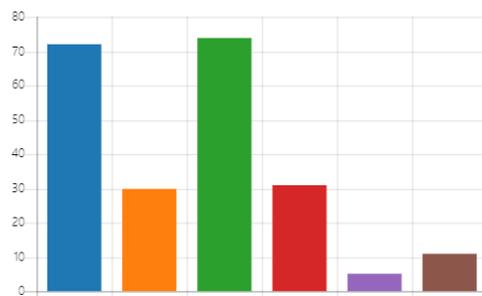
Latest Responses

"As above, broader one way system, extensive tree planting, drop spee..."

17. Everyone is affected by the quality of the air that we breathe and everyone has a role to play to improve air quality. Which of these ways to improve air quality do you already do?

[More Details](#)

- Avoid using the car for short j... 72
- Use public transport 30
- Walk or cycle when possible 74
- Consider using an electric or h... 31
- Live car free or as a member o... 5
- Other 11



Appendix B: Reasons for Not Pursuing Action Plan Measures

Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)

Appendix C: Options Assessment

Measures Not Pursued and the Reasons for that Decision

Action category	Measure	Target Pollution Reduction in the AQMA	Resource Implications	Constraints / Reason action is not being pursued as an initial measure (including Stakeholder views)
Traffic Management	Traffic management to alter Market Hill to become a pedestrianised zone	High	Medium	The measure would create traffic displacement on the Maldon bypass and associated roads on the western side of Maldon. This measure requires the results from Action 1 in the current plan to consider feasibility. This action would be a function of County Council.
Traffic Management	Traffic management to alter Market Hill to become one-way (downhill) route	High	Medium	It will be necessary to observe the impact of the Clean Air Zone and the magnitude of potential vehicle displacement that could impact on other local roads before any traffic based intervention could be considered. This measure requires the results from Action 1 in the current plan to consider feasibility. This action would be a function of County Council.
Traffic Management	Implementation of a bus gate restriction	Medium	High	It will be necessary to observe the impact of the Clean Air Zone and the magnitude of potential vehicle displacement that could impact on other local roads before any traffic based intervention could be considered. This measure requires the results from Action 1 in the current plan to consider feasibility. This action would be a function of County Council.
Promoting Low Emission Transport	Bus emission restrictions enforced by Traffic Regulation Condition	High	High (commercial bus operators)	Essex County Council advise that the bus services in Maldon aren't sufficiently commercially viable to warrant the operators putting cleaner buses on these routes. Routes being withdrawn could have a detrimental impact on the economy of Maldon High Street and may lead to an increase in car use.

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Highway Improvements	Upgrade the pedestrian crossing at the top of Market Hill with a puffin crossing	Negative	Medium	Although the operation of pedestrian crossing is inefficient, analysis has identified that across the course of the day the stop / start operation of a puffin crossing would lead to an increase in traffic queuing times and additional emissions on Market Hill. This measure requires the results from Action 1 in the current plan to consider feasibility. This action would be a function of County Council.
Traffic Management	20mph speed limit on Market Hill	Not Modelled	Medium	It would not be appropriate to implement a 20mph zone or speed limit on a County Route. This action would be a function of County Council.

Appendix D: Public Consultation Responses

The answers to question 16 are listed below:

Q 16 - Please describe the top 3 actions that you think should be taken to address air quality in the District. These can be measures included in the plan or new ideas.

Key to recurring themes:

Active travel: Walk / Cycle / Pedestrian

Infrastructure: Downhill / 20 mph / Pelican / 7.5t

Transport: Bus / Car

Loading bays / deliveries

Schools / Trees / idling

<ol style="list-style-type: none"> 1. re-routing of ALL buses. 2. pelican crossing to replace the zebra crossing outside Maldon Town Hall 3. use of smart technology - artificial trees to reduce pollution https://greencitysolutions.de/en/
<p>Encourage use of public transport Reduce car use Encourage walking</p>
<ol style="list-style-type: none"> 1. Clean Air Zone 2. Diesel scrappage scheme 3. More segregated cycle lanes
<p>A long term holistic strategic plan for Maldon to be Net Zero. It needs to be the highest profile, have considerable staff allocations that are able to communicate, educate and inspire the town to become a healthy and sustainable place to live and visit. This air quality policy cannot take place in isolation of the other issues such as planning, health, economy, tourism etc etc. Be bold and daring with the decisions that are made. Create new ways of working or take chances on models that have been successful elsewhere. Go for national pilot schemes that make Maldon different. How about making a circular hop on and off bus route run around the town. There are several routes it could take and if reliable, frequent and consistent Maldon is an ideal place for it. It could even be free... if Luxembourg can, possibly Maldon can! Investigate ways to eliminate vehicles stopping in High St which causes the congestion. Possible red route as in London. Restricted loading times.</p>
<p>Ease traffic flow on Market hill and the high street by banning non essential traffic</p>
<ol style="list-style-type: none"> 1 Stop building houses you can't support with investment in infrastructure to deal with increased traffic numbers. 2. Stop bus and coach operators being able to use ancient vehicles that are polluting 3 invest in park and ride depots and make the high street and market hill pedestrian 4 make delivery drivers use service roads when delivering to high at shops
<p>More pedestrianisation and cycle lanes to give more public realm space to sustainable use rather than cars.</p>

<p>1) Close Market Hill to all vehicles with the exception of residents/emergency services and public transport which meets stringent low emission criteria.</p> <p>2) Limit traffic at the top of the High Street i.e. closures at certain times of day</p> <p>3) Encourage walking/cycling by improving current paths and infrastructure to make it safer and more appealing.</p>
<p>Reduce traffic on Market Hill, make it one way, downhill only.</p> <p>Better walking and cycling provision, including re surfacing entire length of Chelmer and Blackwater navigation from Heybridge basin to Chelmsford.</p> <p>High Street and Market Hill one way 20mph limit.</p>
<p>Education - providing guidance and education to key audiences about how a small change on their part can have a benefit to all. Presentations in schools to parents who take this route for the school run.</p> <p>Deliveries and alternative routes for these I believe are key to the success of this strategy.</p> <p>No 9 Promotion of free bus service - I live in the town and did not know of this service.</p>
<p>convert buses to electric</p> <p>divert HGVs from town centre</p> <p>convert taxis to electric</p>
<p>Reduce traffic by restricting access to the High Street.</p> <p>Encourage electric cars with charging point availability</p> <p>Free parking for electric cars</p>
<p>Look at the bigger environmental picture.</p> <p>Reduces emissions. Don't just move them.</p> <p>Stop building the houses that are so expensive that people will have to commute to London to pay the mortgage.</p>
<p>The signage at the bottom of Market Hill advising access only for vehicle over 7.5 tonnes is not sufficient and does not deter delivery vehicles from using this to access the High Street. Only vehicle delivering to Market Hill should be using this route and this should be enforced by Trading Standards. If the signage was larger and more visible with an indication that CCTV was installed at both the bottom of the hill and the top of the hill to enforce this. This would act as a deterrent to drivers using this route unnecessarily.</p>
<p>1; Make Market Hill down hill only with access uphill only for residents. 2. All large vehicles rerouted away from the hill.</p>
<p>Pedestrianisation of the high street with a drop off point for all couriers. Businesses then collect from here. This in turn may help to increase the footfall in the high street that has been seriously affected by the retail park that was allowed to open recently.</p>
<p>1. Bus gate at the top of market hill</p> <p>2. Frequent bus service from the bental retail area, demolish disused factory behind it for a park and ride scheme.</p> <p>3. Ask Bradwell B to help pay for the scheme</p>
<p>One-way traffic only DOWN the hill</p>
<p>Major traffic rerouting to avoid Market Hill from the Causeway.</p> <p>Prevent further development in the area and increase green spaces</p> <p>Restrict high street unloading during the day especially for large vehicles</p>
<p>Market Hill needs to be made one way down the Hill only.</p> <p>Areas of the High Street should be pedestrianised.</p>
<p>No traffic in the shopping centre.</p> <p>Move traffic towards the bypass.</p> <p>Stop building houses.</p>

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<p>The measures in the plan are fine, but do not address the detail of what you are planning to actually do other than in the most general of terms. More specific detail is needed before a simple yes/no answer can be given.</p>
<p>Solutions in order of preference</p> <ul style="list-style-type: none"> - Make Market Hill one-way (downhill) - Implement traffic lights at top and bottom to allow cars to pass unhindered <p>As part of either solution, the existing spare lane should be turned in to residents parking with loading/unloading bays for the increased number of courier / home delivery vans that people have become dependent on.</p>
<ol style="list-style-type: none"> 1. Try to reduce the volume of traffic that uses Market hill. 2. Traffic one way, ideally open to traffic coming from the High street. 3. Speed calming measures to prevent traffic coming down the hill at ridiculously high speeds.
<p>Taxi stop engines whilst on the RANKS, GREEN BusSES, not low emissions. Subsidies for GREEN Taxis</p>
<p>The Clean Air Zone is a good idea. I would like to see more segregated cycle routes Loading bays in the High Street for deliveries</p>
<p>Traffic management within the town is key. Either one way or pedestrianisation.</p>
<p>Pedestrianise the high street. Encourage businesses to arrange deliveries to be made to the rear of property. Encourage businesses to arrange deliveries before 9am or after 6pm</p>
<ul style="list-style-type: none"> - Market Hill: downhill only with traffic calming or speed cameras. - Electric and hybrid vehicle access only to affected areas ASAP policed by heavy fines. - Pedestrianise where ever possible.
<ol style="list-style-type: none"> 1. Down hill only 2. Width restriction 3. Council actually cough up some money and take action ASAP.
<p>Market hill to be one way down only bus lane only up hill</p>
<ol style="list-style-type: none"> 1. Wider bus stops so that buses don't block the road 2. Restrict van deliveries to certain times/places 3. Provide bays exclusively for delivery vans
<p>Make Market Hill One way. I would go further and investigate the possibility of making the High St one way from Market Hill to somewhere past Wantz Rd - thus stopping Wantz Rd being used as a rat run and stopping the problems documented recently with regards the chicane parking and the dangerous dropping off of pupils at the primary school. The High St would be much calmer as Wantz Rd is the main source of 'up stream' traffic flow that is simply trying to avoid the bypass.</p>
<p>One way high street and market hill. Speed cameras in high street. Reinstate the railway, an expensive but excellent solution longer term</p>
<p>Since the new shopping complex at the bottom of the hill has opened there is even more traffic & at times it is stationary, fumes & noise pumping out is unbearable. Market hill needs to be traffic free or at least free from lorries & made one way traffic only</p>

<p>1, 20mph zone for Market Hill and the High Street. 2, Pedestrianize the top of the High Street 3, Encourage use of the bypass.</p>
<p>Market Hill One Way DOWN Build an extension to the current “by pass” to allow traffic to avoid The Street Heybridge/Fullbridge Provide free Parking for Maldon high Street in extended hard standing car park in the area of the little Museum/ top end of Prom.</p>
<p>Remind people the bypass exists. Residents and visitors need reminding there are more efficient ways of reaching the High Street and the car parks other than travelling up Market Hill and along the High Street. A simple solution would be to prevent access to the Park via the High Street, sending all visitor traffic round the bypass and the southern relief road. Enforce a 7.5t weight limit on Market Hill with no exceptions outside of public transport and ban school busses from using Market Hill and the High Street, especially when they are carrying no pupils. Reschedule kerbside waste collects to take place outside of peak hours for commuting/school traffic (and provide free parking in the town car park for school traffic between 8:15 and 8.45 (9am at a push) and 3:15-4pm, to stop parents dropping their children at the school door).</p>
<p>Pedestrianise high street Ban buses from high St / market hill A hub for last mile delivery</p>
<p>1. traffic only downhill 2. only buses up hill</p>
<p>Mandate that all public utility transport vehicles be electric by Dec. 2021 and get Govt grants to support the inevitable scrappage costs incurred by both councils and commercial such as Taxi firms. Mandate that the one way downhill solution be put into effect by Dec 2021 In the meantime introduce some of the interim measures contained in the proposed plan.</p>
<p>1. Add a spur to the bypass to allow traffic to access London Road to enter the town 2. Reduce the speed limit to 20 mph where the 30 limit currently starts, this will not only reduce emissions because the energy required to propel a car increases exponentially to the speed. This would make the roads safer for both pedestrians, cyclists and other vehicles as well as reducing emissions. This should be done now because apart from a few signs there is zero cost attached. 3. Forbid any stopping for any reason in the high street, force all deliveries to be made either from the White Horse or Butt Lane car parks. Whenever a truck or van stops in the High Street it causes grid lock which in turn stops traffic on Market Hill which reduces the air quality in the High Street to which again you could argue is worse as there are far more pedestrians in the high street than on the hill</p>
<p>Reduce heavy (diesel) vehicles access throughout residential zones. Speed restrictions with traffic calming and speed cameras in order to implement actions.</p>
<p>Reducing the volume of traffic, ideally through a one way scheme. That's it</p>
<p>Encourage all businesses to run salary sacrifice schemes to allow employees to lease electric vehicles. The removal of benefit in kind taxation for EV makes these schemes better value than any personal lease schemes. Once there is better penetration of EV in the market. People will realise the financial benefits of EV i.e. running costs. As well as exploding myths e.g. range anxiety. Some of the lease companies are offering great deals. Such as OctopusEV. Insist that all new residential properties include a charging point. Encourage owners of car parks to install EV charging points.</p>
<p>More environmentally buses As mentioned above stopping people sitting with there engines idling Children walking to school</p>

<p>1. Ban cars if lower class than Euro VI 2. Restrict most polluted roads to resident only traffic. 3. Improve amount of emissions from buses.</p>
<p>Reduce traffic altogether by encouraging use of bypass. eg, no right turn from High St down Market Hill. Reduce High Street delivery times to speed up flow of traffic on hill. Turn upper High Street into pedestrianised zone during the day.</p>
<p>Part pedestrianisation, stop deliveries between 8-6, better public transport</p>
<p>Tax payers' money shouldn't be used to solve this – bus companies should pay idling on hill going up the hill. Solution just downhill. No buses at all – make them go around.</p>
<p>The plan won't do enough. Pedestrianise part of Market Hill and one-way traffic. Speed camera 20mph</p>
<p>Parking should be better sign posted and publicised.</p>
<p>Would like one-way system down only. Traffic light at Fulbridge</p>
<p>The Clean Air Zone is a good idea, but it should allow access to the car parks. Access to Butt Lane car park needs to be included.</p>
<p>Buses should be made to use the by-pass Pedestrianise the High Street</p>
<p>Primary concern, there should be a one-way system at the top of market hill going down only. One lane going down for vehicles with sufficient laybys for loading / unloading and a bike lane. Widening of pavements. Need speed bumps and a holistic approach, planting of trees - the plan could and should go further.</p>
<p>Delivery vehicles should be restricted</p>
<p>Would like parents who pick children up from schools, to turn off their engines. Idling should be enforced by the council.</p>
<p>We would like traffic downhill only and enforcement of the weight restriction for vehicles going up. Infrastructure should be upgraded to support the amount of development around the town</p>
<p>Would like the 7.5t weight limit enforced</p>
<p>High street should be one way from the top of Market Hill to London Road. This would allow room for short stay parking / loading bays / calming measures / 15-20 mph. Parking spaces improve retail opportunities. Car park charging should be reduced in Maldon to compete with businesses in Heybridge / Business Park. Suggestion – Build a new car park at Princes Road playing field and make Warwick Road one way.</p>
<p>Would like to see more signage of traffic restrictions and speed limits which are enforced.</p>
<p>20 mph speed limit enforced.</p>
<p>Action is quicker</p>

<p>Need speed restrictions as it's very dangerous. Need a speed camera and speed humps and residents parking needs to be improved. Need a 20 mph speed limit.</p>
<p>Need to reroute buses away from Market Hill to bypass. 20 mph speed limit needs to be enforced Speed bumps on Market Hill.</p>
<p>Need to reroute buses to bypass.</p>
<p>Traffic should be one way (down only) on Market Hill. Control speed limits Need a pedestrian crossing at Cromwell road where it is very dangerous to cross. Need more traffic enforcement, to include cyclists speeding.</p>
<p>Need to have smaller, less polluting buses. There are parking issues which need to be addressed.</p>
<p>One-way system for cars east to west on high street and down Silver Street and Cromwell lane. No buses going uphill on Market Hill.</p>
<p>Gas fire power station on the causeway towards Black Water should not be built. Market Hill should be one way down, and Fanbridge Road one way up to offset this. Need a consultation on buses that have a strategic route only.</p>
<p>Reduce traffic on Market Hill. Stop large vehicles in High Street causing hold ups when delivering. Make bus engines greener.</p>
<p>Make the Hill downhill only. Make the buses adhere to the weight restriction and go around the bypass or put on smaller transport rather than empty buses. Use one lane for voluntary contribution resident parking leaving bays for deliveries as this will future proof the way people shopping. Also Passing places for emergency vehicles</p>
<p>There appears to be no suggestion of a change to the zebra crossing at the top of the hill. This should be a pelican crossing. At present there is a constant stream of dawdling pedestrians; a pelican crossing would ensure they waited their turn. ENFORCE lorry restrictions. Cleaner buses; some are so old!</p>
<p>newer buses as been behind some of the buses in Maldon and the fumes coming out of them are awful Safe cycle routes park and ride</p>
<ol style="list-style-type: none"> 1) Remove zebra crossing and replace with pelican crossing. This will stop pedestrians having right of way which causes hold ups on the week end particularly 2) Stop vehicle's unloading between 07:00 and 09:00 on high street to improve traffic flow 3) Agree 7.5 ton weight limit, no exceptions, except fully electric vehicles
<p>Reduce traffic using Market Hill Enforcement of 7.5t Weight Restriction on Market Hill Development of a Transport Strategy for Maldon</p>
<p>Stop all cars, motorcycles, taxis and lorries driving up and down the road AT ALL TIMES. If you are allowing buses to drive down the hill then make the, drive down the middle of the road. That will stop our properties from getting filthy and damage (cracks) from appearing. They are shaking our houses apart.</p>

<p>Close market hill or make one way Consider pedestrian areas along the high street Increase trees and other air scrubbing measures is planting (removing tree's in our area is NOT good).</p>
<p>With regards to Market Hill the 3 top actions are: 1 - a one way downhill system - excluding residents, buses, taxis and emergency vehicles - + bus gate at bottom of the hill 2 - a narrowing of the road and widening of the pavement both at the top and bottom of the hill to act as a traffic calming measure . Use the extra space for landscaping and planting of trees and shrubs in strategic locations on the hill 3 - enforcement of speed and weight restrictions which are frequently ignored</p>
<p>Restrict traffic going up Market Hill and send it round the bypass instead Rigorously enforce the weight limit on Market Hill Time vehicle deliveries on the High Street to avoid peak traffic periods and allow free flow down the High Street at all times.</p>
<ol style="list-style-type: none"> 1. One way going down the hill 2. Widen pavements in order to plant trees 3. Speed limit with cameras
<p>Re Market Hill. Remove the zebra crossing at the top and change to controlled pelican crossing. Consider making it down hill only for most traffic at peak times.</p>
<p>Traffic restrictions Travel rerouting Survey the local industry, some appear to pollute 24/7</p>
<p>Pedestrianisation of the high street Discourage heavy vehicles using the minor roads unnecessarily Encourage the use of public transport and walking rather than using the car</p>
<p>I do not think that the plan to have all taxis registered by 2025 as electric or hybrid is achievable due to the current developments in this field and in the immediate future.Of the 86 Taxis and Private Hire vehicles currently registered 45 (52.3%) today would not be possible to obtain and Electric or Hybrid replacement as they are not made.These are vehicles of over 4 licensed passenger seats.On research I have found (1) six seater vehicle currently on the sale which is Nissan E-NV200 at a cost of in excess of £30,000.Range on good day would be 124 miles and the top speed possible would be 76MPH.Charge times are ordinary socket 7 hours-Fast Charge 42 Minutes.The range would not allow a trip to Gatwick Airport & Return on a single charge.The cost to operators of going down this electric/hybrid route laid out in this plan could result in a number of operators going out of business.The Capital costs of taking on this liability could mean for example that the Minimum Taxi Fare in Maldon could rise to £7.50 at todays prices.I do not think the people of Maldon would be too happy with that.Until electric/hybrid vehicle development is much further advanced I think it is prudent to continue with diesel and petrol vehicles for the time being and not to set a firm date to NOT licence such vehicles.</p>
<p>Restrict vehicle parking in the High Street and require rear access deliveries where available Re route school buses away from Market Hill Ensure new developments contribute to encouraging model shift by giving each household a free local bus pass for one year to discourage short trips to the Town by car.</p>
<p>Stop building houses and put in a park n ride service. If you cant pedestrianised the hill make it a one way road. Turn the hill into a low emission zone</p>
<p>Market hill weight restriction Buses fitted filters Taxis</p>
<p>The actions that are proposed in general are good but I think careful consideration needs to be taken regarding forcing cars to use a longer route. A restriction on turning left into Market Hill from the High street would make sense in this case, as Cars from the top end of the town would then use the By Pass.</p>

<p>Improve bus frequency and routes. More cycle paths and foot paths Monitor traffic, particularly lorries using Market Hill</p>
<p>1) One way traffic Down Hill on Market Hill to immediately deal with the single area in the district with a major air quality issue 2) Retrofit all buses using Market Hill and ideally Maldon with the technology referenced in the plan. To deal with the small proportion of vehicles which cause a proportionally large air quality issue. 3) Limit HGV access within the district to deal with the second type of vehicle causing disproportionate air quality issues. - this could mean night time deliveries etc.</p>
<p>Single down hill traffic route. Enforce a 'red route' along the high street. Delivery vehicles and people stopping to use cash points create awful tailbacks and jams. More defined cycle routes</p>
<p>One way traffic downhill on Market Hill Convert bus fleet to electric vehicles Regular monitoring of not only the Nitrogen oxides but also of the particulate pollution, so intervention can be facilitated before the situation becomes health endangering.</p>
<p>Implementation of a single traffic route down hill to Market Hill with bus gate at the bottom.</p>
<p>1)A single traffic route down Market hill with a bus access gate up at the bottom 2)electrify the buses (no diesel) 3) or close off Maldon High street into a pedestrian zone, like Chelmsford town centre & make parking charges cheaper & free at certain times.</p>
<p>Only single measure which will address the core issue speedily is the Single Traffic Route Downhill with Bus Gate at bottom. No evidence has been provided that this option is not sustainable</p>
<p>One way system to reduce the amount of private traffic with bus gate Banning of double decker buses , these are not needed for the volume of passengers, and directives to ensure that public transport that replaces them comply with current EU emissions standards Park and ride to be implemented from outside the town centre to discourage traffic from using access roads for shopping(with transport that complies with current EU emissions standards)</p>
<p>Make Market Hill a one way route - downhill</p>
<p>My concern is the heavy, highly localised air pollution of Market Hill and particularly at the top. I was not aware that there is a general problem of air pollution over the District as a whole.</p>
<p>Ban lorries Ban large vans Ban buses</p>
<p>Downhill all traffic unrestricted , with only bus and taxi allowed up the hill unrestricted, maybe allow all traffic up, the hill after 6 pm daily</p>
<p>Down the hill only</p>
<p>Stop Shops accepting deliveries in peak times. Improve Park and Ride facilities. Extend Tesco's car park and abolish time restrictions</p>
<p>Stop traffic jams</p>
<p>Traffic management is the key. Prohibition of heavy polluters - buses, delivery vans and taxi buses - is required. The businesses that run these vehicles need to bear the cost of their businesses, by way of additional mileage by using the bypass and/or delays. Of course this would need to be backed by sufficient enforcement, presumably by camera monitoring, given that the current lorry weight limit restriction is frequently flouted. Use of the road by the general public could be dissuaded by imposition of a range of 'calming' (slowing) measures, such as one way, narrowing, chicanes, etc.</p>
<p>- Stop Building more houses - Stop over developing the surrounding area with business parks and such like</p>
<p>As above, broader one way system, extensive tree planting, drop speed limits.</p>

I would like to express my opinion on the proposed solution for the pollution on Market Hill. The council has now known for several years there is a problem with pollution on the Hill. It is known internationally that air pollution is a direct cause of many health complaints. My 9 year old daughter who has lived on Market Hill her whole life has had several overnight admissions to hospital with asthma. We have no family history of asthma and I am sure the air pollution is directly contributing to this.

The council commissioned a scientific report looking at the solutions to the Market Hill problem. The only solution this report felt was sure to result in a decrease in the pollution levels was **one way traffic down** the hill and a **bus gate**. However the council have decided not to initiate this plan, instead they are planning signage and retrofitting of busses (if money is identified for this). In my opinion this will just increase the time the residents are being exposed to the pollution, it will not solve the problem. The council has now know about this issue for several years, they have not acted in what I would consider a timely manner to protect the health of the residents of Market Hill.

I am very concerned about the air pollution affecting Market Hill, why can't you initiate a single traffic **route down hill** with a **bus gate** at the bottom, for a trial period to see how other areas are effected by this. I have put my house on the market because of the noise and pollution, I doubt if I will sell when potential buyers are informed of Market Hills problems

Response from Taxi Industry 1:

Some years ago, I believe we were also the first Taxi company in Essex and maybe the UK to operate all electric Nissan Leafs, and have been trialling Hybrid Nissans, Hyundai, and Kia vehicles, and have recently purchased a new Mercedes hybrid. In our bus fleet, we are already moving over to EuroVI vehicles which now represent 50% of our bus fleet. I do therefore believe that we can speak with some experience on the subject, and with a genuine view towards emission reduction. At present, there are no ideal all electric or hydrogen powered vehicles that have the range for cost-effective use as a Taxi. Our actual real-life experience has been that the range figures quoted by the manufacturers are highly misrepresentative of everyday taxi use, and have not materialised in any the vehicles we have tried to date. We have historically not been able to get an electric car to reach Heathrow Airport from Maldon. I am however, aware of another Maldon operator who had a second generation Nissan Leaf, and he managed to get to the airports with the increased range, but couldn't get back again. He had to recharge for two hours to get home again. This is not cost effective use of a taxi.

Hybrids are not the answer either, at present, as experience suggests that unless PHEV charging is undertaken around every 30 miles, and this is simply not practical for a taxi, then the emissions are actually worse, as you have the cars driving around on conventional fuel most of the time, dragging around the extra weight of the batteries not being efficiently used. I emphasise: at present. Technology is moving forward all the time, and while I cannot see into the future, I expect we will be in a better position in a couple of years time, to revisit electric vehicles. I would point out that we are a Rural operation, and as such, run much higher mileages than a more Urban Taxi operator would expect. Range, is therefore the key factor. Having just said all that, within the last week, Hyundai have released their Nexo Fuel-cell car onto the UK market, and two more all-electric cars have been announced. We must also bear in mind, that the Government are banning the building of any new cars with petrol or diesel engines, thus removing hybrids from sale after 2030.

Our proposal:

At first application

- 1. From 01.01.2021 Completely new registrations must be minimum Euro 6 and less than 10 years old.*
- 2. From 01.01.2022 Completely new registrations must be zero-emission and less than 10 years old.*

At Renewal

- 1. From 01.01.2021 vehicles will not be renewed unless they meet or exceed Euro IV, but failing that, the vehicle licence cost will double.*
- 2. From 01.01.2022 vehicles will not be renewed unless they meet or exceed Euro V, but failing that, the vehicle licence cost will be treble.*
- 3. From 01.01.2023 vehicles will not be renewed unless they meet or exceed Euro VI, and/or the vehicle is less than 10 years old, or 15 years old for WAV. (Purpose built Taxis should all be WAV anyway).*

This gives us up to three years to renew existing vehicles, along with an incentive to do so, when coupled with: Any zero-emission vehicle, licensed between now and 01.01.2023, will receive a 50% discount on its licence fee. This does not apply to hybrids, only to genuine zero-emission vehicles.

From 01.01.2025 no vehicle will be renewed, unless it is less than 10 years old at renewal, and meets minimum Euro VI emission standard. Zero-emission vehicles will receive a 25% discount.

From 01.01.2030 no vehicle will be renewed unless it is both less than 10 years old, and is of Zero-emission standard. Failure to renew a vehicle by appropriate renewal date, will result in the renewal being treated as a new registration.

This gives a full life to Euro VI vehicles, while encouraging operators to move to zero-emissions. This complies fully with Central Government requirements, and encourage any early move over to zero-emission vehicles, without putting affordable pressures on Taxis

Response from Taxi Industry 2:

I do not think that the plan to have all taxis registered by 2025 as electric or hybrid is achievable due to the current developments in this field and in the immediate future. Of the 86 Taxis and Private Hire vehicles currently registered 45 (52.3%) today would not be possible to obtain and Electric or Hybrid replacement as they are not made. These are vehicles of over 4 licensed passenger seats. On research I have found (1) six seater vehicle currently on the sale which is Nissan E-NV200 at a cost of in excess of £30,000. Range on good day would be 124 miles and the top speed possible would be 76MPH. Charge times are ordinary socket 7 hours-Fast Charge 42 Minutes. The range would not allow a trip to Gatwick Airport & Return on a single charge. The cost to operators of going down this electric/hybrid route laid out in this plan could result in a number of operators going out of business. The Capital costs of taking on this liability could mean for example that the Minimum Taxi Fare in Maldon could rise to £7.50 at today's prices. I do not think the people of Maldon would be too happy with that. Until electric/hybrid vehicle development is much further advanced I think it is prudent to continue with diesel and petrol vehicles for the time being and not to set a firm date to NOT licence such vehicles.

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Bus Gate	A stretch of road through which only scheduled buses and other authorised vehicles to pass through.
CAZ	Clean Air Zone
CVRAS	Clean Vehicle Retrofit Accreditation Scheme. Certification scheme for retrofit emissions reduction technology that will enable Clean Air Zone (CAZ) compliance of legacy fleet vehicles.
Defra	Department for Environment, Food and Rural Affairs
Dispersion Modelling	The mathematical computation of the dispersal of emissions as they travel through the ambient atmosphere
Euro Emission Standards	European emission standards define limits for exhaust emissions of new vehicles sold in the European Union and EEA member states.
EU	European Union
EV	Electric Vehicles
HGV	Heavy Goods Vehicle (in excess of 7.5t)
LAQM	Local Air Quality Management
LEZ	Low Emission Zone
LGV	Light Goods Vehicle (3.5t to 7.5t)
NAEI	National Atmospheric Emissions Inventory

NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
S106	Section 106 of the Town and Country Planning Act 1990
SPD	Supplementary Planning Document
TRO	A Traffic Regulation Order is a legal tool which allows a local authority to regulate the use of any named road.
Street Canyon	Generally defined as narrow streets where the height of buildings on both sides of the road is greater than the road width, leading to the formation of vortices and recirculation of air flow that can trap pollutants and restrict dispersion

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