

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Revision no: 04

Transport for London
Integrated Impact Assessment
17 October 2022



Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Client name: Transport for London
Project name: Integrated Impact Assessment
Client reference: 94202/53
Revision no: 04
Date: 17/10/22
Doc status: Final Version
Project no: B2417101
Project manager: Annys O'Brien
Prepared by: Steve Isaac

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
01	09/09/22	First draft for TfL review	SI	AC	JP	AO
02	28/09/22	Second draft	SI	AC	JP	AO
03	11/10/22	Final Draft	SI	AC	JP	CF
04	17/10/22	Final Version	SI	AC	JP	CF

Distribution of copies

Revision	Issue approved	Date issued	Issued to	Comments
01	AO	09/09/2022	TfL	1 st Draft/Skeleton
02	AO	28/09/2022	TfL	Second draft addressing TfL comments
03	CF	11/10/2022	TfL	Final Draft
04	CF	17/10/2022	TfL	Final Version

Jacobs UK Limited

2nd Floor, Cottons Centre
Cottons Lane
London SE1 2QG
United Kingdom

T +44 (0)203 980 2000
www.jacobs.com

Copyright Jacobs UK Limited © 2022.

All rights reserved. The concepts and information contained in this document are the property of the Jacobs group of companies. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Jacobs, the Jacobs logo, and all other Jacobs trademarks are the property of Jacobs.

NOTICE: This document has been prepared exclusively for the use and benefit of Jacobs' client. Jacobs accepts no liability or responsibility for any use or reliance upon this document by any third party.

Contents

Acronyms and abbreviations	1
1. Introduction	1
1.1 Background to the Proposed MTS Revision and IIA	1
1.2 The Purpose of the Post Adoption Statement.....	2
1.3 Report structure	2
2. Consultation on the Proposed MTS Revision and SEA	4
2.1 Proposed MTS Revision consultation	4
2.2 SEA consultation.....	4
3. Integration of Environmental Considerations into the Plan	6
3.1 Incorporation of IIA environmental assessment into the MTS and its Proposed Revision.....	6
3.2 Incorporation of environmental feedback from stakeholders	7
3.3 Habitats Regulations Assessment	7
4. Reasons for Choosing the Plan as Adopted	9
4.1 Alternatives considered	9
4.2 Reasons for selecting current MTS Revision.....	9
5. SEA Monitoring Framework	10
5.1 Overview.....	10
6. Concluding Statements	12
6.1 How did the SEA make a difference to the plan?.....	12
6.2 How did the SEA ensure effective stakeholder consultation?	12
6.3 How were environmental issues highlighted early and avoided or minimised?	12
7. References	13

Appendices

Appendix A. Existing ULEZ Boundary and Proposed Changes	15
Appendix B. Consultation Responses	17

Tables

Table 5-1: Mayor's Transport Strategy outcomes and tracker measures	10
---	----

Acronyms and abbreviations

CO ₂	Carbon dioxide
HRA	Habitats Regulations Assessment
IIA	Integrated Impact Assessment
LAEI	London Atmospheric Emissions Inventory
LEZ	Low Emission Zone
MTS	Mayor's Transport Strategy
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
PM _{2.5}	Particulate matter of less than 2.5 micrometres in diameter
PM ₁₀	Particulate matter of less than 10 micrometres in diameter
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SPA	Special Protection Area
TfL	Transport for London
ULEZ	Ultra Low Emission Zone
ZEC	Zero emission capable

1. Introduction

1.1 Background to the Proposed MTS Revision and IIA

The Mayor of London's third Transport Strategy (MTS3) (TfL, 2018) sets out his plans to transform London's streets, improve public transport and create opportunities for new homes and jobs. To achieve this, the Mayor wants to encourage more people to walk, cycle and use public transport.

Transport for London (TfL) has operated a London-wide Low Emission Zone (LEZ) which applies to the most polluting heavy diesel vehicles since 2008. The ULEZ only applies in central and inner London. The original ULEZ in central London was implemented in April 2019 and later expanded to inner London in October 2021. These schemes have improved air quality and have also contributed to reduced vehicle numbers and carbon emissions. However, air quality remains a challenge, including in outer London.

Toxic air pollution in London remains the biggest environmental risk to the health of all Londoners, particularly the most vulnerable. There remains more that can and should be done to lower exposure to poor air quality as quickly and effectively as possible to protect human health, including potentially going beyond achieving existing UK air quality requirements.

In 2019, there were around 4,000 premature deaths in London related to air pollution. The greatest number of those premature deaths were in London's outer boroughs, where the ULEZ doesn't currently apply. Over 500,000 Londoners suffer from asthma and are vulnerable to the effects of highly polluted air, with more than half of these people living in outer London. There has also been a slower rate of improvement in air quality in outer London than in central and inner London. Outer London accounts for an increasing proportion of NO₂ and PM_{2.5} emissions from road transport and - due to the higher proportion of older Londoners living in outer London boroughs - has the greatest share of premature deaths related to poor air quality.

In September 2021, the World Health Organization (WHO) updated its recommended guidelines for air pollutants reflecting the overwhelming evidence of the health impacts of air pollution, even at low levels.

On 18 January 2022, the Mayor announced four potential approaches to address the triple challenges London is facing, that is, toxic air pollution, the climate emergency and traffic congestion in London. The approaches that were under consideration by the Mayor were:

- Extending the ULEZ London-wide with the current vehicle charge levels and emissions standards
- Extending the ULEZ London-wide and adding a small clean air charge for all but the cleanest vehicles
- A small, London-wide, clean air charge for all but the cleanest vehicles
- A Greater London boundary charge for non-London registered vehicles entering Greater London

The possible extension of the ULEZ boundary London-wide is shown in relation to the existing ULEZ boundary on the figure provided as Appendix A. After considering the options, on 4 March 2022 the Mayor of London, Sadiq Khan announced that he had asked TfL to consult on the first option: expanding the current ULEZ London-wide in 2023 because this would strike the right balance between maximising the health and environmental benefits for Londoners while minimising the impacts on drivers.

To facilitate the proposed ULEZ expansion and comply with requirements set out in Schedule 23 to the Greater London Authority Act 1999, the Mayor considers that the current MTS needs to be supplemented with the following new proposal and accompanying narrative:

The Mayor, through TfL and the boroughs, will seek to address the triple challenges of toxic air pollution, the climate emergency and traffic congestion through road user charging schemes including by expanding the Ultra-Low Emission Zone London-wide.

TfL commissioned Jacobs to undertake an Integrated Impact Assessment (IIA) to assess the likely impacts of the Proposed MTS Revision (Jacobs, 2022a). The IIA comprised the following component assessment processes to provide proportionate and integrated assessments:

- Strategic Environmental Assessment (SEA)
- Health Impact Assessment (HIA)
- Equality Impact Assessment (EqIA)
- Economic and Business Impact Assessment (EBIA)

The Proposed MTS Revision is a plan for the purposes of the Environmental Assessment of Plans and Programmes Regulations 2004 (the "SEA Regulations", SI 2004/1603) and a SEA must, therefore, be carried out in respect of it and an environmental report must be prepared. A SEA is a means of assessing and communicating the likely significant effects of an emerging plan, and reasonable alternatives, with the aim of influencing the plan and thereby achieving sustainable development.

TfL also commissioned Jacobs to undertake a London-wide ULEZ IIA, which focused on the potential impacts of the proposed expansion of the ULEZ at the scheme level. The assessment of the London-wide ULEZ scheme proposal was informed by more detailed modelling and includes a more detailed assessment than was possible or appropriate for the Proposed MTS Revision. The ULEZ IIA Report (Jacobs, 2022b) also identifies potential targeted measures to mitigate the adverse impacts identified. While the ULEZ IIA includes an environmental impact assessment, a SEA is not formally required since the proposal for ULEZ expansion is not within scope of the SEA Regulations.

TfL consulted on the Proposed Revision to the MTS alongside a consultation on the proposed expansion of ULEZ London-wide (and other road user charging proposals) between 20 May and 29 July 2022. The Proposed MTS Revision IIA report Jacobs (2022a) and ULEZ IIA Report (Jacobs, 2022b) formed part of the consultation materials.

Consultation feedback received from Natural England on the Proposed MTS Revision IIA Report (Jacobs, 2022a) requested that a Habitats Regulations Assessment (HRA) of the Proposed MTS Revision be prepared. This has now been completed and the results of the HRA are summarised in Section 3.3.

The SEA Regulations require that a Post Adoption Statement (this document) is published following adoption of a plan in respect of which an SEA has been carried out. This Post Adoption Statement therefore focuses on the SEA component of the Proposed MTS Revision IIA Report Jacobs (2022a).

1.2 The Purpose of the Post Adoption Statement

Post Adoption Statements are intended to improve the transparency of decision-making within plan-making and strategic planning for plans such as the MTS and its revision.

Regulation 16 of the SEA Regulations lists the SEA post-adoption requirements. As soon as reasonably practical after the adoption of the plan for which the SEA has been undertaken, the responsible authority must publish an 'adoption statement'. This is normally placed on a public consultation website alongside the preceding SEA deliverables, the Scoping Report, the IIA Report and the plan itself, in this case, the revision to the MTS. The responsible authority must also inform the public and the SEA consultation bodies (see Section 2.1) about the availability of these documents and other particulars such as the date on which the plan was adopted.

This Post Adoption Statement documents:

- How environmental considerations have been integrated into the MTS
- How the environmental component of the Proposed MTS Revision IIA Report (Jacobs, 2022a) has been incorporated into the plan
- How the environment-related feedback from the consultation on the Proposed MTS Revision and its IIA Report has been incorporated into the plan
- The reasons for choosing the plan in light of other reasonable alternatives considered by the SEA
- The measures to be taken to monitor the significant environmental effects of implementing the plan

1.3 Report structure

This report is structured as follows:

- Section 1 (Introduction) – provides a background to the revision to the plan (the Proposed MTS Revision) and IIA process
- Section 2 (Consultation on the Proposed MTS Revision and SEA) – summarises the public consultation responses received from the SEA statutory consultation bodies (see Section 2.1) and others who responded to the consultation and explains how they were considered in the plan and IIA

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

- Section 3 (Integration of Environmental Considerations into the Plan) - summarises how environmental constraints and opportunities were integrated into the Proposed MTS Revision
- Section 4 (Reasons for Choosing the Plan as Adopted) - sets out the rationale for choosing the Proposed MTS Revision in light of other reasonable alternatives
- Section 5 (SEA Monitoring Framework) - sets out the monitoring framework, which incorporates responses to consultation feedback received on the draft environmental mitigation and enhancement measures that were presented in the Proposed MTS Revision IIA Report
- Section 6 (Concluding Statements) - provides a concluding summary for the Post Adoption Statement

2. Consultation on the Proposed MTS Revision and SEA

2.1 Proposed MTS Revision consultation

TfL, on behalf of the Mayor, held a public consultation between 20 May 2022 and 29 July 2022 on the Proposed MTS Revision (TfL, 2022a), as described in Section 1.1. The Proposed MTS Revision IIA Report (Jacobs, 2022a) was published as part of the consultation materials with the public and stakeholders, including the SEA consultation bodies (see Section 2.2), were invited to comment on its findings.

The following modifications were made to the Proposed MTS Revision to provide further clarity or to reflect more recent data or consultation comments. It was recommended that a minor modification to the narrative on the Climate Emergency in the Proposed MTS Revision was made for the purposes of clarity. In this section, the Mayor's preferred pathway to net zero in London by 2030 was described and the section originally concluded: *"However there is more to be done including taking action to reduce vehicle kilometres travelled on London's roads by 27 per cent by 2030."* This is a reference to the Accelerated Green scenario in the Element Energy report, which the Mayor then announced was his preferred pathway.

In both the report and the press release, this is stated as a 27 per cent reduction in car vehicle kilometres. For consistency and clarity, it was recommended that this sentence was modified to reflect the wording used in the report and press release. This resulted in the final sentence of the Climate Emergency section of the narrative reading as:

'However there is more to be done including taking action to reduce car vehicle kilometres travelled on London's roads by 27 per cent by 2030.'

Minor updates have also been made to the narrative in Section 1, Toxic air pollution, to reflect more recent data on the impact of the expansion of ULEZ on compliance with vehicle emissions standards. The text originally referred to an increase of 92 per cent a month after implementation: this has been replaced with text referring to 94 per cent six months after implementation (Mayor of London, 2022).

Minor updates were also made to the Traffic Congestion section of the narrative. This update reflects more recent or fuller information about the initial impacts of inner London ULEZ in terms of vehicle reduction. This text replaced the original paragraph which referred to initial indications being an 11,000 reduction in vehicles. The final modified paragraph reads as follows:

The inner London ULEZ has only been in operation since October 2021 but early indications suggest it has contributed to a reduction of around 21,000 vehicles (Mayor of London, 2022a) (around two per cent) in the expanded zone on an average day compared to the month before the launch of the scheme.

Finally, the following text was inserted in the section "Addressing the Triple Challenges":

Proposals for any new or amended RUC schemes would need to be introduced in accordance with statutory procedure, including consultation requirements.

No modification to the text of Proposal 24.1 itself were made.

2.2 SEA consultation

The SEA Regulations require that the 'consultation bodies' (the Environment Agency, Natural England and Historic England) are consulted.

As described in Section 1.1, this Post Adoption Statement is focused on the Proposed MTS Revision and the SEA component of its IIA (Jacobs, 2022a), rather than the IIA undertaken for the ULEZ expansion scheme proposal (Jacobs, 2022b).

Consultation on the SEA is a specific requirement for a Proposed MTS Revision with consultations undertaken for both the Proposed MTS Revision IIA Scoping Report and the Proposed MTS Revision IIA Report. The Proposed MTS Revision IIA Scoping Report was issued to the SEA consultation bodies for a five-week consultation commencing in March 2022. The Proposed MTS Revision IIA Report was subsequently published for public consultation between May and July 2022. All SEA-related consultation feedback received from the

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

consultation on the Proposed MTS Revision IIA Report, and the SEA responses to this feedback, are included in Appendix B of this Post Adoption Statement.

3. Integration of Environmental Considerations into the Plan

3.1 Incorporation of IIA environmental assessment into the MTS and its Proposed Revision

An IIA undertaken in respect of the current MTS ("2018 MTS IIA") was published in 2017 (the MTS IIA Report, Jacobs, 2017). This was followed by a Post Adoption Statement also published in 2018 (Jacobs, 2018) which set out how the IIA had influenced the development of the strategy. The SEA scoring of the MTS used a framework of 11 assessment objectives that relate to environmental aspects of sustainability. As a whole, the implementation of the MTS was expected to have positive environmental outcomes for a range of environmental topics considered in the SEA and these are described in the MTS3 IIA Post Adoption Statement (Jacobs, 2018).

These environmental outcomes are not expected to significantly change as a result of the Proposed MTS Revision. The Proposed MTS Revision is likely to enhance positive effects on the historic environment, natural capital and noise and vibration as a result of reduced road traffic and the anticipated shift to low emissions vehicles. However, the overall SEA scoring of the MTS3 was not affected by the Proposed MTS Revision.

The MTS3 IIA Post Adoption Statement (Jacobs, 2018) describes how the 2017 IIA findings were incorporated into the MTS3. The IIA assessed six 'illustrative interventions' to identify their likely sustainability outcomes and the findings informed the development of the 'Preferred Option' for the strategy. The Jacobs (2017) IIA Report summarised the changes to the assessment as a result of further refinements to the Preferred Option made by TfL in response to IIA recommendations arising from the assessment of Strategic Options. These refinements included revisions to draft policies and the inclusion of new proposals which strengthened the sustainability performance of the strategy and improved the performance of the strategy against IIA objectives in relation to many of the environmental topics. The MTS3 IIA Report (Jacobs, 2017) also identified positive cumulative environmental effects from the wider strategic delivery of proposals to improve air quality across the different strategies.

The Proposed MTS Revision IIA Report (Jacobs, 2022a), based specifically on the Proposed MTS Revision described in Section 1.1, included an assessment that used a framework of 11 assessment objectives that relate to environmental aspects of sustainability. This framework was the same framework as had been used to assess the draft MTS in 2017. TfL modelling identified that the Proposed MTS Revision and two Alternatives will see a reduction in NOx and carbon emissions and would help reduce volumes of road traffic and traffic congestion to a small degree. The ULEZ expansion with a tighter standard (Alternative A) would have the greatest reduction, however it should be noted the differences in reduction between the Proposed MTS Revision and two Alternatives are minimal in relation to the baseline.

The principal environmental benefits of the MTS also apply to the Proposed MTS Revision, as the assessment scoring from the MTS3 IIA (Jacobs, 2017) was unchanged by the Proposed MTS Revision. Based on IIA scoring of moderate to major positive effects, the principal environmental benefits are likely to be for air quality. However, minor to moderate positive effects were also predicted for:

- Climate change adaptation and mitigation
- Flood risk
- Materials and waste
- Natural capital and natural environment
- Historic environment (with some uncertainty acknowledged)
- Noise and vibration (with some uncertainty acknowledged)

The Proposed MTS Revision IIA Report Jacobs (2022a) concluded that there were no significant environmental effects identified as a result of the Proposed MTS Revision or the two alternatives assessed. Therefore, there were no changes to the existing scoring on the environmental objectives identified in the original MTS3 IIA Report (Jacobs, 2017). This included the scoring of cumulative effects. As a result, no further changes have been made to the MTS in response to the findings of the Proposed MTS Revision IIA

Report (Jacobs, 2022a). However, mitigation recommendations were incorporated into the MTS when the MTS3 was originally prepared, as described in Jacobs (2017) and Jacobs (2018).

3.2 Incorporation of environmental feedback from stakeholders

In March 2022, a Scoping Report for the Proposed MTS Revision IIA was sent to statutory environmental bodies in accordance with regulation 12(5) of the SEA Regulations. This report proposed that a HRA would not need to be undertaken to inform the IIA as the Proposed MTS Revision would not increase visitor/recreational pressure on designated habitats. In April, Natural England responded to TfL that it had no specific comments to make on the Proposed MTS Revision IIA Scoping Request.

Subsequently, in its response to the public consultation (between 20 May and July 2022) on the Proposed MTS Revision Report (Jacobs, 2022a) and on the proposed ULEZ expansion, Natural England advised that a HRA is in fact required to rule out any impacts from the proposed expansion on Epping Forest Special Area of Conservation (SAC) and apologised for not having raised this earlier in the process. In their response to the same MTS Revision consultation, Spelthorne Borough Council expressed concerns about potential air pollution impacts on the South West London Waterbodies Special Protection Area and Epping Forest District Council expressed concerns about potential air pollution impacts on the Epping Forest SAC. These consultation responses are provided in Appendix B of this Post Adoption Statement.

Consequently, Jacobs were commissioned to undertake a HRA of the Proposed MTS Revision and the proposed ULEZ expansion. The conclusions of the HRA are summarised in Section 3.3.

The Environment Agency's response was more focused on sustainable resource use and waste management in relation to vehicles and the scrappage scheme. Local authority responses related to the need for HRA and queried the IIA's evidence base and consideration of cumulative effects. The SEA response to each piece of feedback is included in Appendix B of this Post Adoption Statement.

3.3 Habitats Regulations Assessment

A HRA has been prepared since the publication of the Proposed MTS Revision IIA Report (Jacobs, 2022a), in response to consultation feedback received from the public consultation. The HRA is of particular relevance to the biodiversity SEA topic as it seeks to identify any likely significant effects on sites designated for their internationally important habitats, flora and fauna. These sites are SACs, Special Protection Areas (SPAs), collectively known as European sites, and wetland sites designated under the Convention on Wetlands of International Importance, known as Ramsar sites.

Seven European/Ramsar sites were identified and included in the HRA screening. A review of traffic, emissions and air dispersion modelling data used to inform the IIA indicates that road traffic emissions of NO_x will decline around all European/Ramsar sites identified, which is estimated to result in a negligible reduction in nitrogen deposition associated with corresponding changes in annual mean NO₂ concentrations.

Based on modelling undertaken as part of the Nitrogen Futures project (Dragosits *et al.*, 2020) and TfL's forecast response of vehicle owners to the proposed expansion of ULEZ, it is considered unlikely that the proposed London-wide ULEZ would result in an increase in NH₃ concentrations or associated nitrogen deposition within the European sites under consideration.

The HRA screening stage did not identify any likely significant effects on any European/Ramsar sites. As the proposed London-wide ULEZ is estimated to result in a reduction in NO_x emissions along all but one of the road links considered, with an associated reduction in nitrogen deposition, only beneficial effects are expected. The beneficial effects are not likely to undermine or have a bearing on the conservation objectives of any of the seven European/Ramsar sites within scope of the HRA and so are not considered to be significant.

The Proposed MTS Revision and London-wide ULEZ will therefore not result in any likely significant effects on any European/Ramsar site and there is no requirement to proceed to Stage Two Appropriate Assessment.

The MTS3 IIA Report (Jacobs, 2017) and Proposed MTS Revision IIA report Jacobs (2022a) concluded there would be minor to moderate positive effects on the Natural Capital and Natural Environment topic. The HRA findings show that this IIA scoring does not need to be updated as a result of any predicted impacts of the Proposed MTS Revision on European sites. The Proposed MTS Revision IIA report Jacobs (2022a) has not

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

been updated to reflect that an HRA has been prepared since the Proposed MTS Revision IIA consultation finished in July 2022. Instead, the HRA results are summarised in this section of the Post Adoption Statement.

4. Reasons for Choosing the Plan as Adopted

4.1 Alternatives considered

The two reasonable Alternatives to the London-wide ULEZ proposal considered in the Proposed MTS Revision IIA were:

- Alternative A - Modifying the ULEZ to make it even more impactful in reducing emissions: building on the existing scheme by extending it to cover the whole of Greater London and adding a small Clean Air Charge for all but the cleanest vehicles
- Alternative B - A small, London-wide, clean air charge: a low-level daily Clean Air Charge for all but the cleanest vehicles to nudge behaviour and reduce the number of short journeys by car. This would operate on top of the existing ULEZ (central and inner London)

Under Alternative A, in 2023 the existing ULEZ standards would continue to apply but be expanded to cover the whole of Greater London with a £12.50 charge for motorcycles not meeting Euro 3 standards, petrol vehicles not meeting Euro 4 standards and diesel vehicles not meeting Euro 6 standards. Additionally, a low-level Clean Air Charge would apply to internal combustion engine (ICE) vehicles that meet the current ULEZ standards, but do not meet a potential new, tighter zero emission capable (ZEC) standard. Plug in hybrids, battery electric and hydrogen vehicles (i.e. ZEC vehicles) would not pay anything (neither the ULEZ charge nor the additional charge).

Under Alternative B, in 2023 there would be no change to the existing ULEZ boundary or emissions standards. Rather, a new low-level daily Clean Air Charge would be introduced across Greater London (in addition to the existing ULEZ covering central and inner London) which would apply to ICE vehicles that meet the current ULEZ standards, but do not meet a potential new, tighter ZEC standard. Plug in hybrids, battery electric and hydrogen vehicles (i.e. ZEC vehicles) would not pay anything (neither the ULEZ charge nor the additional charge).

4.2 Reasons for selecting current MTS Revision

The Mayor considered the benefits and drawbacks of each of the four approaches listed in Section 1.1 and concluded that the proposal for a London-wide ULEZ in 2023 was the optimal approach to develop further and take to public and stakeholder consultation due to its higher impact on greenhouse gas and air pollutant emissions whilst limiting the number of people impacted by the charge. He has ruled out both the Clean Air Charge and the Greater London Boundary Charge as options.

Overall, due to the scale of the Proposed MTS Revision (i.e. the addition of one Proposal to the MTS), there are no impacts identified across all of the objectives that are significant enough at this strategic level to change the scoring from the MTS3 IIA (Jacobs, 2017). The assessment did identify some minor differences in the magnitude of the impacts identified as a result of implementing the Proposed MTS Revision and Alternative A (ULEZ expansion with a tighter standard) and Alternative B (Low-level daily Clean Air Charge). However, given the extent of the Proposed MTS Revision within the context of the wider MTS, the differences are minimal.

TfL has estimated that expanding the ULEZ London-wide (the Proposed MTS Revision) would have the following environmental benefits, based on high-level modelling of the Proposed MTS Revision and the Alternatives listed in Section 4.1. These figures are taken from the Proposed MTS Revision IIA Report (Jacobs, 2022a) and Transport for London (2022f):

- Reduction in NO_x emissions¹ from cars and vans of between 285 and 300 tonnes
- Reduction of CO₂ emissions² in outer London of between 135,000 and 150,000 tonnes
- Traffic reduction of between 20,000 and 40,000 fewer cars on London's roads every day

¹ For NO_x emissions figures, the higher figure excludes a phase-out of ICE vehicles by 2030 and the lower figure includes this.

² For CO₂ emissions figures given above, the higher figure excludes a phase-out of ICE vehicles by 2030 and the lower figure includes this

5. SEA Monitoring Framework

5.1 Overview

The SEA Regulations (Part 4, Article 17) require monitoring of the significant environmental effects of the implementation of plans to allow early identification of unforeseen adverse effects and to be able to undertake appropriate remedial action. A framework of environmental monitoring indicators is typically used for the SEA topics where significant adverse environmental effects were predicted at the Environmental Report (or IIA Report) stage.

Although no significant adverse environmental effects were predicted at the Proposed MTS Revision IIA Report stage, TfL's ongoing monitoring programme is a way of demonstrating success in delivering the MTS targets and reducing its environmental, social and economic impacts.

TfL's annual Travel in London (TIL) reports (TfL, 2022c) provide the framework for monitoring progress towards implementing the MTS. The London Atmospheric Emissions Inventory (LAEI) is an important part of this monitoring programme for key pollutants (NO_x, PM₁₀, PM_{2.5} and CO₂). The LAEI allows TfL to monitor the impacts of the expansion of the ULEZ and will help inform what other measures may be needed to meet legal limits for NO₂ across London by 2025 at the latest (TfL, 2021). Progress in delivering the MTS is reported annually to the TfL board and published on the TfL website (TfL, 2022d). This includes monitoring the MTS outcomes shown in Table 5.1. Each of these outcomes are tracked annually.

Table 5-1: Mayor's Transport Strategy outcomes and tracker measures

Outcome	Proposed measure	MTS 2041 aim
Mode share	Percentage of trips undertaken by active, efficient and sustainable modes	80% of trips
Active	Percentage of Londoners doing 20 min active travel per day	70% of Londoners
Safe	Number of people killed or seriously injured on London's roads	Zero
	Number of customers killed or seriously injured on TfL services	Zero
Efficient	Number of car trips crossing cordons in central, inner and outer London	3 million (approx. 30%) fewer daily trips
Green	Average roadside NO ₂ concentration in central, inner and outer London	60-70% reduction, equivalent to 94% emissions drop
	All CO ₂ emissions from London's transport network	72% reduction – potential for more ambitious aim now
Connected	Percentage of Londoners living within 400 metres of a bus stop	Not directly in MTS, but assumes it is maintained at current high level
Accessible	Additional journey time by step-free routes	50% reduction
Quality	Percentage of rail-travelled km in crowding above 2 persons per square metre	10-20% reduction
	Average bus speed (within safety and speed limits)	5-15% improvement

ULEZ monitoring reports are also produced regularly and are available for the Central London ULEZ and Inner London ULEZ (TfL, 2022e). These include monitoring data for vehicle compliance, traffic flows, NO₂, NO_x, particulate matter and CO₂.

As the IIA Report (Jacobs, 2022a) concluded that no changes to the Jacobs (2017) MTS3 IIA scoring were required, there are no updates proposed for the current MTS monitoring framework.

6. Concluding Statements

6.1 How did the SEA make a difference to the plan?

Given that the proposed revision under consideration constitutes a very small part of the MTS, it would be expected that the influence of the SEA on the MTS would come primarily during the development of the main body of the MTS rather than at the current Proposed MTS Revision stage. The SEA therefore had the highest impact in the earlier stages of MTS development.

6.2 How did the SEA ensure effective stakeholder consultation?

The Proposed MTS Revision IIA Scoping Report was issued to the three SEA consultation bodies (listed in Section 2.2) for a five-week consultation commencing in March 2022 and the Proposed MTS Revision IIA report Jacobs (2022a) was consulted on between May and July 2022. All SEA-related consultation feedback received from the consultation on the Proposed MTS Revision IIA Report, and the SEA responses to this feedback, is included in Appendix B of this Post Adoption Statement. Consultation responses that related to the SEA component of the IIA were received from Natural England, the Environment Agency and local authorities. Natural England requested the production of a HRA to determine any likely significant effects on Epping Forest SAC. A HRA report has now been produced (see section 3.3) and this concluded that there would be no likely significant effects of the Proposed MTS Revision on Epping Forest SAC, or any other European sites.

The IIA (including SEA) responses to consultation feedback on MTS3 and its Proposed Revision has been documented in the MTS 3 IIA Report (Jacobs, 2017), the MTS 3 IIA Post Adoption Statement (Jacobs, 2018) and the Proposed MTS Revision IIA Report Jacobs (2022a).

6.3 How were environmental issues highlighted early and avoided or minimised?

The successive IIAs for MTS3 and its Proposed Revision have each highlighted the most significant environmental effects, including cumulative effects, expected from implementation of the MTS3. This has ensured that the environmental issues have been considered at each stage of MTS3 development, as described in the MTS3 IIA Report (Jacobs, 2017) and Proposed MTS Revision IIA Report (Jacobs, 2022a).

At the Proposed MTS Revision stage, the principal environmental benefits of the Revision, based on IIA scoring or moderate to major positive effects, are likely to be for the environmental topic of air quality. However, minor to moderate positive effects were also predicted for various other environmental topics, as described in Section 3.1.

The Proposed MTS Revision IIA Report (Jacobs, 2022a) also highlighted that a shift to low emission vehicles would result in a small negative impact on materials and waste as a result of the short to medium-term increase in the number of non-compliant vehicles that would be scrapped, and the increase in demand for mineral resources required for the production of new replacement vehicles. The Mayor has proposed that a vehicle scrappage scheme would be available to help people prepare for a London-wide ULEZ.

At this Proposed MTS Revision stage, there are no impacts identified across all of the objectives that are significant enough at this strategic level to change the scoring from the MTS3 IIA (Jacobs, 2017).

7. References

- DEFRA, Department for Environment Food & Rural Affairs (2016). DEFRA statistics release: *Emission of air pollutants in the UK, 1970 to 2015*.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579200/Emissions_airpollutants
- Dragosits, U., Carnell, E.J., Tomlinson, S.J., Misselbrook, T.H., Rowe, E.C., Mitchell, Z., Thomas, I.N., Dore, A.J., Levy, P., Zwagerman, T., Jones, L., Dore, C., Hampshire, K., Raoult, J., German, R., Pridmore, A., Williamson, T., Marnier, B., Hodgins, L., Laxen, D., Wilkins, K., Stevens, C., Zappala, S., Field, C. and Caporn, S.J.M. (2020). Nitrogen Futures. JNCC Report No. 665. JNCC, Peterborough, ISSN 0963-8091.
- Greater London Authority (2020). *Air Quality in London 2016 - 2020*. [Online] [Accessed: 14/07/22] Available from: [Air Quality in London 2016 - 2020 | London City Hall](#)
- Jacobs (2017) Integrated Impact Assessment of the Consultation Draft Mayor's Transport Strategy 3, 6 June 2017. [Online] [Accessed 12/08/2022] Available from: <https://content.tfl.gov.uk/integrated-impact-assessment-report.pdf>
- Jacobs (2018) Integrated Impact Assessment of Mayor's Transport Strategy 3 – Post Adoption Statement. [Online] [Accessed: 20/09/22] Available from: <https://content.tfl.gov.uk/integrated-impact-assessment-post-adoption-statement.pdf>
- Jacobs (2022a) Proposed Mayor's Transport Strategy (MTS) Revision Integrated Impact Assessment (IIA) Report, 17 May 2022. [Online] [Accessed 12/08/2022] Available from [this](#) site.
- Jacobs (2022b) London-wide ULEZ Integrated Impact Assessment (IIA) Report, 17 May 2022. [Online] [Accessed 12/08/2022] Available from [this](#) site.
- Logika Noise and Air Quality Consultants (2021) Air Pollution and Inequalities in London 2019 Update. [Online] [Accessed 14/10/2022] Available from https://www.london.gov.uk/sites/default/files/air_pollution_and_inequalities_in_london_2019_update_0.pdf
- Mayor of London (2022) Millions of Londoners breathing cleaner air thanks to ULEZ expansion. [Online press release] [Accessed 14/10/2022] Available from <https://www.london.gov.uk/press-releases/mayoral/londoners-breathing-cleaner-air-thanks-to-ulez>
- Transport for London (2017). Changes to Low Emission Zone and Expansion of the Ultra-Low Emission Zone-Supporting Information. [Online] [Accessed 01/08/2022] Available from: https://consultations.tfl.gov.uk/environment/air-quality-consultation-phase-3b/user_uploads/supporting-information-document-updated.pdf
- Transport for London (2018). Mayor's Transport Strategy 2018. [Online] [Accessed: 08/08/22] Available from: <https://tfl.gov.uk/corporate/about-tfl/the-mayors-transport-strategy>
- Transport for London (2021). Travel in London Report 14. [Online] [Accessed: 02/09/22]. Available from: <https://content.tfl.gov.uk/travel-in-london-report-14.pdf>
- Transport for London (2022a). Our Proposals to Help Improve Air Quality, Tackle the Climate Emergency, and Reduce Congestion by Expanding the ULEZ London-wide and other Measures. [Online] [Accessed: 02/09/22]. Available from: https://ehq-production-europe.s3.eu-west-1.amazonaws.com/39bc28e1df271326c400b28ec7622683a9582672/original/1652957227/ea52618f8dad9eef453e6e5ea5d3be5_Our_proposals_to_help_improve_air_quality_tackle_the_climate_emergency_and_reduce_congestion_by_expanding_the_ULEZ_London-wide_and_other_measures.pdf
- Transport for London (2022b). Delivering the Mayor's Transport Strategy 2021/22. [Online] [Accessed: 08/08/22] Available from: <https://tfl.gov.uk/corporate/about-tfl/the-mayors-transport-strategy>
- Transport for London (2022c). Travel in London reports. [Online] [Accessed: 08/08/22] Available from: <https://tfl.gov.uk/corporate/publications-and-reports/travel-in-london-reports>

Transport for London (2022d). The Mayor's Transport Strategy (Monitoring our Progress). [Online] [Accessed: 20/09/22] Available from: <https://tfl.gov.uk/corporate/about-tfl/the-mayors-transport-strategy#on-this-page-5>

Transport for London (2022e). Ultra Low Emission Zone [Online] [Accessed: 20/09/22] Available from: <https://tfl.gov.uk/corporate/publications-and-reports/ultra-low-emission-zone#on-this-page-1>

Transport for London (2022f). Next steps for reducing emissions from road transport. [Online] [Accessed: 06/10/22] Available from: <https://content.tfl.gov.uk/next-steps-for-reducing-emissions-from-road-transport.pdf>

Appendix A. Existing ULEZ Boundary and Proposed Changes

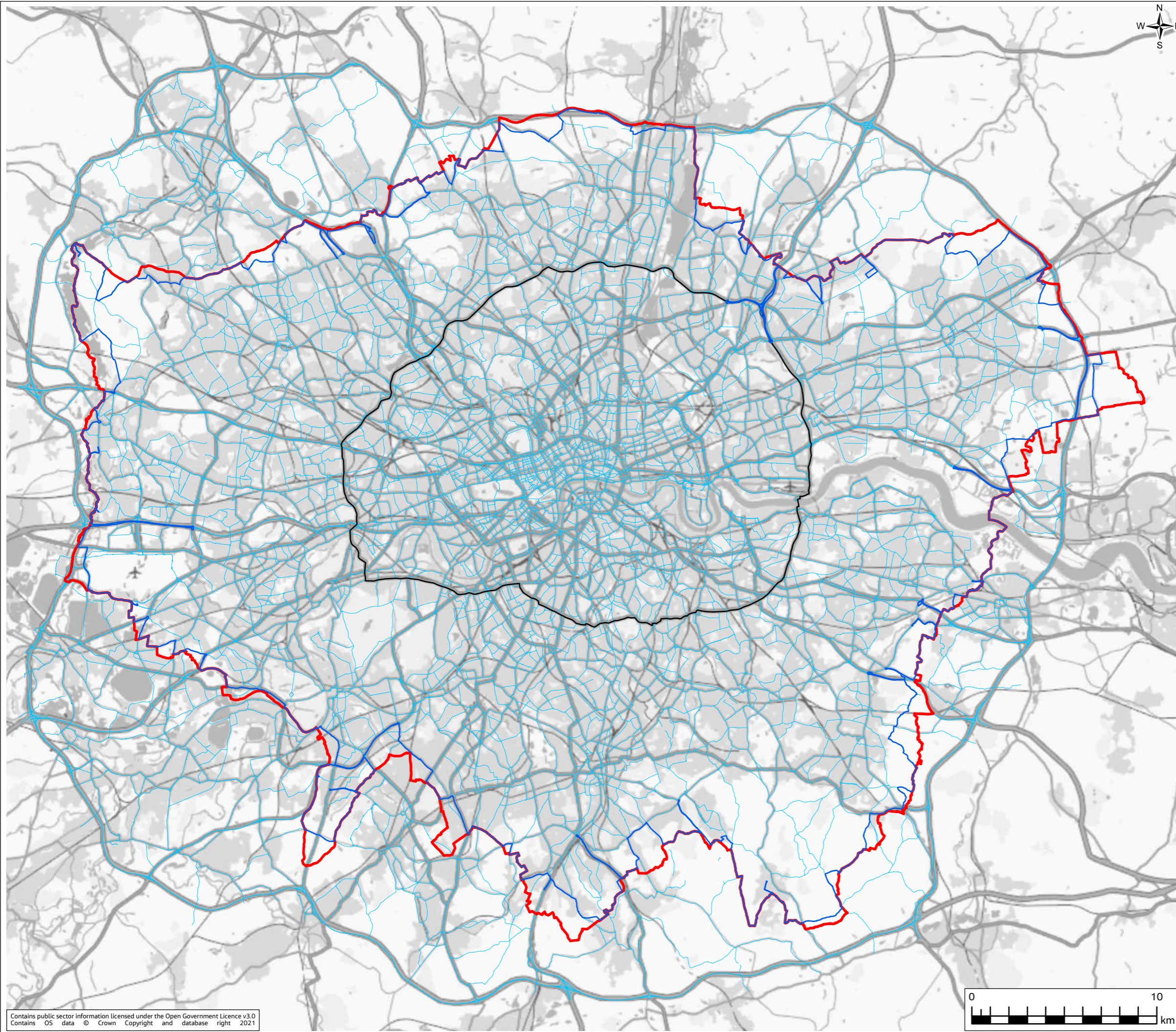
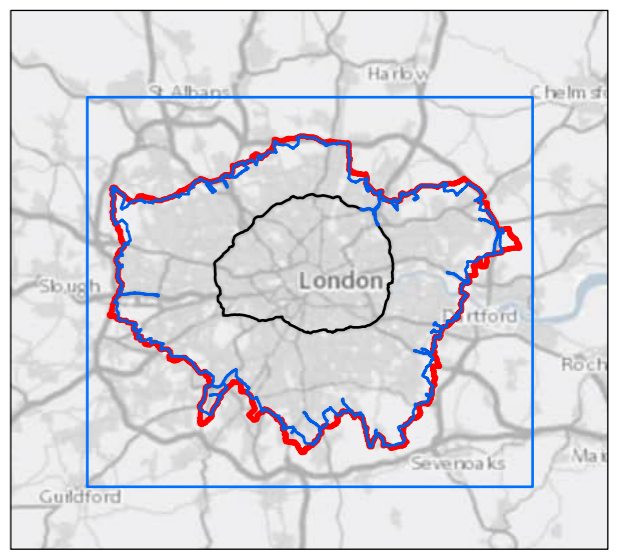


FIGURE 1

- Legend**
- Proposed London-Wide ULEZ Boundary / LEZ Boundary
 - ULEZ Boundary
 - Greater London Authority
 - Study Area



PO1	SEP 2022	Initial Issue	MS	JM	SP	AO
Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Jacobs
 Cottons Lane, London, SE1 2QG, UK.
 Tel: +44(0)22 3980 2000
 www.jacobs.com

Client
Transport for London

Project
 MTS REVISION IIA

Drawing Title
 EXISTING AND PROPOSED ULEZ BOUNDARY

Drawing Status
 DRAFT

Scale @ A3
 1:200,000 DO NOT SCALE

Jacobs No.
 B2417101

Drawing No.
 B2417101_Existing and Proposed ULEZ Boundary

© Copyright 2022 Jacobs U.K. Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of, Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



Appendix B. Consultation Responses

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Consultee/ Date	Consultation Response	Response in IIA
<p>Environment Agency 29 July 2022</p>	<p>Thank you for the opportunity to comment on the Mayor's proposals to expand London's Ultra-Low Emissions Zone (ULEZ). We have also provided comments in response to the accompanying Integrated Impact Assessment (IIA) report.</p> <p>We support measures that improve the environment and public health. Clean air is critical for our health, to sustain wildlife and provide essential services that support our lifestyles and economy. It helps to provide the natural capital on which we all depend. 'Healthy air, land and water' is one of the priorities of the Environment Agency's 5-year Action Plan EA2025 Creating a Better Place. We are also committed to supporting the response to the climate emergency in London. We therefore see strong alignment between our organisation's wider strategic objectives for the environment, London, and Londoners.</p> <p>We are an arms-length body of the Department for Environment, Food and Rural Affairs (DEFRA). We support the principle of the ULEZ and other Clean Air Zones (CAZs) as outlined in Defra's Clean Air Framework. We have no comments to make on the suitability of the proposed charges or the geographical expansion of the ULEZ, which we consider to be matters for the Mayor and the people of London.</p> <p>We have included some further comments in response to the Integrated Impact Assessment as an appendix to this response.</p>	<p>No proposed change to the IIA</p>
	<p>Appendix 1: Integrated Impact Assessment comments:</p> <p>Impacts on sustainable resource use and waste management: We have some concerns with regards to potential impacts on waste operations which we regulate in London. The expanded ULEZ could potentially result in the relocation of some permitted waste operations to locations beyond the ULEZ, and beyond the Greater London boundary.</p> <p>The IIA (page 64) estimates that the expansion of ULEZ would generate an average of an additional 36,600 tonnes of scrappage waste per annum in the first few years after implementation. It could also result in an increase in fly tipping or illegal waste operations and activities which the IIA acknowledges.</p>	<p>Impacts to waste operations were considered as part of the assessment that accompanied the introduction of the London-wide Low Emission Zone. It is assumed that all successful applicants for a new scrappage scheme will be required to prove they have scrapped their vehicles at an Authorised Treatment Facility.</p> <p>Current government End of Life vehicle (ELV) legislation requires that 95% of a car's weight must be recycled. For owners of non-compliant vehicles that do not qualify for scrappage, the risk of illegal fly tipping is considered to be low in the context of the current demand for second-</p>

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Consultee/ Date	Consultation Response	Response in IIA
	<p>Both of these potential impacts, if they were to be realised, have potential to impact on the Mayor's ambition (London Environment Strategy and London Plan 2021) for London to be net-waste sufficient by 2026 (the equivalent of 100 per cent of London's waste should be managed within London). We look forward to continued positive dialogue between our teams on safeguarding, and if/where necessary increasing, London's waste capacity to support delivery of these ambitions which we enthusiastically support.</p>	<p>hand vehicles nationally and the historically high price of scrap metal.</p>
<p>Natural England July 2022</p>	<p>Thank you for consulting us on the ULEZ expansion.</p> <p>We note that the proposed expansion to the London Boundary cuts through Epping Forest Special Area of Conservation (SAC), and would advise that a Habitats Regulations Assessment is required to rule out any impacts from the proposed expansion on Epping Forest SAC. We apologise for not having raised this earlier in the process.</p> <p>Epping Forest SAC is designated for Atlantic acidophilous beech forests, Northern wet heaths and European dry heaths and contains habitats which are sensitive to air quality impacts. Having reviewed Chapter 5 of the Integrated Impact Assessment, it appears that the expanded ULEZ will lead to a drop in traffic both within the proposed zone, as well as in the areas of non-greater London that were also included in the study area. Noting this, it suggests that the proposals are unlikely to have any adverse impact on Epping Forest. However due to the nature of the plan, and the potential for impacts, this plan should follow the process of the Habitats Regulations. A Habitats Regulations Assessment could be informed by the information that is provided within the IIA.</p> <p>Natural England guidance provides a simple step by step approach to assessing road traffic emissions under the Habitats Regulations. All designated sites that may be impacted by the affected road network within a reasonable buffer zone should be screened in for consideration under your authority's appropriate assessment. Please note that the method for assessing in combination effects has changed in the past few years due to a number of high-profile appeal decisions. They include the following: The Wealden Judgement; The People Over Wind Case; and CJEU Ruling in The Netherlands Nitrogen And Agriculture Cases C-293/17 and C-294/17. Please note that ammonia (NH3) from traffic emissions should also be assessed as the impact from this source on designated sites is currently unclear.</p>	<p>A Habitats Regulations Assessment screening report has been prepared to determine potential likely significant effects of the ULEZ on the Epping Forest SAC and other European sites. The HRA screening concluded that the Proposed MTS Revision will not result in any significant effects on any European/Ramsar site.</p>

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Consultee/ Date	Consultation Response	Response in IIA
	Please don't hesitate to contact me if you have any questions about the above.	
Epping Forest District Council August 2022	<p><i>NB – The text below is part of a wider response</i></p> <p>Concern 4: Impact on the Epping Forest Special Area of Conservation</p> <p>The ULEZ may influence people to upgrade their vehicles or switch from diesel to petrol. Whilst this may be beneficial with regards to reducing NO₂ and particulate tail pipe emissions, it may result in an increase in ammonia levels as ammonia is a product released by catalyst-equipped petrol vehicles and selective catalytic reduction (SCR) on both light and heavy-duty diesel vehicles. Ammonia is a pollutant of concern for the EFSAC. The additional information provided by TfL states that while ammonia emissions have not been modelled, the baseline proportion of electric vehicles in their model inputs are considerably higher than that assumed in the modelling undertaken to inform the Habitats Regulations Assessment 2021 (HRA 2021) undertaken to support the main modifications to our emerging Local Plan and our Interim Air Pollution Mitigation Strategy. Therefore TfL have suggested that ammonia levels are expected to result in an earlier achievement of the targets set out in the HRA 2021 and the Interim Air Pollution Mitigation Strategy. We feel that a baseline proportion of EV's in the range of 40-50% from 2030 is optimistic and feel that instead there will be an increase in petrol vehicles. This is supported by the follow up response provided by TfL that acknowledges a potential increase in the proportion of compliant petrol vehicles. This is a matter of importance as there is a need under the Habitats and Species Regulations to take a 'precautionary' approach. The HRA 2021 and Interim Air Pollution Mitigation Strategy set out that, based on current available information, a 30% reduction in petrol cars (such that 12-15% of all vehicles using roads through the EFSAC are ULEVs by that year) would need to be achieved by 2033 in addition to any Clean Air Zone to be able to demonstrate no adverse effect on the integrity of the EFSAC as a result of Local Plan development. The EFSAC ANPR data collected in 2019 also showed that the proportion of the vehicle fleet was 43.8% petrol car as opposed to 31.5% of diesel cars.</p> <p>Action requested:</p>	<p>A Habitats Regulations Assessment screening report has been prepared to determine potential likely significant effects of the ULEZ on the Epping Forest SAC and other European sites. The HRA screening concluded that the Proposed MTS Revision will not result in any significant effects on any European/Ramsar site.</p>

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Consultee/ Date	Consultation Response	Response in IIA
	We ask that TfL model for the impact of the ULEZ expansion on the EFSAC in relation to ammonia concentrations. Without this information, Epping Forest District Council would not be able to support the ULEZ expansion.	
London Borough of Lewisham 29 th July 2022	6. The IIA provides an integrated assessment of the potential positive and negative impacts of the Proposed Scheme on the environment, equalities, health and the economy. Responsibilities in managing/implementing the scheme (example role of boroughs) and the cumulative impacts with other interventions should be assessed and included.	Section 5.3 of the Proposed MTS Revision IIA Report (Jacobs, 2022a) covers potential cumulative environmental effects, including in-combination with the London Plan. This includes positive cumulative effects on air quality.
Spelthorne Borough Council August 2022	<p><i>NB – The text below is part of a wider response</i></p> <p>The Council supports the principals of the proposals to extend the Ultra-Low Emission Zone (ULEZ), in attempting to address poor air quality, climate change and to improve health. Reducing emissions is positive, however the Integrated Impact Assessment demonstrates that there are potential negative impacts for vulnerable and less affluent communities.</p> <p>The Council has serious concerns regarding the evidence base used for the Integrated Impact Assessment, and the resolution of the data presented within the consultation materials for Spelthorne as a non-Greater London Authority Borough. The level of detail in the consultation documentation for non GLA boroughs regarding the economic, social and environmental impacts is poor, and the material impacts on our community cannot be understood from the assessment provided.</p> <p>2.6 A further issue to consider which is associated with this is the volume of existing HGV vehicle movements around Stanwell Moor, to the north of Staines, due to the waste and recycling plant located there at Oakleaf Farm. The capacity of this plant is expected to increase to continue to meet increasing waste management and recycling targets. This will likely lead to increased HGV movements and, when coupled with similar movements associated with Heathrow Airport directly to the north of Stanwell Moor, presents significant air quality and noise impacts which negatively affect the north of Spelthorne.</p> <p>2.7 There are sensitivities at these locations, namely the proximity of Sites of Special Scientific Interest (Staines Moor) and the Southwest London Waterbodies Special Protection Area to Staines upon Thames, along with the already high levels of pollution at Sunbury</p>	<p>No updates to the IIA required.</p> <p>The evidence base and the assessment within the Proposed MTS Revision IIA has been consulted on and amended to incorporate feedback from the SEA consultation bodies.</p> <p>A Habitats Regulations Assessment screening report has been prepared to determine potential likely significant effects of the ULEZ on the Epping Forest SAC and other European sites. The HRA screening concluded that the Proposed MTS Revision will not result in any significant effects on any European/Ramsar site.</p>

Proposed Mayor's Transport Strategy Revision – Integrated Impact Assessment (IIA) Post Adoption Statement

Consultee/ Date	Consultation Response	Response in IIA
	<p>Cross. Given the significance of the Local Plan setting of the Council's approach to meeting development needs over the next 15 years and, the requirement to mitigate any impacts of this as far as possible, it is a concern that there has been a lack of consultation with the Borough.</p> <p>This is particularly concerning given the sensitive sites and the potential impacts of increased traffic flows on these, that there has been such limited, or no, clear consultation with Natural England and National Highways. The Council is developing its Habitats Regulation Assessment to support the Local Plan in conjunction with Natural England to ensure any identified air quality impacts on sensitive sites are fully scoped and mitigated where possible. If external factors are likely to influence this work, such as changing and increased traffic flows because of the ULEZ, then TfL should be liaising with NE and the Council to share modelling and to ensure there is a fully considered assessment and mitigation strategy in place.</p>	