

Central London Congestion Charging Scheme

Consultation with the public and stakeholders on:

The removal of the Western Extension (Variation Order 1)

Changes to the remaining Congestion Charging Scheme (Variation Order 2)

**TfL's REPORT TO THE MAYOR ON THE
CONGESTION CHARGING SCHEME
VARIATION ORDERS CONSULTATION**

October 2010

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Introduction

1.1 Overview and purpose of this report

- 1.1.1 The central London Congestion Charging scheme was introduced in February 2003 in line with the proposal set out in the Mayor's Transport Strategy as published in July 2001. Following further public and stakeholder consultation (on a revision to the Mayor's Transport Strategy and a Variation Order), the zone was extended westwards in February 2007. This additional area is known as the Western Extension (WEZ).
- 1.1.2 The scheme operates as one extended zone, with the same charging hours, daily charge and discounts and exemptions available. For example, a 90% Residents' Discount is available for eligible drivers living within the zone, as is a 100% Blue Badge Discount for eligible disabled people.
- 1.1.3 The Greater London (Central Zone) Congestion Charging Order 2004, as varied, (the "Congestion Charging Scheme Order") provides the legal basis for the operation of the scheme. From time to time changes are made to the scheme, in order to ensure that it remains effective and to make improvements to its operation: these have included the introduction of Pay Next Day in June 2006 and other minor boundary changes and adjustments to the discounts and exemptions. The charge has been increased once, in July 2005, when it was raised from £5 to £8. Changes are often effected via a Variation Order which makes changes to the Congestion Charging Scheme Order and is typically subject to a public consultation before being confirmed, with or without modifications, by the Mayor.
- 1.1.4 On behalf of the Mayor, TfL made and consulted the public on two Variation Orders (VOs) to effect changes to the Congestion Charging Scheme Order. Variation Order 1 (VO1) allows for the removal of the Western Extension; Variation Order 2 (VO2) sets out a number of changes to the remaining Congestion Charging scheme. TfL produced two VOs in order to reflect the scale and nature of the various changes proposed and to enable the proposed changes and their potential impacts to be considered separately. However, both VOs were consulted on in a single process, which allowed interested parties to consider the proposals together and helped TfL to make good use of resources.
- 1.1.5 The consultation ran for ten weeks from 24 May to 2 August 2010. This report presents TfL's analysis of the issues raised in response to the consultation on the two Variation Orders.

- 1.1.6 The remainder of this chapter provides background information in order to aid understanding of the consultation and this Report to Mayor. More detailed information about the development of the proposal to remove the Western Extension is given in Chapter 3.
- 1.1.7 Chapter 2 of this report sets out the changes proposed in both VOs in more detail. Chapter 3 sets out the legislative framework and procedures followed and Chapter 4 describes the consultation process. Chapter 5 summarises the potential impacts of the proposed changes. Chapter 6 summarises the responses received to the consultation, sets out TfL's response to the issues raised and its recommendations to the Mayor. In Chapter 7, two minor modifications to VO2, recommended by TfL, are described. Chapter 8 contains TfL's conclusions and recommendations. The Mayor is advised, when considering TfL's summaries, responses and recommendations, to have regard to the consultation responses themselves, all of which have been copied to him.
- 1.1.8 After reviewing TfL's analysis of the responses to this consultation, the Mayor will decide whether or not to confirm the Variation Orders, with or without modifications. It should be noted that the Mayor will make a separate decision with regard to each Variation Order.
- 1.1.9 The materials published for the public consultation (for example, the Supplementary Information) used the terms 'VO1' and 'VO2' to refer to the two orders described in paragraph 1.1.4 above. For consistency, these terms are also used in this report. In the Mayoral Decision Form which requests the Mayor to consider the VOs and TfL's Report on them, Variation Order 1 is referred to as "the WEZ Removal VO" and Variation Order 2 as "the CCZ Changes VO".
- 1.1.10 If the Mayor confirms the VOs as made by TfL, the changes to the Scheme Order would be in place from 24 December 2010, which is the date that the WEZ would be removed (at the end of the charging day). However, given the usual charge-free period over the holidays, some of the changes would not actually take effect until the 4 January 2011. An information campaign would take place to ensure that drivers are aware of the changes to the way that the Scheme would operate.
- 1.1.11 In the context of this consultation, and subject to the Mayor's decision, TfL has been working to the operational timetable set out above and in the consultation materials. Should the Mayor decide to make further modifications to the Variation Orders, this could affect the date at which changes could be implemented. Under some circumstances, the Mayor's decision may entail further public consultation on a Variation Order.

1.2 The Responses to the Consultation

- 1.2.1 Members of the public, businesses and other organisations were invited to respond to the consultation via an online or paper questionnaire. Responses via email or letter were also accepted. In total, 13, 967 responses were received. Of these, 13, 657 were by questionnaire (2,194 paper questionnaires and 11, 463 online), and 305 in the form of letters and emails.
- 1.2.2 Analysis of these responses was carried out on behalf of TfL by Accent Market Research. Their report on this analysis is attached at Annex A.
- 1.2.3 TfL received 44 responses from stakeholders. A list of stakeholders responding to the consultation is provided in Appendix 1. TfL's analysis of these responses, and a summary of the responses from the public, businesses and other organisations, is set out in Chapter 6. Chapter 4 sets out the consultation process in more detail.

1.3 Information included in this Report to Mayor

Requests received under Freedom of Information (Fol) and Environmental Information Regulations

- 1.3.1 During the consultation, TfL and the GLA received a number of requests under Fol/EIR legislation. In response, TfL provided some additional information about the impacts of Variation Order 1.
- 1.3.2 A description of the information provided is given at the end of Chapter 5.
- 1.3.3 The matters raised in one of the requests were referred to in some detail in several responses received to the consultation, principally by the Campaign for Clean Air in London (CCAL), which made the request, Client Earth and Friends of the Earth. The matters relate to the consultation process itself and the impacts of the proposed removal of WEZ and so are considered in Theme A and Theme B of Chapter 6.
- 1.3.4 In order to address these points in detail, and to better place them in the context of this additional information, comments raised about this matter are considered separately within the themes. The relevant paragraphs have been titled 'Additional Matters Arising' so that they may be easily identified.
- 1.3.5 Copies of these requests and the information provided by TfL have been given to the Mayor, and are included in Appendix 3.

Consultations on the deferral of LEZ Phase 3 and the MAQS

- 1.3.6 Two other consultations took place around the same time as the consultation on the two Variation Orders to the Congestion Charging Scheme, both of which have a bearing on this consultation. The public consultation on a draft Mayor's Air Quality Strategy (MAQS) took place from 28 March to 13 August 2010, and was preceded by a consultation with the Assembly and Functional Bodies in 2009. In addition, there was a public and stakeholder consultation on a Variation Order to defer to 2012 the extension of the London Low Emission Zone (LEZ) to larger vans and minibuses, which ran from 17 May to 4 July 2010. The Mayor confirmed the deferral on 16 September 2010.
- 1.3.7 In responding to the Congestion Charging consultation, a number of respondents made reference to the draft MAQS and the proposed deferral of LEZ Phase 3. These comments are set out in Chapter 6 of this report, alongside all the other issues raised in the consultation on VO1 and VO2. In considering these, it is useful to bear in mind that neither the MAQS nor the decision on LEZ Phase 3 had been confirmed by the Mayor at the time these responses were submitted.
- 1.3.8 In addition, some respondents to the consultation on the draft MAQS, and to the LEZ Phase 3 deferral consultation made comments about the proposed removal of WEZ. These comments have been included in Chapter 6. In many cases the respondent had also responded to the present consultation making the same comment and these are not listed separately. Where there is an additional respondent, or a new point is introduced, these are listed separately within the subtheme. All such responses are considered in Theme C of Chapter 6.
- 1.3.9 It may also be useful to refer to TfL's Report to the Mayor on the LEZ Phase 3 consultation which is available at: www.tfl.gov.uk/lezlondon. Information about the Mayor's draft Air Quality Strategy can be found at www.london.gov.uk

2. Overview of proposals

2.1 Introduction

- 2.1.1 This chapter sets out the proposed changes to the central London Congestion Charging scheme as consulted upon in Variation Order 1 (VO1) and Variation Order 2 (VO2).
- 2.1.2 In preparing the Variation Orders, TfL has had regard to the Mayor's prepared and published London Plan, Biodiversity Action Plan, Municipal Waste Management Strategy, Ambient Noise Strategy, Culture Strategy, Energy Strategy, Economic Development Strategy, Food Strategy, Older People Strategy, Transport Strategy and Air Quality Strategy. TfL can confirm that the Order is consistent with these documents.

2.2 The key features of the proposed scheme as consulted upon

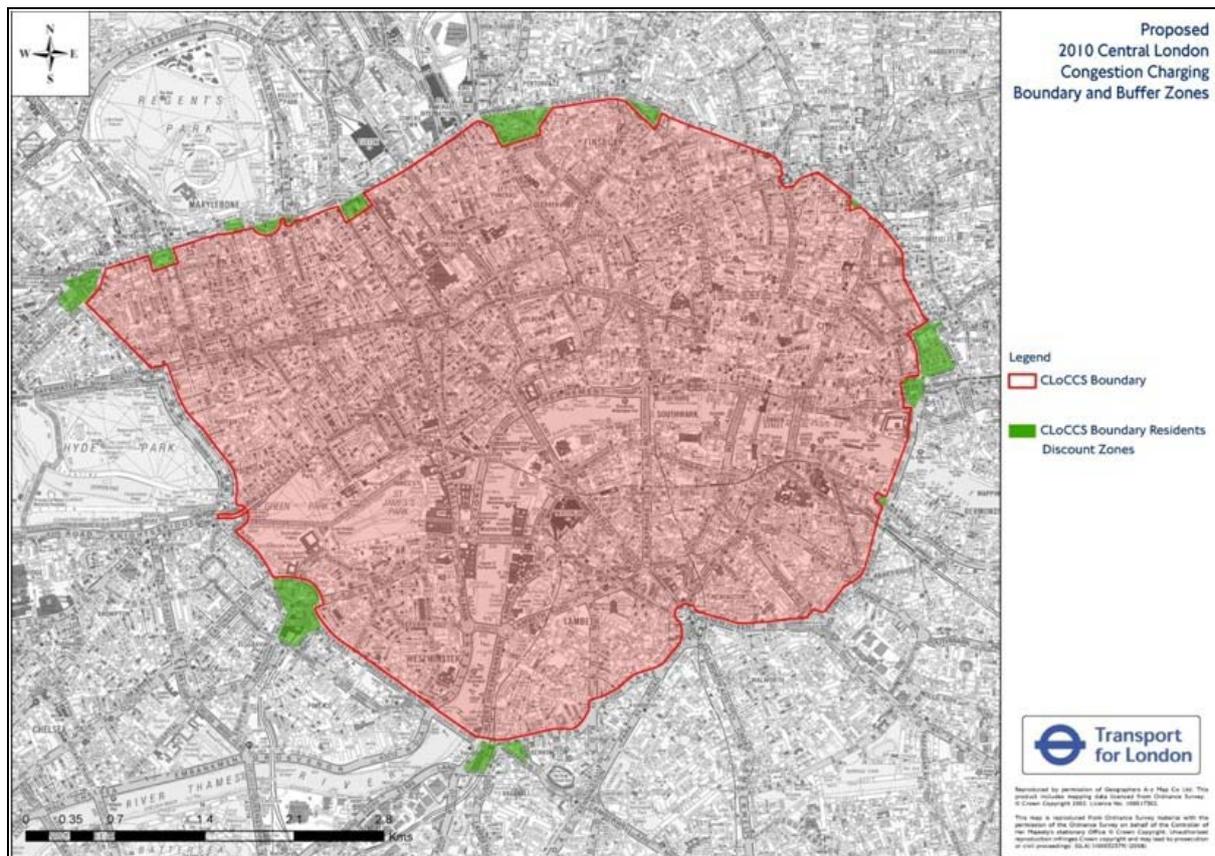
Removal of the Western Extension (VO1)

- 2.2.1 Chapter 3 of this report provides information about the introduction of the Western Extension in the context of the overall Congestion Charging Scheme; however it may be useful to briefly describe how the scheme currently operates in order to better understand what would happen if the Mayor confirms VO1.
- 2.2.2 The Western Extension was added to the original central London Congestion Charging zone in February 2007. The scheme operates as a single zone, with the same charging hours, daily charge and discounts and exemptions available. A charge-free route runs from north-south between the original central zone and the WEZ. Residents in the extended zone are eligible to apply for a Residents' 90% Discount, which, as this scheme operates as a single zone, applies in both the original zone and WEZ, regardless of where the resident lives. There are also a number of additional Residents' Discount zones outside the boundary of the Charging Zone: some of which relate to the original charging zone and some of which relate to the Western Extension. While there is no charge to drive in these areas, residents may apply for the 90% residents' discount.
- 2.2.3 If the Mayor confirms the proposal set out in VO1, the Western Extension of the central London Congestion Charging zone would be removed at the end of the charging day on 24 December 2010 so that the area no longer formed part of the Congestion Charging zone. After this date, there would be no

charge to drive in the Western Extension area. The central London Congestion Charge would return substantially to its pre-extension boundaries. The remaining central London Congestion Charge zone would continue to operate as it does at present, subject to the other proposed changes consulted upon in Variation Order 2, and set out in this report.

- 2.2.4 Once the zone was removed, the Residents' Discount would apply only to those eligible before the introduction of the Western Extension, i.e. residents of the original central London Congestion Charging zone. Residents of the Western Extension area would cease to be eligible for the Residents' Discount and would need to pay the full charge to drive within the remaining zone after 24 December 2010. The outstanding balance for any discounted charge payments would be refunded automatically. The Congestion Charge is not payable from Christmas Day to New Year's Day inclusive, so the first charging day after the proposed removal of the Western Extension area would be Tuesday 4 January 2011.
- 2.2.5 With regard to the additional Residents' Discount zones, areas lying within the outer arm of the diversionary route of the remaining charging zone would continue to receive the 90% Residents' Discount. The result would be that areas which were brought into the Residents' Discount by the VO that put WEZ in place, but which relate to the original zone, would retain their eligibility, while those which were eligible because they are within the discount areas associated with the WEZ would lose their eligibility. The map in Figure 1 below shows the effect of the proposal on the Residents' Discount zone.
- 2.2.6 With regard to non-residents who currently drive in the zone, anyone who no longer required a monthly or annual charge which they had purchased because they drive in the Western Extension area could apply to have the outstanding balance on these advance payments refunded. Where a weekly charge had been bought in advance, the customer could apply to have this payment refunded provided no part of the week had already elapsed.

Figure 1: Proposed Central London Congestion Charging zone and residents' discount zone map



Other changes to the remaining Congestion Charging Scheme (VO2)

Introduction of automated payment

- 2.2.7 At present, drivers have to ensure they have paid the charge either before or on the day they drive within the zone or on the next charging day. Under the proposed system, drivers would be able to register for an automated payment system, CC Auto Pay, using either a credit or debit card (excluding Maestro and Solo). The system will record the number of days a vehicle travels within the zone each month, and bill the account holder accordingly.
- 2.2.8 Drivers registered for CC Auto Pay would pay a £9 daily charge. It is proposed that drivers would also be required to make an annual £10 payment to register and maintain a vehicle on their CC Auto Pay account. Up to five vehicles could be registered on any one account.
- 2.2.9 The current discount for purchasing the charge monthly (£136) or annually (£1,696) in advance would be removed as this new payment option would mean that people are charged only for the days that they drive in the zone. Those still wishing to purchase a monthly or annual charge would be charged

£200 and £2,520 respectively, based on the standard £10 daily charge. It is proposed that this discount be removed, because the introduction of CC Auto Pay means that people are only charged for the days they drive in the zone.

2.2.10 Currently operators of fleets with ten or more vehicles registered for Fleet Auto Pay receive a £1 discount on the daily charge. This was introduced to offer a comparable discount to that available for drivers who chose to pay the charge monthly or annually. It is proposed that those registered for Fleet Auto Pay would pay the same charge per vehicle as those using CC Auto Pay (£9).

2.2.11 In addition, the minimum number of vehicles required for Fleet Autopay would be reduced to six (Fleet scheme currently requires a minimum of ten vehicles)

Increase in the level of the charge

2.2.12 The Congestion Charge is currently £8 if paid in advance or on the day or £10 if paid the charging day after driving within the zone. This would be raised to £10 if paid in advance or on the day of travel and £12 if paid the charging day after driving within the zone. The charge would be increased to £9 per day for drivers who register for the proposed CC Auto Pay.

2.2.13 The current charge for fleet operators registered with Fleet Auto Pay is £7 per vehicle. This would increase to £9 per vehicle to bring payment in line with all other Auto Pay users. The minimum number of vehicles required to register for Fleet Auto Pay would decrease from ten to six, as described above.

Withdrawal of the Alternative Fuel Discount

2.2.14 The current Alternative Fuel Discount (AFD) is a 100% discount on the Congestion Charge for vehicles powered by an alternative fuel, bio fuel or dual fuel and not solely by diesel or petrol. Since the introduction of the AFD, the benefits of alternative fuels have in some cases been outpaced by technological development in conventional vehicles, meaning some vehicles that are eligible for the AFD perform less well in terms of level of CO₂ emissions than more recent vehicle models which do not qualify for AFD.

2.2.15 It is proposed that the AFD is closed to new registrations on 24 December 2010. Owners of vehicles already registered with TfL for the AFD would continue to receive the 100% discount for the vehicle for two years until 24 December 2012 and would not need to take any action to ensure this. If a vehicle owner sells the vehicle during this period, the new owner would not be eligible for the AFD. After 24 December 2012, owners of vehicles which were registered for the AFD would have to pay the full daily charge unless their

vehicle also meets the criteria for the proposed new Greener Vehicle Discount as described below.

Introduction of a new Greener Vehicle Discount

- 2.2.16 A new Greener Vehicle Discount (GVD) to encourage the switch to cleaner and more CO₂ efficient vehicles would be introduced. The GVD would provide a 100% discount on the Congestion Charge for cars that both emit 100g/km of CO₂ or less and meet the Euro 5 standard for air quality.
- 2.2.17 The Euro 5 standard is a European standard that sets levels of air quality emissions for new vehicles sold in Europe with which all vehicles must comply when manufactured. Any car registered with the Driver and Vehicle Licensing Agency (DVLA) on or after 1 January 2011 would be deemed to meet the Euro 5 standard, however there are some cars registered before this date that meet the Euro 5 standard.
- 2.2.18 As is the case with the current AFD and all other discounts, an annual £10 registration charge would be required for the new GVD.
- 2.2.19 Should the GVD be implemented, TfL will monitor the impacts of it on the Congestion Charging scheme. The discount would be reviewed by 2013, and may consider the qualifying criteria or level of discount, to ensure that the congestion and environmental benefits of the scheme were being maintained.

Change in vehicles eligible for the electric vehicle discount

- 2.2.20 The eligibility criteria for the current 100% discount for fully electrically propelled vehicles would be widened to include plug-in hybrid electric vehicles (PHEVs). PHEVs run on electric power and another fuel, usually petrol. PHEVs differ from standard hybrid vehicles as they can be plugged in to mains supply to recharge the battery. PHEVs form a key part of the Mayor's Electric Vehicle Delivery Plan. Ensuring that these vehicles receive a 100% discount will help to support the aims set out in the plan.
- 2.2.21 TfL keeps Congestion Charge discounts and exemptions under review and the PHEV discount would be included in this.

Alteration to the registration process for vehicles with 9 or more seats

- 2.2.22 Vehicles with 9 or more seats can currently register for the 9+ discount at no cost. It is proposed that a £10 registration charge and a £10 annual charge

would be introduced for these vehicles, bringing the registration process for this discount into line with almost all other vehicle discounts.

Amendment to the current exemption for Ministry of Defence vehicles

2.2.23 Vehicles that are being used for naval, military or air force purposes are currently exempt from the Congestion Charge. New legislation has recently been passed which requires the exemption to be extended to any vehicles belonging to the Ministry of Defence. It is therefore proposed that all vehicles owned by the Ministry of Defence would be exempt from the Congestion Charge.

2.3 Monitoring

2.3.1 If the proposals are implemented as consulted on, TfL would monitor the immediate impacts of the removal of the Western Extension on key indicators of traffic volume and congestion. If there are no significant adverse effects, it is expected that specialist monitoring of the area which used to be WEZ would cease around six months after withdrawal.

2.3.2 TfL has an ongoing monitoring programme for the road network, and which would cover the former WEZ area, which includes traffic and congestion monitoring, which will continue regardless of these proposals.

3. Legislative Framework and Consultation Procedures

3.1 Introduction

- 3.1.1 This chapter summarises the legislative and procedural framework for the making of, and consultation on, the two Variation Orders (VOs) which were made and published for consultation on 24 May 2010 by TfL. It describes the powers and responsibilities of both the Mayor and TfL. It also details the various impact assessments that have been undertaken to support the consultation process.
- 3.1.2 Although there was a single consultation (which ran from 24 May to 2 August 2010), TfL prepared two VOs in order to reflect the scope of the proposals and to enable greater separation of the legal processes for consulting on and potential implementation of the various proposed changes.
- 3.1.3 Variation Order 1 (VO1¹) makes provision for the removal of the Western Extension of the central London Congestion Charging Scheme. Variation Order 2 (VO2²) sets out a number of changes to the Scheme, including an increase to the daily charge, the introduction of Auto Pay, changes to the Alternative Fuel Discount and electric vehicles discount and the introduction of the Greener Vehicle Discount. These proposed changes are described in more detail in Chapter 2 of this report.

3.2 The legislative background

- 3.2.1 The general duties, policies and functions of the GLA, the Mayor and TfL are set out in the Greater London Authority Act 1999 (the GLA Act), as amended by sections 199 and Schedule 13 of the Transport Act 2000 in particular as regards road user charging schemes. Principal amongst these that are relevant to issues raised by the two Variation Orders are the requirements for the Mayor:
- to develop and implement policies and proposals for the promotion and encouragement of safe, integrated, efficient and economic transport facilities and services to, from and within Greater London and to prepare and to publish a Strategy (the Mayor's Transport Strategy) containing them (sections 141 and 142 of the GLA Act); and

¹ This is called the "WEZ Removal VO" in the Mayoral Decision Form.

² This is called the "CCZ Changes VO" in the Mayoral Decision Form.

- to develop proposals and policies for implementing in the 'National Air Quality Strategy' policies in Greater London and for the achievement of the national air quality objectives prescribed in regulations the Air Quality (England) regulations 2000 (made under the Environment Act 1995) in Greater London and to prepare and publish a Strategy (the Mayor's Air Quality Strategy) setting them out (section 362 of the GLA Act); and
- to have regard to the need to ensure that each statutory strategy that he prepares under section 42 of the GLA Act (which includes the MTS and the MAQS) is consistent with each of his other statutory strategies.

3.2.2 The GLA Act gives TfL the power to create road user charging schemes in Greater London. The Act stipulates that this charging scheme must be contained in an order. The Congestion Charging Scheme Order effectively sets out the rules which apply to the road user charging scheme e.g. the central London Congestion Charging Scheme is governed by the the Greater London (Central Zone) Congestion Charging Order 2004 ("the Congestion Charging Scheme Order"). Details of the required contents of a scheme order are contained in Schedule 23 of the GLA Act which stipulates that a charging scheme must:

- designate the area to which it applies;
- specify the classes of motor vehicles in respect of which a charge is imposed;
- designate those roads in the charging area in respect of which a charge is imposed; and
- specify the charges imposed.

Conformity with MTS and other Mayoral strategies

3.2.3 A charging scheme (or a variation to a charging scheme) can only be made if it directly or indirectly facilitates policies or proposals in the MTS and is in conformity with the MTS (under paragraphs 3 and 5 of Schedule 23). However the requirements of Schedule 23, paragraphs 3 and 5 do not apply to other Mayoral strategies such as the MAQS. Therefore a Charging Scheme Order, or Variation Order altering it, is not required to be in conformity with the MAQS, albeit the MAQS would be a relevant consideration to the Mayor's confirmation of such an order.

3.2.4 As described in the section below ('The Mayor's Transport Strategy and Variation Order 1'), the new MTS, as confirmed by the Mayor in May 2010, contains a proposal to remove the Western Extension, subject to the completion of further statutory processes including a public and stakeholder consultation on a Variation Order.

3.2.5 Paragraph 38 of Schedule 23 of the Act gives TfL a power to revoke or vary a charging scheme. The power is exercisable in the same manner and subject to the same limitations and conditions as the making of a Scheme Order. Various amendments to the Congestion Charging Scheme Order have been made since it was first confirmed by the then Mayor in February 2002 Scheme Order. Changes are made by way of Variation Orders. Under Schedule 23, any Variation Order must be made by TfL and may be confirmed with or without modifications by the Mayor.

Climate Change

3.2.6 The Mayor has duties under section 361A of the GLA Act to address climate change, so far as relating to Greater London. In the case of the Mayor, this duty consists of each of the following:

- to take action with a view to the mitigation of, or adaptation to, climate change;
- in exercising any of his functions under this Act or any other Act (whenever passed), to take into account any policies announced by Her Majesty's government with respect to climate change or the consequences of climate change; and
- to have regard to any guidance, and comply with any directions, issued to the Authority by the Secretary of State with respect to the means by which, or manner in which, the Mayor is to perform the duties imposed on him as above.

3.3 The Western Extension and Variation Order 1

The introduction of the Western Extension

3.3.1 Following public and stakeholder consultation, the Congestion Charging Scheme Order to implement the Central London Congestion Charging Zone was confirmed by the then Mayor of London, Ken Livingstone in February 2002. The Congestion Charging Scheme Order was in line with the proposal set out in the Mayor's Transport Strategy published in 2001.

3.3.2 The central London congestion charging scheme began operation in February 2003. The daily charge for driving within the zone was set at £5, with a system of discounts and exemptions, including a 90% Residents' Discount. Operating hours of the scheme were 7am to 6.30pm, Monday to Friday, with no charge at weekends and public holidays.

3.3.3 As the benefits of the scheme became apparent, the Mayor asked TfL to explore the possibilities for extending the scheme to other parts of central London suffering from all-day traffic congestion. Following TfL's examination

of possible extensions to the north, south, east and west of the central zone, an extension to the west of the existing scheme, covering most of the Royal Borough of Kensington & Chelsea and the City of Westminster, was proposed.

- 3.3.4 In October 2003, the then Mayor delegated to TfL the responsibility for preparing a formal Revision to his Transport Strategy, to allow for a possible western extension to the congestion charging zone. Following a public and stakeholder consultation, this Revision was published, with modifications, in August 2004.
- 3.3.5 TfL then undertook further analysis with regard to the development of a possible western extension and undertook informal engagement in order to prepare a Variation Order on the proposed extension. A public and stakeholder consultation on this Variation Order took place between May and July 2005, and the Variation Order for the Western Extension was confirmed, with modifications, by the then Mayor in December 2005. A full description of the consultation process and the Variation Order itself can be found in TfL's Report to the Mayor of September 2005.
- 3.3.6 The Western Extension (WEZ) commenced operation in February 2007. The extended scheme operates as one zone, with the same scheme hours and charge level. When the WEZ was implemented, the scheme's operating hours were changed so that the charging day ended at 6pm rather than 6.30pm. Residents of the WEZ, and in specified additional Residents' Discount zones are able to apply for a 90% Residents' Discount.
- 3.3.7 In order to maintain the scheme's effectiveness, the daily charge for driving within the zone rose to £8 in July 2005, and this remained the charge when the scheme was extended westwards. This charge increase had been preceded by a public and stakeholder consultation on a Variation Order (VO no.5 2004) between December 2004 and February 2005. In June 2006, the 'Pay Next Day' facility was introduced, meaning that drivers could pay up to midnight on the next charging day (£10 charge); which also applied to the extended scheme once the WEZ was introduced.

The Mayor's Transport Strategy and Variation Order 1

- 3.3.8 When the new Mayor of London, Boris Johnson, was elected in May 2008, one of his manifesto commitments was to consult on the future of the Western Extension. In autumn 2008, TfL carried out an informal, non-statutory consultation on this matter on behalf of the Mayor. The majority of the public and businesses who responded to the consultation supported the removal of

the Western Extension (69 per cent overall; with 67 per cent of members of the public and 86 per cent of business respondents selecting this option).

- 3.3.9 Following this consultation the Mayor announced that he was minded to remove the WEZ and would begin the statutory processes needed in order to do this. The Mayor made a further announcement on this matter, and also set out his intention to make a number of changes to the Congestion Charging Scheme in a press release dated 15 October 2009. TfL's annual update to its ten-year Business Plan, published in October 2009, assumed the removal of the Western Extension, subject to the outcome of two further statutory consultations on this proposal.
- 3.3.10 The first of these consultations relates to the need for any proposed Variation Order amending the Congestion Charging Scheme Order to be in conformity with the Mayor's Transport Strategy (MTS). The version of the MTS which applied at the time of the informal consultation took place (i.e. as approved in 2001 and revised in 2004) provided that road user charging would be extended to what is now the area of the Western Extension. The 2001 MTS was due for revision and in February 2007 the then Mayor delegated to TfL responsibility for preparing a new MTS. This was aligned with the development of the new replacement London Plan, and a new Economic Development Strategy; the three strategies form an overarching 'Strategy for London', although each was subject to separate legal processes.
- 3.3.11 In accordance with statutory requirements, the development of the new revision of the MTS included two phases of consultation: firstly with the London Assembly and Functional Bodies, which was conducted between 7 May and 2 July 2009; and then with the public and stakeholders which ran from 12 October 2009 to 12 January 2010.
- 3.3.12 For the first phase of consultation, TfL produced a 'Statement of Intent' which included the proposal to remove the Western Extension. As required by section 42A of the GLA Act, the Mayor provided a report to the Chair of the Assembly as to which of the Assembly's comments would be implemented in his final strategy. TfL prepared a Report to the Mayor on responses received from the Assembly, the Functional Bodies and other stakeholders.
- 3.3.13 This phase was followed by a statutory consultation with the public and stakeholders on the proposed text of a new strategy ("the Public Draft MTS"), which ran from 12 October 2009 to 12 January 2010. This included a proposal (Proposal 127) to remove the Western Extension of the congestion charging zone. The public questionnaire prepared by TfL for the consultation included a question on this proposal, which invited respondents to indicate how far they agreed with it via a closed question as well as providing the opportunity to comment on this matter in an open text box.

3.3.14 The Mayor published his revised Transport Strategy, with modifications as recommended by TfL, on 10 May 2010. MTS Proposal 128 states that: *“The mayor, through TfL, subject to consultation, will remove the Western Extension of the central London Congestion Charging zone after putting in place such measures in mitigation of negative impacts as are both desirable and practicable.”* TfL’s Reports to the Mayor on both stages of the MTS consultation, and the Mayor’s Statement to the Chair of the Assembly are available on TfL’s website using the following link:
<http://www.tfl.gov.uk/corporate/11610.aspx>

3.3.15 TfL made the Greater London (Central Zone) Congestion Charging (Variation and Transitional Provisions) Order 2010 on 20 May 2010. This variation order contains the boundary change needed to effect the removal of the Western Extension. This is referred to as VO1 to distinguish it from the order made at the same time concerning changes to the Congestion Charging Scheme. The Variation Order is attached to this report at Annex A. It is for the Mayor to decide whether or not to confirm the Variation Order as made by TfL, with or without modifications

3.3.16 As well as containing provisions for the removal of the Western Extension, VO 1 set out how residents of the WEZ could obtain refunds for payments made under the Residents’ Discount scheme without having to follow the current refund process, and provision to remove the Royal Borough of Kensington & Chelsea and the London Borough of Hammersmith & Fulham from the list of boroughs whose vehicles benefit from non-chargeable status.

3.3.17 TfL consulted with the public and stakeholders on this Variation Order (alongside VO 2) for a ten week period from 24 May to 2 August 2010

3.3.18 Subject to Mayoral confirmation of the VO, with or without modifications, it is proposed that these changes would come into effect on 24 December 2010. However, if the Mayor decides to make modifications, these may affect the date of implementation.

3.4 Variation Order 2 – changes to the Congestion Charging scheme

3.4.1 TfL made the Greater London (Central Zone) Congestion Charging (Variation and Transitional Provisions) (No.2) Order 2010 on 20 May 2010, the same date as the order to remove the Western Extension. This VO, which sets out a number of changes to the Congestion Charging scheme, will be referred to as VO2. The Variation Order is attached to this report at Annex B.

3.4.2 Unlike the proposed removal of the Western Extension set out in VO1, the changes to the Scheme set out in VO 2 did not require an amendment to the

previous MTS (since they were in conformity with the Strategy that applied from 2001 until the adoption of a new Strategy in May 2010). Since it was introduced in February 2003, the Congestion Charging Scheme has been subject to various changes, and, in principle, a Variation Order to effect such changes could stand alone.

- 3.4.3 However, in order to facilitate this and other future changes more generally, the MTS which was confirmed in May 2010 includes Proposal 129: *“the Mayor, through TfL, will operate and monitor Congestion Charging zone. The Mayor will keep the scheme under review, making variations to ensure the continued effectiveness of the policy reflects best practice, improves the operation of the scheme, or helps it to deliver the desired outcomes of the MTS.”*
- 3.4.4 The changes included in VO2 are described in detail in Chapter 2 of this report. They include an increase to the charge level, the introduction of Auto Pay, the closure of the Alternative Fuel Discount (AFD) and the introduction of the Greener Vehicle Discount (GVD). In addition it is proposed that the criteria for the existing electric vehicle discount is widened to include plug-in hybrid electric vehicles.
- 3.4.5 Subject to Mayoral confirmation of the VO, the change to the Alternative Fuel Discount would come into effect on 24 December 2010. All the other changes in VO2 would come into effect on 4 January 2011
- 3.4.6 TfL has recommended two minor modifications to VO2, which are described in Chapter 7. If the Mayor were to decide to make further modifications, these may affect the date of implementation.

3.5 The Consultation Process

- 3.5.1 TfL consulted on the two Variation Orders described above in a single, integrated process. This was to enable respondents to consider the proposed changes together and to understand the potential implications of these proposals in total. In addition, this approach helped TfL to make the best use of resources and reduced associated costs of consultation, for example by producing one leaflet and questionnaire for the proposals rather than two.
- 3.5.2 That said, the information on the two Variation Orders presented in the consultation materials was clearly identified as pertaining to either or both of the Variation Orders. The Supplementary Information contained a separate “impacts” section for each of the VOs. A stand-alone Integrated Impact Assessment was prepared for each of the Variation Orders. Further details are provided below.

- 3.5.3 Although there are two Variation Orders, In this report, TfL has set out the range of responses to the consultation so that it is clear which VO the comments pertain to, and to which aspect of that VO the comments are about.
- 3.5.4 As well as publishing two Variation Orders, each had its own Legal Notice in the London Gazette and Schedule of Variations. For VO2, a marked-up version of the Congestion Charging Scheme Order was published. This was because the proposed changes would have an effect throughout the existing scheme order and the mark-up allows these changes to be considered in the context of the overall scheme.
- 3.5.5 Both Variation Orders are classed as “major variations” under the Mayor’s Guidance to TfL on road user charging schemes (made pursuant to Schedule 23 of the GLA Act; “the Mayor’s Guidance”) and as such require a public and stakeholder consultation period of 10 weeks. In accordance with this, the public and stakeholder consultation ran for ten weeks from 24 May 2010 to 2 August 2010. TfL followed all other relevant procedures in the Mayor’s guidance when undertaking this consultation.
- 3.5.6 Detailed information about the consultation process is provided in Chapter 4 of this report.

3.6 Impact Assessments

- 3.6.1 The Mayor is required by equal opportunities legislation to ensure that in exercising his functions to have regard to the need to promote equality of opportunity for all persons, irrespective of their race, sex, disability, age, sexual orientation or religion, to eliminate unlawful discrimination and to promote good relations between persons of different racial groups, religious beliefs and sexual orientation.
- 3.6.2 Under the GLA Act, when exercising his functions with regard to the confirmation of the Variation Orders the Mayor, TfL and any bodies acting for or on behalf of them, must have regard to the need to promote equality of opportunity for all persons irrespective of their race, sex, disability, age, sexual orientation or religion; to eliminate unlawful discrimination; and to promote good relations between persons of different racial groups, religious beliefs and sexual orientation. In addition, the Mayor and TfL have general “public body” duties under equal opportunities legislation to exercise their functions with due regard to the need to eliminate unlawful race, sex and disability discrimination and unlawful harassment of disabled persons and sexual harassment, and to promote equality of opportunity for those groups. Further, the Mayor is required to have due regard to the need to take steps to take account of disabled persons’ disabilities even where that involves more favourable treatment, to promote positive attitudes towards disabled persons

and to encourage participation by disabled persons in public life. (These duties are due to be superseded by the duty to have regard to protected characteristics under the Equalities Act 2010 and the public sector duties that will come into force under it.)

- 3.6.3 The MTS proposals contained in the two VOs were originally assessed as part of the Integrated Impact Assessment (IIA) undertaken for the public and stakeholder consultation on the Public Draft MTS. The MTS is considered a 'plan or programme' under Article 2(a) of Directive 2001/42/EC ("the SEA Directive") and Regulation 2 of the Environmental Assessment of Plans and Programmes Regulations 2004 ("the SEA Regulations"). An assessment of the likely strategic environmental impacts of the policies and proposals contained in the MTS was carried out and combined with other impacts in an "integrated impacts assessment". This IIA reflected the requirement for, and incorporated components of, an environmental report under the Strategic Environmental Assessment (SEA) regulations
- 3.6.4 In addition, the MTS IIA report contained an appendix (Appendix E) that specifically analysed the air quality and other impacts of the proposal to remove the Western Extension (Proposal 128). The proposal to remove the WEZ was assessed using the same approach as in the IIA assessment. This comprised a strategic level assessment of a London-wide transport strategy following SEA Guidance. It also meets the requirements of a strategic level Equalities Impact Assessment (EqIA), Health Impact Assessment (HIA) and economic assessment, whilst also being informed by the Habitats Regulations Assessment (HRA) Screening.
- 3.6.5 In preparing for the subsequent consultation on VO1 and VO2, TfL commissioned the consultants Scott Wilson to produce an Integrated Impact Assessment (IIA) for each variation order. Although the making and confirmation of a variation order to a road user charging scheme is not a matter that falls within the SEA Regulations it was considered prudent to do so for each VO. The resulting IIA report conformed to the requirements of an environmental report under those regulations in order to identify any likely significant environmental impacts resulting from their implementation.
- 3.6.6 The IIA Report for the proposed removal of the Western Extension under Variation Order 1 builds on the earlier integrated impact assessment undertaken for the Public Draft MTS described above. This IIA was undertaken in the same manner both to ensure its quality and to achieve consistency with the earlier report. The IIA Report for VO 1 contains an assessment of impacts for traffic and emissions, on the economy, health, safety and cultural heritage and includes an Equalities Impact Assessment. It also considers the effects on climate change mitigation and adaptation.

3.6.7 The IIA for VO2 uses the approach applied in the IIA of the MTS. Again, although there is no requirement under the SEA Regulations for such a report it was done to ensure quality and for consistency with the IIA for Variation Order 1.

3.6.8 These assessments have been provided to the Mayor. A summary of the impacts of the proposed changes is included at Chapter 5 of this Report.

3.7 Mayoral options

3.7.1 On receiving this report, the Mayor has a number of options:

- to confirm either or both of the Orders (with or without modifications);
- to hold a further consultation; or
- not to confirm the orders.

3.7.2 In addition, paragraph 4 of Schedule 23 of the Greater London Authority Act 1999 gives the Mayor the power to hold a public inquiry. This option is discussed in detail in Chapter 8.

4. The consultation process

4.1 Introduction

- 4.1.1 This chapter provides details of the consultation carried out by TfL during the public and stakeholder consultation on the Variation Orders.
- 4.1.1 The public and stakeholder consultation ran for 10 weeks from 24 May 2010 to 2 August 2010 inclusive.
- 4.1.2 TfL used a variety of communication channels to raise awareness of, and participation in the consultation. A notice was published in the London Gazette on 24 May 2010. A public information leaflet publicising the consultation was available in a range of languages and the consultation was advertised through newspapers and local press publications.
- 4.1.3 The consultation was publicised on TfL's website and the consultation materials were also available to download. In addition, a pack containing the leaflet and all the consultation materials was available for public inspection at TfL's Windsor House offices for the duration of the consultation. A public helpline with a local rate number was established by TfL and operated by Granby Marketing on TfL's behalf. This helpline provided information to callers about the consultation proposals and sent out leaflets throughout the duration of the consultation.
- 4.1.4 The consultation process was supplemented by a process of engagement with stakeholders. The purpose of this engagement was to ensure stakeholders clearly understood the proposals, to encourage responses to the consultation and to provide an opportunity for stakeholders to raise issues and concerns. The meetings attended by TfL are listed in Section 4.4 below.

4.2 Consultation materials

- 4.2.1 Materials prepared to support the consultation included an information leaflet and questionnaire, consultation pages on the Congestion Charging website (cclondon.com), an impact assessment and supplementary information.

Website

- 4.2.2 A specific area of the TfL website (www.tfl.gov.uk) was allocated to the consultation on the proposals, and could also be accessed via the Congestion Charging website. Links to the consultation were placed on the TfL homepage, the TfL Road Users page and the Congestion Charging home page for the duration of the consultation. The following information and documents were available to read and download:

- The information leaflet and attached questionnaire
- Scheme Description and Supplementary Information
- Impact Assessment of VO1 and Impact Assessment of VO2
- The Variation Orders
- Explanatory Note for the Variation Orders
- Schedule of Variations

4.2.3 The public were encouraged to read about the proposals and respond to the consultation online. People could either submit their views directly via the website or send an email to cchargeconsultation@tfl.gov.uk.

4.2.4 The consultation part of the TfL website had 55,882 unique visitors throughout the course of the consultation. Each visitor can view the pages more than once, and the pages were viewed a total of 86,997 times.

Information leaflet and questionnaire

4.2.5 TfL produced a 20 page information leaflet entitled ‘We’d like to hear your views on the proposed changes to the Congestion Charge’ (“the information leaflet”), which included a questionnaire inviting businesses and the public to comment on the proposals (included in Annex A).

4.2.6 The information leaflet explained that the consultation concerned the details of a number of proposals to change elements of the Congestion Charging scheme. The information leaflet set out:

- The purpose of the leaflet
 - The background to and impacts of removal of the Western Extension
 - A map of the Congestion Charging Zone showing the boundary if the Western Extension were to be removed
 - Details of the proposal to increase the charge level
 - Details and benefits of the introduction of CC Auto Pay
 - Details of the proposal to remove the Alternative Fuel Discount
 - Details of the proposal to introduce a Greener Vehicle Discount
 - Details of the proposal to extend the electric vehicle discount to include plug-in hybrid electric vehicles
 - Details of the proposal to alter the process for the registration of the discount for vehicles with nine or more seats
 - Details of the proposal to alter the exemption for Ministry of Defence vehicles
 - Details of the next steps following the commencement of the consultation
- Details of where further information could be obtained.

4.2.7 The information leaflet also referred to the TfL website, where the consultation materials distributed to stakeholders and other supporting documents were available to download. Organisations and the public were encouraged to take part in the consultation by completing a questionnaire that formed part of the leaflet. The questionnaire could be returned to TfL via the pre-paid address

given on the leaflet, or completed and submitted online through the TfL website.

4.2.8 The questionnaire provided three free text boxes, with people asked to provide their views on the proposals. The boxes stated:

- Please use this place to provide your views on the proposed removal of the Western Extension (Question 6)
- Please use this space to provide your views on the other proposed Congestion Charge changes (Question 7)

4.2.9 Please use this space to provide any other comments you may have (Question 8)

The questionnaire also included questions asking the respondent for personal or organisational demographic data (Questions 1-5).

4.2.10 The information leaflet was available from the TfL website as a pdf download. A supply of the public information leaflets was delivered at the start of the consultation to borough libraries and more were made available as requested. These libraries are set out in Table 1 below.

Table 1: libraries where the public information leaflet was available

Barking and Dagenham Central Library
Barnet Central Library
Bexley Central Library
Brent Central Library
Bromley Central Library
Camden Central Library
City of London Central Library
Croydon Central Library
Ealing Central Library
Enfield Central Library
Fulham Central Library
Greenwich Central Library
Hackney Central Library
Haringey Central Library
Harrow Central Library
Havering Central Library
Hillingdon Central Library
Hounslow Central Library
Islington Central Library
Kensington Central Library
Kingston Upon Thames Central Library
Lambeth Central Library
Lewisham Central Library
Merton Central Library
Newham Central Library
Redbridge Central Library

Richmond Upon Thames Central Library
Southwark Central Library
Sutton Central Library
Tower Hamlets Central Library
Waltham Forest Central Library
Wandsworth Central Library
Westminster Reference Library

4.2.11 Any individual or organisation requiring a copy could also ring the helpline operated by Granby on TfL's behalf to request a copy of the information leaflet and attached questionnaire. The helpline operated for the duration of the consultation between the hours of 08:00 and 21:00. An answering machine service was in operation outside these hours and at weekends.

4.2.12 The helpline received 231 calls requesting leaflets, with 64 callers requesting over 50 leaflets each.

4.2.13 Other language versions and large print and audio CD of the leaflet were available by ringing the call centre.

4.2.14 A telephone number, 0844 811 9785, was provided in the information leaflet, and also advertised on TfL's website and in TfL's print media.

4.2.15 Individuals and organisations were able to obtain further information on the proposals by calling the advertised telephone number. The call centre escalated more complicated enquiries to TfL for response.

4.2.16 In addition to providing the questionnaire online, TfL provided a pdf version of the information leaflet and questionnaire. Early on in the consultation, some respondents reported to TfL that they were not able to post a printed-off version of the online questionnaire, because no address had been provided in the pdf on the website. This was rectified in the first week of consultation.

Supplementary information

4.2.17 A Supplementary Information document was published on the Congestion Charging consultation page. The document set out:

- The background to Variation Order 1 (VO1)
- The concern over the impacts of Congestion Charging in the Western Extension (VO1)
- Impacts of removing the Western Extension (VO1)
- Mitigation and complementary measures (VO1)
- Scope of decommissioning and operational issues (VO1)
- Description and operation of Variation Order 2 proposals
- Impacts of the VO2 proposals
- Timetable and next steps

Integrated impact assessments

- 4.2.18 TfL engaged consultants Scott Wilson to prepare integrated impact assessments (IIAs) of both VO1 and VO2. These IIAs outlined the assessment undertaken and the potential impacts of both VO1 and VO2.
- 4.2.19 The purpose of an integrated impact assessment is to bring together findings of a variety of different impact assessments, including Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA), Equalities Impact Assessment (EIA) and Habitats Regulations Assessment (HRA) as appropriate. More information about the IIAs is provided in Section 3.6 earlier in this report.
- 4.2.20 During the consultation, TfL received a request under the Freedom of Information regulations which noted that the IIA of VO1 did not contain all the relevant footnotes. A corrected copy was put on the website and also provided to the applicant.
- 4.2.21 A summary of both IIAs can be found in Chapter 5.

4.3 Stakeholders consulted

- 4.3.1 TfL emailed 444 stakeholders notifying them of the commencement of the consultation. The email contained, an outline of the proposals and how to respond to the consultation. It stated that responses should be sent to a dedicated email address (cchargeconsultation@tfl.gov.uk) or in writing to TfL at Windsor House (Congestion Charging Consultation, Transport for London, 10th Floor, Windsor House, 42-50 Victoria Street, London, SW1H 0TL). The email also contained a link to the documents listed in section 4.2 above.
- 4.3.2 A number of stakeholder organisations were offered a meeting with TfL to discuss the consultation. These stakeholders were chosen because of their importance to the governance of the provisions contained in the Variation Orders. It was considered that these particular groups should be offered the opportunity to be further briefed about the proposals.

4.4 Meetings attended by TfL

- 4.4.1 TfL met with five key stakeholders to discuss the proposals specifically. These were:
- Royal Borough of Kensington & Chelsea
 - City of Westminster
 - The Federation of Small Businesses
 - The Freight Transport Association

- UKLPG.

4.4.2 In addition, TfL discussed the proposals as part of its regular stakeholder engagement cycle with boroughs during the consultation period. These boroughs are outlined in Table 2 below.

Table 2: Borough meetings attended by TfL

Borough	Date
LB Barking and Dagenham	7 July
LB Brent	12 July
LB Croydon	12 July
LB Enfield	13 July
LB Hammersmith & Fulham	7 July
LB Hillingdon	21 July
LB Hounslow	26 July
LB Islington	14 July
LB Kingston Upon Thames	12 July
LB Lewisham	14 July
LB Southwark	16 July
LB Waltham Forest	14 July
LB Westminster	21 July

4.5 Advertising

4.5.1 Advertisements were used to inform the public and drivers, including residents of the Western Extension zone, that TfL was consulting on behalf of the Mayor on a range of changes to the Congestion Charging scheme, including the removal of the Western Extension and to encourage people to have their say by the end of the consultation on 2 August 2010.

4.5.2 The advertisements invited the public to visit TfL's website for more information and to make their views known by means of an online questionnaire or to call a dedicated telephone number to request a leaflet. Advertisements were placed in the Metro, the Evening Standard, London local papers (collectively known as "the Capital Package"), a range of Council titles and a selection of ethnic press titles. (see Tables 3,4 and 5 below).

4.5.3 The advertising ran from the start of the consultation on 24 May to 26 July 2010.

4.5.4 There were two Metro adverts: one was placed on the TfL travel page and another half page advert appeared on the regular pages. The Evening Standard, London local titles and Council titles carried a half page advert.

4.5.5 The following tables outline the print media adverts.

Table 3: London and local print media advertising to support the consultation

Area	Newspaper	Target audience	Date(s)	Type of Ad
London	Metro	London Drivers	w/c 24/05/10	½ page
London	Evening Standard	London Drivers	w/c 24/05/10 w/c 19/07/10	½ page
London	City AM	London Drivers	w/c 24/05/10 w/c 14/06/10	½ page
London	Metro (TfL Travel page)	London Drivers	27/05/10 10/06/10 15/06/10 16/07/10 20/07/10 26/07/10	¼ page

Table 4: London Local Press titles (Capital Package)

Newspaper	Dates
Barking & Dagenham Post	w/c 24 May
Barking & Dagenham Yellow Advertiser	
Barnet Hendon Press	
Bexley & Bromley Times	w/c 7 June
Bromley Biggin Hill Oxted & Caterham News Series	
Croydon Advertiser Series	w/c 12/7
Ealing Gazette Series	
Ealing Leader	w/c 19/7
East London Advertiser	
Enfield Advertiser	
Fulham Chronicle Series	
Gravesend Reporter/Dartford & Swanley Times	

Hackney Gazette
Hampstead & Highgate Express Group
Haringey Advertiser
Harrow & Wembley Observer
Harrow Leader
Hounslow Borough Chronicle
Iford Recorder Series
Islington Camden Gazette & Hornsey Journal Series
Lewisham & Greenwich Mercury Group
Mitcham Morden & Wimbledon Post
Newham Recorder Series
Redbridge & Ilford Yellow Advertiser
Richmond & Kingston Informer
Romford & Havering Post
Romford Recorder Series
Romford Yellow Advertiser
South London Press (Fri)
Staines Informer
Stratford & Docklands Express
Streatham Clapham & West Norwood Post
Surrey Herald News
Surrey Mirror
The Post Reigate & Epsom
The Post Croydon & Sutton
Thurrock Yellow Advertiser
Uxbridge & Hillingdon Leader
Uxbridge Gazette Series
Waltham Forest Yellow Advertiser
Walton & Weybridge Informer
Wembley & Brent Times Series
Bexley Mercury
Enfield Gazette
Southwark News
Stratford Yellow Advertiser
The Docklands
The Wharf
Woodford Recorder

Table 5: Local Council Titles print media advertising to support the consultation

Borough	Newspaper	Target audience	Date(s)	Type of Ad
Wandsworth	Brightside Mag	London Drivers	w/c 31/05/10 w/c 28/06/10	½ page
Tower Hamlets	East End Life	London Drivers	w/c 24/05/10 w/c 12/07/10	½ page
Hackney	Hackney Today	London Drivers	w/c 24/05/10 w/c 19/07/10	½ page
Camden	Camden New Journal	London Drivers	w/c 21/06/10 w/c 12/07/10	½ page
Islington	Islington Now	London Drivers	w/c 31/05/10 w/c 12/07/10	½ page
Lambeth	Lambeth Life	London Drivers	w/c 31/05/10 w/c 12/07/10	½ page
Hammersmith	Hammersmith & Fulham News	London Drivers	w/c 24/05/10 w/c 19/07/10	½ page
Kensington & Chelsea	The Royal Borough	London Drivers	w/c 14/06/10	½ page
Fulham	Fulham Chronicle	London Drivers	w/c 24/05/10 w/c 05/07/10	¼ page

Table 6: Ethnic press titles containing a consultation advertisement

Paper	Advertisement Language	Target audience	Circulation	Dates
Polish Express	Polish	London Drivers	48,000 in London (60k nationally)	24/05/10
Garavia Gujarat	English, Gujarati	London Drivers	21,500 in London (55k national)	24/05/10
Avrupa Gazette	Turkish	London Drivers	15k in London (20k national)	25/05/10

4.6 London Gazette notice to publicise the consultation

4.6.1 Legal notices publicising the consultation were published on 24 May 2010 in the *London Gazette*. A separate notice for both Variation Orders was required. They each included the following information:

- Notice that Order had been made under Schedule 23 of the Greater London Authority Act 1999 and the title of the Orders – The Greater London (Central Zone) Congestion Charging (Variation and Transitional Provisions) Order 2010 and the Greater London (Central Zone) Congestion Charging (Variation and Transitional Provisions) (No.2) Order 2010
- Brief outline of the proposed changes as detailed in the Variation Orders
- Details of where the leaflet summarising the proposals and other supporting documents could be obtained
- The pre-paid address for people to submit their questionnaires and any additional comments
- The date by which representations were to be received.

4.2 Late consultation responses

4.6.2 While the consultation on the proposals formally closed on 2 August 2010, responses to the consultation from the public and organisations received up to and including 9 August 2010 were analysed by Accent. This does not include responses from stakeholders, which were analysed by TfL.

4.6.3 Responses to the consultation received after 9 August 2010 and up to and including 8 October 2010 are analysed in Annex 2 of this report.

4.6.4 Any representations received after this report is submitted, and up to the date of the Mayor's decision, will be forwarded to the Mayor. As set out in Chapter 1, all responses to the consultation have been copied to the Mayor.

5. Impacts of the proposals

5.1 Introduction

- 5.1.1 The consultation on the proposed changes to the Congestion Charging scheme was accompanied by Integrated Impact Assessment (IIA) reports and a Supplementary Information document to assist those wishing to know more about the potential impacts of the proposals.
- 5.1.2 An IIA was produced for each of the Variation Orders and both were summarised in separate chapters of the Supplementary Information. As described in Chapter 4, these documents were made available on TfL's website at the start of the consultation, and remain available for download. This chapter begins with a summary of the impacts outlined in the consultation materials.
- 5.1.3 During the consultation, TfL provided additional information about the impacts of the proposed removal of the Western Extension in response to a request received under Environmental Impact Regulations 2004 (EIR). This information is summarised at the end of this chapter.

5.2 Summary Impacts of removing the Western Extension (VO1)

- 5.2.1 The Supplementary Information document noted that any assessment of the likely change in traffic conditions if the Western Extension is removed has to take account of a number of uncertainties, in addition to the effects of the implementation of other policies and proposals in the revised MTS.
- 5.2.2 The main factors of relevance, and assumptions made in the assessment (which are provided in Tables 5-2 to 5-5, later in this section), are as follows:
- **London-wide changes in transport demand and supply:** there are many influences on travel and transport in London, some of which could interact with the impacts of the removal of the Western Extension; for example, changes in economic conditions. However, the estimates in Tables 5-1 to 5-4 below, assume that such influences are constant.
 - **Driver responses:** how individual drivers will respond to the removal of the charge or the residents' charge, and the timescales of responses, cannot be known with certainty. This means that there is a range of aggregate responses, reflected in the conditions set out in scenarios 1a and 1b in Table 5-1. This uncertainty has much less influence at the London-wide strategic level but is a relatively significant influence on the Western Extension area itself.

- **Bus operations:** at the time the Western Extension was introduced in early 2007 a major review of bus services in this part of London was introduced. The estimates in Tables 5-1 to 5-4 assume that the post-2007 revised bus service arrangements would be retained. This means that removing the Western Extension would not represent a simple reversion to previous travel conditions in this part of London.
- **Changes in road network capacity:** reallocations and reductions in effective vehicular capacity (typically the maximum vehicle throughput at junctions) have occurred since congestion charging was introduced³. In the Western Extension area during the second half of 2007, there was a loss of effective vehicular road capacity of about 15 to 20 per cent, owing to road works, development works, and alterations to traffic signals. There is uncertainty over the amount of that capacity which might be recovered in future and hence its effects on traffic congestion and emissions. Monitoring of traffic and congestion levels suggested at spring 2009 that some 30 to 40 per cent of the lost effective capacity had been recovered. However, this recovery was short lived, and by the second half of 2009 observations suggested that capacity had returned to its lower level, where the latest observations suggest it remains. The scenarios in Table 5-1 assume a fixed network capacity.
- **Traffic management mitigation measures:** TfL recognises that removal of the Western Extension could produce an increase in congestion within the Western Extension area and so is considering a number of possible measures to try to mitigate (prevent, reduce or offset) this as far as possible. The details of some of the measures have yet to be determined, so the effects are uncertain. The scenarios in Table 5-1 assume no measures in mitigation.
- **Background traffic trends:** there has been a slow reduction in motor vehicle traffic in inner London for many years while outer London traffic levels are relatively stable. The estimates in Tables 5-1 to 5-4 are based on an assumption of no material change in background traffic levels from 2009 to 2010.
- **Westfield shopping centre:** this opened on 30 October 2008. TfL has looked at traffic data and although some increase in traffic was observed there around the time it opened, it did not occur in locations that indicated that Westfield was the cause. There has since been a decline in traffic in the Western Extension area so any increase due to Westfield would be negated by other causes, perhaps the recession. TfL is still processing data to assess the traffic effects of this development; there are indications of localised increases in traffic.
- **Scheme policy:** these analyses assume no other change in scheme policy (e.g. hours of operation, charge level, payment methods, discounts and exemption classes all remain the same). The changes to the Congestion Charging scheme

³ TfL (July 2008) Central London Congestion Charging Impacts Monitoring, Sixth Annual Report. Transport for London: London. Accessed online at: <http://www.tfl.gov.uk/roadusers/congestioncharging/6722.aspx> on 20/05/2010.

which were consulted on concurrently with the proposed removal of the Western Extension are described in following section. The impacts of any changes that the Mayor confirms would be in addition to those outlined in Tables 5-1 to 5-4.

- **Pedal cyclists:** there has been a trend of increasing pedal cycling activity across the boundary of the Western Extension area since 2003, part of a wider trend within central London. The Mayor’s Cycle Hire scheme was launched in central London in July 2010 and other measures are planned to encourage an increase in pedal cycling as a mode of transport. The estimates in Tables 5-1 to 5-4 reflect levels of cycling which prevailed in and around the Western Extension area during the baseline year and their effects on traffic conditions; no specific allowance has been made for any further increase in pedal cyclists in 2010 for the purposes of this assessment.
- **Secondary travel impacts:** there are numerous potential secondary impacts which could affect traffic conditions. TfL’s assessments have considered the broad strategic implications of the removal of the Western Extension in terms of the impact of additional traffic on overall demands for road travel and more localised effects.

Traffic impacts

5.2.3 The assessment of the effects on emissions from road traffic necessarily takes into account an additional factor: the general trend of improvement in vehicle technology. There are likely to be more ‘cleaner’ vehicles on the road in 2010 than there were in the period covered by the baseline year (2008). The air quality and CO2 estimates in Tables 5-2 to 5-4 take these changes into account.

5.2.4 Taking all these factors together and having due regard to the outputs of the monitoring and modelling studies, TfL’s current estimates of the traffic, congestion and emissions impacts in 2011 of removing the Western Extension are as set out in Tables 7-10 below.

Table 7⁴: Impacts of removing WEZ, 2010 conditions

Baseline: existing conditions	Scenario 1: WEZ removed 2010	Scenario 2: WEZ removed 2010
WEZ remains 2010	No capacity change	No capacity change
	100% return of deterred traffic	80% return of deterred traffic

⁴ Table 5-1 in Supplementary Information

Traffic (000s of vehicle-kms per charge day, and % change in veh-kms compared to Base)

WEZ	600	+8% to +12%	+6% to +10%
CLoCCS	950	-1% to -2%	-1% to -2%
Western Inner Ring Road (charge-free through-route)	150	+2% to +3%	+1% to +2%
Rest of inner London	12,600	+~1%	+~1%
Rest of London	34,700	+0% to +0.5%	+0% to +0.5%

Congestion (minutes/km above night rate, and % change in minutes/km above night-time travel rate)

WEZ	2.3	+17% to +21%	+15% to +17%
CLoCCS	2.4	-2% to -3%	-2% to -3%
Western Inner Ring Road (charge-free through-route)	2.3	+4% to +5%	+3% to +4%
Rest of inner London	1.0	+4% to +5%	+4% to +5%
Rest of London	0.8	+3% to +4%	+3% to +4%

5.2.5 Traffic impacts Scenarios 1 and 2 show how the proportion of deterred traffic that returns might affect the impact of removing the scheme (as noted above, not all traffic is thought likely to return if the Western Extension is removed). Scenario 1 represents the extreme worst case, while Scenario 2 estimates the impact of the return of 80 per cent of presently deterred traffic. It is assumed that there is no network capacity change. Additionally, it is important to note that no mitigation is assumed in either scenario.

5.2.6 Modelling of these scenarios suggests that all other things being equal, there would be an increase in traffic and congestion in the Western Extension area if the Western Extension were removed, as traffic returned to the area, while there would be a small decrease in traffic and congestion in the remaining central London Congestion Charging zone, due in part to the impacts of the removal of the Residents' discount from the residents of the former Western Extension.

5.2.7 The actual impact of removing the Western Extension would be likely to lie closer to Scenario 2. But, as noted, this does not take account of the effect of any potential measures which might mitigate some of these impacts.

5.2.8 It should be noted that because congestion in the Western Extension area is currently at levels which are similar to those which prevailed prior to the introduction of charging in the area, the predicted increases in traffic and congestion over this point would represent an increase on the level of

congestion which prevailed before charging was introduced in the area of the Western Extension.

Environmental impacts

- 5.2.9 Where previously deterred drivers returned to the former Western Extension area, rising traffic levels would lead to local increases in emissions of air pollutants and CO₂ from road transport. Note that, despite leading to reductions in emissions, the introduction and operation of the Western Extension had no direct discernible effect on air quality.
- 5.2.10 Estimates of the impacts of these traffic and congestion changes on emissions of air quality pollutants and climate change gases have been made using traffic and congestion changes that broadly correspond to a third scenario in which around half of the effective road network capacity that is estimated to have been lost in the Western Extension area has been recovered. They therefore give a relatively pessimistic view of the likely changes because additional traffic (more than 100 per cent of previously deterred traffic) would be induced in these circumstances, though congestion would be lower than shown in Scenarios 1 and 2 due to the regained capacity for vehicles.

Table 8⁵: Impacts of removing WEZ in 2011 on road transport emissions of PM₁₀

Emissions of PM ₁₀ from road transport (tonnes/year)	Base case 2011 with WEZ	2011 without WEZ scenario
WEZ	40	+3% to +4%
CLoCCS	50	0% to -1%
Inner ring road	25	0%
Inner London	450	0% to +1%
London as a whole	1350	0% to +1%

⁵ Table 5-2 in Supplementary Information

Table 9⁶: Impacts of removing WEZ in 2011 on road transport emissions of NO_x

Emissions of NO _x from road transport (tonnes/year)	Base case 2011 with WEZ	2011 without WEZ scenario
WEZ	550	+2% to +3%
CLoCCS	950	0% to -2%
Inner ring road	350	0% to -1%
Inner London	6200	0% to +1%
London as a whole	18400	0% to +1%

Table 10⁷: Impacts of removing WEZ in 2011 on road transport emissions of CO₂

Emissions of CO ₂ from road transport (KTonnes)	Base – 2011 with WEZ	2011 WEZ removed
WEZ	200	+4% to +6%
CLoCCS	275	0% to -1%
Inner Ring Road	100	0% to +1%
Inner London	2350	0% to +1%
Outer London	4200	0% to +1%
GLA total	7100	0% to +1%

Revenue impacts

5.2.11 The impact of removing the Western Extension on Congestion Charging scheme finances would be significant. TfL's estimates suggest that it could amount to a net reduction in the region of £55m per year. Note that a reduction for TfL in this regard would directly represent a saving for those who would no longer be required to pay the charge. There is also likely to be a one-off removal cost of up to £5m.

Economic impacts

5.2.12 On one hand, some businesses would directly benefit from not having to pay the charge to drive within the Western Extension area. Informal analysis suggests that businesses currently pay approximately £40 million a year in charges and penalties associated with the Western Extension; over 85 per cent of this is paid by small businesses with 10 or fewer workers. An increase in car-borne shoppers could also benefit businesses, perhaps particularly small to medium sized enterprises. The removal of the zone should alleviate

⁶ Table 5-3 in Supplementary Information

⁷ Table 5-4 in Supplementary Information

the concerns of those businesses who regard the Congestion Charging scheme in the Western Extension area as the cause of the reduced sales and profitability they have described.

Traffic economic benefits

5.2.13 Traffic economic benefits are a measure of the impacts to those travelling through the scheme area from the change in the levels of congestion. In the case of removing the Western Extension this is therefore connected with the capacity of the network.

5.2.14 Net annual traffic disbenefits from the removal of the scheme are likely to be between £70m and £50m a year at 2008 values and prices, depending upon the proportion of currently deterred drivers who would revert to driving in the zone. This assumes no mitigation or recovery of lost capacity.

Social impacts

5.2.15 The characteristics of the original central London Congestion Charging Zone and the Western Extension are in many ways quite different. The Western Extension has approximately three times the number of residents registered for the discount scheme as the central zone. The social impacts therefore affect more people in the Western Extension.

5.2.16 One in three people who travel in or visit the Western Extension report that they find the congestion charge difficult to pay; this was particularly prevalent among lower income households, economically inactive households, households with young children and the disabled. Of Western Extension users, 41 per cent considered that they had 'lost out' due to its introduction and so removing it should reverse this perception.

5.2.17 Concerns over the impacts of the Western Extension on communities in the northern area of the zone where the boundary was viewed by some as posing issues of severance would be alleviated by the removal of the scheme.

5.2.18 Both the number of visits made by people living outside the Congestion Charging zone to friends and family living within it, and the number of visits carers made to those living inside the zone fell following the introduction of the charge in the Western Extension area, the former by 16 per cent; carers reported a 10 per cent fall in the frequency of trips during charging hours. The removal of the Western Extension would be likely to reverse these impacts.

5.2.19 Of key workers in the Western Extension surveyed following the introduction of the scheme, 37 per cent found their work commute harder after the introduction of the Western Extension. This is significantly higher than the 11 per cent of central London key workers who reported that their commutes were harder after the introduction of the original zone in 2003. Around 3 per

cent of key workers in the Western Extension cited the charge as a factor in turning down a job in the year after the charge was introduced. Once again, the removal of the Western Extension would be expected to alleviate these concerns.

5.2.20 Those residents of the Western Extension who regularly drive within the area of the original central London zone currently gain a significant benefit from their inclusion in the extended zone since they receive a 90% discount on charge payments. If the Western Extension were removed, these residents would lose this benefit.

Public transport impacts

5.2.21 The removal of the Western Extension would have an effect on the public transport network. Bus passenger numbers in the charging day would be expected to fall somewhat as people who had previously been deterred from using their cars returned to using them. If journey times and passenger waiting times at bus stops increase this could also reduce patronage.

5.2.22 National Rail and London Underground passenger numbers would be expected to be largely unchanged.

5.2.23 There would be a reduction in Congestion Charging revenue that would otherwise have been spent on measures in support of the Mayor's Transport Strategy, including on public transport.

Costs and benefits

5.2.24 The costs and benefits of WEZ removal are considered in Chapter 8.

5.3 Impacts of the other proposed changes to the Congestion Charging Scheme (VO2)

5.3.1 Overall, the impacts of the changes proposed in Variation Order 2 are expected to be small, and insignificant in the case of 9+ vehicle discount registration and MoD discount. Areas where there are potential impacts are outlined below. Further information on impacts relating to all proposed changes is available in the supplementary information to the consultation.

Environmental and air quality impacts

5.3.2 It is not expected that the proposed changes would impact significantly on air quality or CO₂ emissions, especially as traffic levels are expected to remain relatively stable.

- 5.3.3 As the alternative fuel discount would remain available for those already registered with TfL until 2013, it can be expected that the current savings of CO₂ and the small savings of Oxides of Nitrogen (NO_x) and Hydrocarbons (HC) annually would be maintained. In 2013, when the discount is removed, these benefits are expected to decrease. However, it is anticipated that the vehicle legacy created by AFD would continue to bring some environmental benefits even after closure of the discount.
- 5.3.4 The introduction of the greener vehicle discount should encourage some people to switch from a higher emitting vehicle to one that is eligible for the discount. Given the relatively small numbers of vehicles involved in the shorter term, the initial direct impacts are likely to be small. However, if people switch to lower emitting vehicles as a result of the discount, some benefits would also be seen outside the zone, as very few people drive only within the Congestion Charging Zone.

Economic Impacts

- 5.3.5 Given that the charge increase is broadly in line with inflation, raising the charge is unlikely to have an impact on overall business activity in the zone. There would be some businesses that feel the effect more, in particular those with Fleet Auto Pay accounts, for whom the charge is increasing by close to 30 per cent from £7 to £9.
- 5.3.6 The introduction of CC Auto Pay is expected to have a positive but minor effect on business productivity. TfL estimates that the transaction cost for paying the charge through manual payment channels is around £0.50-£1.50 (it varies significantly based on the method chosen) and this would be reduced for Auto Pay customers.
- 5.3.7 The limited number of registered Liquefied Petroleum Gas (LPG) installers based in Greater London would be negatively affected by a change in demand for LPG vehicles. However, it is probable that there would be continued demand for LPG vehicles due to other benefits of using this fuel type.
- 5.3.8 Businesses that operate alternative fuel vehicles would be likely to experience some increased costs resulting from the removal of the alternative fuel discount in 2013. The two-year sunset period for vehicles registered for the alternative fuel discount by 24 December 2010 should help mitigate the impacts. The introduction of the greener vehicle discount and expansion of the electric vehicle discount are unlikely to have any significant impact on business or the economy.

Impacts on traffic and congestion

- 5.3.9 It is not expected that the changes proposed in Variation Order 2 are likely to have a significant impact on traffic and congestion in the zone. With a charge of £9 or £10 (depending on the method of payment chosen), it is expected that traffic could decline by between 1-2 per cent. The introduction of CC Auto Pay could have a minor negative effect on traffic within the zone due to the reduced transaction costs involved and the fact that it would make the money cost of using the zone less immediately apparent. Traffic could increase by 0-3 per cent. The impact of the charge increase combined with the introduction of CC Auto Pay is therefore expected to be broadly neutral, and range between 0 to 2 per cent.
- 5.3.10 Currently, there are around 22,000 vehicles registered for the Alternative Fuel Discount. Until the end of 2012 it can be assumed that these vehicles would continue to drive within the zone as they do now.
- 5.3.11 The introduction of the greener vehicle discount could impact on traffic levels in the zone over time. Currently, there are very few vehicles seen in the Congestion Charging Zone that would qualify for the GVD. However it is anticipated that the discount could further encourage the uptake of vehicles eligible for the greener vehicle discount. As proposed, the discount will be monitored and reviewed to ensure the congestion benefits of the scheme are retained.

Equalities Impacts

- 5.3.12 The Impact Assessment concluded that the proposed changes in Variation Order 2 would have very little impact on society, equalities and health. The majority of Londoners are not directly affected by the charge and would therefore not be directly affected by any increase. Given that the charge has not increased since 2005 and the proposed charge is broadly in line with inflation, the real terms impact of the charge increase is not considered significant.
- 5.3.13 There would be some people on lower incomes for whom a £1 or £2 increase (depending on the payment method chosen) may be perceived as significant. There may be a limited number of people who do not have a bank account and therefore cannot access the CC Auto Pay system, and would not be able to pay a lower charge. The removal of the monthly and annual discount may be considered fairer for those who currently cannot afford to pay lump sums and take advantage of the “free days” that purchasing the charge either monthly or annually offers. Conversely, those who purchase the charge either monthly or annually would be more sensitive to its removal.

5.3.14 The introduction of the greener vehicle discount may be accessible to those on lower to moderate incomes due to the lower cost of vehicles eligible for the greener vehicle discount in comparison to vehicles eligible for the alternative fuel discount. The removal of the alternative fuel discount would impact on the individual drivers who currently receive it. The sunset period has been proposed to reduce the impacts, giving people until the start of 2013 before they would have to pay the charge.

5.4 Additional information concerning the impacts of removing the Western Extension on emissions of air quality pollutants released in response to requests for information.

5.4.1 The Campaign for Clean Air in London (CCAL) wrote to the Mayor and TfL on 11 June 2010, requesting information under the Freedom of Information Act, to which TfL responded treating it as a request under the Environmental Information Regulations 2004 (EIR).

5.4.2 The information provided in response to this request supplements that presented in the consultation materials. As noted in Chapter 6 of this report, TfL considers that the information it provided in the Integrated Impact Assessment and Supplementary Information Document was appropriately detailed and sufficient for those wishing to comment on the proposed removal of the Western Extension to come to a considered opinion.

5.4.3 The information provided by TfL in response to the request is reproduced below. TfL also provided a number of maps which are described in Section 5.6 and attached in Appendix 3. Appendix 3 also contains two other requests received during the consultation, and TfL's response to them.

PM₁₀ modelling for WEZ

5.4.4 In response to CCAL's request for "information held by TfL about emissions and/or assumptions relating to Figure 5-1 in the Congestion Charging Variation Orders "Scheme Description and Supplementary Information" document informing the consultation on the proposed changes to the Congestion Charging scheme" and information regarding the "highest concentrations of PM₁₀ within each 'concentration contour' shown, and details of any adjustments made to ERG / Kings College London's work", TfL provided the following information:

Background information on the London Air Quality Model

5.4.5 TfL and the GLA predict the levels of pollution in London's air (i.e. concentrations) using The London Air Quality Model ("the London Model"), which was developed by the Environmental Research Group (ERG) at King's

College London. This estimates how pollution will be dispersed over time and distance from where it is released, depending on weather conditions.

5.4.6 The model takes into account sources of emissions within London, as well as chemical reactions and the additional pollution which reaches London from sources outside, including from southern England, Europe and further afield.

5.4.7 The pollutants of concern in London are nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}) as these are often associated with health impacts, and the EU has set limit and target levels for these pollutants which are to be implemented by each European member state.

5.4.8 The years and pollutants modelled are:

- 2008 for NO₂ and PM₁₀ (the most recent year for which monitoring and source activity estimates are available in order to validate the London Model)
- 2011 for PM₁₀ (the year in which PM₁₀ limit values will have to be met should the Government obtain a time extension from the European Commission)
- 2015 for NO₂ (similarly, the year by which the EU Limit Values for NO₂ would have to be met).

5.4.9 The basis for the air pollution modelling is the London Atmospheric Emissions Inventory (LAEI) which provides the estimates of the amount of emissions to the air that are produced by sources within the London area.

5.4.10 The LAEI considers many different types of sources across London including road traffic, airports, rail, shipping, domestic, commercial and industrial fuel use, industrial processes and boilers, along with sources such as sewage treatment, solvent use, and natural sources, which are important contributors to particulate emissions in London.

5.4.11 Although construction sites are a significant source of local PM₁₀ and PM_{2.5} pollution, pollution from this source has historically been difficult to estimate and is not yet included in the LAEI. The annual emissions from most of these sources are estimated for grid squares of 1x1km across London so that the contribution of different sources can be assessed for the whole of London.

5.4.12 More information about the ERG modelling can be found at <http://www.erg.kcl.ac.uk/Modelling.aspx?DeptID=Modelling&CategoryID=ModellingDevelopment>

Road traffic emissions modelling

5.4.13 An advanced road traffic emissions model developed for the GLA/TfL is used to provide detailed information on road traffic emissions across the day and at different times of the year. Traffic flows on over 63,000 major road links are

used to determine emissions to air from road traffic, representing over 12,000 kilometres of the main roads in London. Information on traffic speeds, vehicle types, and vehicle age is also taken into account in order to estimate how much pollution is emitted to the atmosphere.

5.4.14 The traffic data is based on three main sources of information including data from over 6000 manual classified counts (MCC) across London, several hundred automatic counters, the London Transportation Studies Model (LTS) road traffic predictions for London, and vehicle-kilometre estimates for small minor roads in London (based on DfT estimates).

5.4.15 LTS is a strategic multi-modal transport model for London and its surrounding area. It is one of the largest such models and is used in a wide range of applications, providing forecasts, analysis and traffic data using a detailed database of travel patterns within the London area. Traffic speeds are derived from surveys undertaken by TfL across London’s main road network in order to provide representative average speeds throughout the day.

5.4.16 Due to improvements in engine technologies and the introduction of more efficient systems, introduced largely as a result of EU regulation (“Euro standards”), new vehicles tend to produce less pollution than older vehicles. However, the real-world emissions from vehicles in urban conditions is a matter of much discussion across the EU. The profile of how vehicle emissions standards change over time is defined by the Euro standard profiles of different vehicle types. In general, newer vehicles with lower emissions (based on the standard emissions testing cycle required), have a higher Euro standard classification.

5.4.17 The Euro standard profiles for motorcycles, cars, licensed taxis (black cabs), buses and coaches, LGVs, and rigid and articulated HGVs are determined nationally using the National Atmospheric Emissions Inventory (NAEI), which is produced on behalf of Defra, but have been amended for this work to take into account differences in the London fleet. These include the impacts of the Low Emission Zone (LEZ) which has resulted in cleaner HGV, bus and coach fleets in London. Assumed Euro standard profiles (the percentages of the total stock at each Euro band) are provided in Table 1, below. NB, percentages may not sum to 100 per cent due to rounding.

Vehicle Fleet Euro Standard assumptions for WEZ assessment

Taxi Stock	2011 (%)	2015 (%)
Pre-Euro I	2.8	1.3
Euro I	0.0	0.0
Euro II	0.0	0.0
Euro III	58.2	38.1
Euro IV	38.0	39.3
Euro V	0.0	16.2

Euro VI	0.0	4.1
LPG	1.0	1.0

LT Buses	2011 (%)	2015 (%)
Euro II + DPF	13.5	0.0
Euro III + DPF	53.6	41.8
Euro III + DPF+SCR	0.0	0.0
Euro IV	21.4	21.4
Euro V	8.4	33.7
Euro IV Hybrid	1.9	1.9
Euro V Hybrid	1.2	1.2

Diesel LGV and Minibus	2011 (%)	2015 (%)
Pre-Euro I	1.5	0.0
Euro I	4.2	0.6
Euro II	9.5	2.0
Euro II + RPC	0.0	0.0
Euro III	41.2	16.5
Euro IV	40.7	21.7
Euro V	2.9	59.2
Euro VI	0	0.0

Articulated HGV	2011 (%)	2015 (%)
Pre-Euro I	0.0	0.0
Euro I	0.0	0.0
Euro II	0.2	0.0
Euro II + TRAP	1.1	0.0
Euro III	26.9	0.0
Euro III (PM) + Euro II (NOx)	0.8	0.0
Euro IV (PM) + Euro III (NOx)	0.0	7.2
Euro IV	30.2	7.9
Euro V	40.8	50.5
Euro VI	0	34.5

Rigid HGV	2011 (%)	2015 (%)
Pre-Euro I	0.0	0.0
Euro I	0.0	0.0
Euro II	0.6	0.0
Euro II + TRAP	0.9	0.0
Euro III	36	0.0
Euro III (PM) + Euro II (NOx)	1.2	0.0
Euro IV (PM) + Euro III (NOx)	0	7.4
Euro IV	22.4	6.4
Euro V	38.9	53.8
Euro VI	0	32.4

Coaches	2011 (%)	2015 (%)
Pre-Euro I	0.0	0.0
Euro I	0.1	0.0
Euro II	0.7	0.0
Euro II + TRAP	6.1	2.4
Euro III	35.8	0.0

Euro III (PM) + Euro II (NOx)	2.2	0.0
Euro IV (PM) + Euro III (NOx)	0.0	14.6
Euro IV	23	16.6
Euro V	32.2	40.8
Euro VI	0.0	25.5

Car Stock Assumptions	2011 (%)	2015 (%)
Petrol		
Pre-Euro I	3.3	1.5
Euro I	1.5	0.2
Euro II	8.6	1.7
Euro III	13.9	5.2
Euro IV	56.1	36.2
Euro V	16.6	46.3
Euro VI	0.0	8.9
LPG	0.0	0.0
Diesel		
Pre-Euro I	0.0	0.0
Euro I	0.8	0.1
Euro II	3.5	0.6
Euro III	21.9	8.9
Euro III + TRAP	4.1	1.8
Euro IV	38.4	22.4
Euro IV + TRAP	9.6	5.4
Euro V	21.7	50.6
Euro VI	0.0	10.1
LPG	0.0	0.0
The split of petrol/diesel cars is 69%/31% in 2011, and 63%/37% in 2015 as provided in NAEI.		

5.4.18 As well as exhaust emissions, the road traffic emissions model takes into account emissions of particulate matter from tyre and brake wear, which is expected to be a greater source than exhaust emissions in future years. The model also includes estimates of additional emissions due to using cold engines ('cold starts'), and from evaporation related to high engine temperatures.

5.4.19 When modelling road traffic emissions, it is also important to consider the width of roads and presence of buildings, which affect how emissions to air will interact with the surrounding environment. These are taken into account in the ERG model main road network.

5.4.20 Once the 2008 base data model is validated, models for future years are then built. These include projected changes in activity (for example traffic growth over time, and the use of domestic gas in future years) along with projections of how the emissions (i.e. factors) for these sources are likely to change over time. The London Model uses the projections for changes in road traffic emissions performance provided by Defra and DfT (last updated in 2009),

although this is supplemented with TfL data for buses in London where possible (such as hybrids), whilst for other sources the expected changes in emissions factors over time is based on the methods set out in the LAEI and NAEI.

5.4.21 Non-transport policies related to reducing emissions from residential and commercial energy use have also been quantified.. Emission reduction estimates have been derived from models used to support implementation of the GLA energy efficiency programmes.

Concentration modelling

5.4.22 Once the emissions for London have been determined, the London Air Quality Model, developed by ERG, is used to predict concentrations of pollutants in London's air based on the emissions. Predicted concentrations are made based on 20m grid spacing across London, although PM₁₀ modelling at a 5m spacing has been used for Central London only in 2011.

5.4.23 The concentration of a pollutant in the air at any location is in part due to the distance between the receptor and the source of the emission. The pattern of dispersion of pollution with respect to any receptor will be dependent on many factors including the variability and strength of emissions, local features that can affect wind flow patterns, and the general ambient weather conditions at the time. For example, cool and calm weather conditions with low wind speeds can lead to pollution being trapped in some locations and concentrations can increase because there is little movement of the air to disperse the pollution.

5.4.24 The London Model uses observations of wind speeds and directions, air temperature and other parameters recorded every hour for London in order to estimate the condition of the atmosphere (called stability), so that variable weather conditions can be accounted for. It is not possible to predict with confidence the actual hourly meteorological conditions for future years, so the model uses a recent 'representative year', in this case 2008, which is a reasonable representation of annual meteorology for Greater London.

5.4.25 The London Model has been updated for a base year of 2008 from which comparisons with pollution monitoring data in London can be made to ensure the basis provides a reasonable estimate of London's pollution levels. It is widely recognised that there are many uncertainties in the prediction of air pollution concentrations, such as those related to emissions factors, as well as variability of model parameters and monitoring data.

5.4.26 The process of comparing modelling and monitoring data is often known as model validation and involves checking the many different parameters and

modelling options in order to reduce modelling error as much as reasonably possible. Once the 2008 model has been validated, it is then used for prediction of emissions and concentrations in the years 2011 and 2015.

Assumptions underpinning the modelling of impacts of WEZ removal

- 5.4.27 For the purposes of the assessment of the impacts of WEZ removal in 2011, the following inputs have been assumed. The WEZ-removed scenario in 2011 referred to in the consultation documents is the same as the 2011 baseline used within draft Mayor's Air Quality Strategy (MAQS). This assumes that LEZ Phases 1, 2 and 4 go ahead as planned but do not include any of the additional MAQS policies.
- 5.4.28 The ERG method used for preparation of the results has removed natural salt and determines that the annual mean PM₁₀ concentration equivalent to the daily mean limit value of 35 days is 31.4 µg/m³ in 2011. This is consistent with Defra's approach which has determined that the equivalent concentration is 31.5 µg/m³ in any year.
- 5.4.29 Assumed traffic flows on road links within and around the Western Extension area considered the potential changes in traffic flow as a result of the removal of the WEZ. The impact of these changes on emissions and concentrations of PM₁₀ and NO₂ concentrations in 2011 has been assessed.
- 5.4.30 As noted in the Supplementary Information document, estimates of the impacts of the removal of WEZ on emissions of air quality pollutants from road transport have been made using traffic composition and speed changes that broadly correspond to a scenario in which around half of the effective road network capacity that is estimated to have been lost in the Western Extension area is recovered. They therefore give a relatively pessimistic view of the likely changes because additional traffic would be induced in these circumstances.
- 5.4.31 TfL made no adjustments to any of the results of modelling of concentrations of PM₁₀ or daily mean exceedences produced by ERG for the purposes of this assessment.

Information on emissions impacts

- 5.4.32 The daily mean limit value is expected to be achieved outside the red contour line shown in Figure 5-1 in the Supplementary Information document (provided as Figure 1 in Appendix 3). The red contour line is equivalent to 35 days' exceedence of daily mean PM₁₀ concentrations of 50 µg/m³, and is based on the interpolation of annual mean concentrations, which are themselves outputs of work undertaken by ERG, who modelled concentrations at a spacing of 5m².

5.4.33 The assessment of compliance with the EU limit value has not considered concentrations within the road carriageway itself. This is consistent with the approach taken by Defra. However, TfL's assessment also considers the concentrations at the kerbside of major junctions.

5.4.34 Figure 2 shows the predicted annual mean PM₁₀ concentrations in 2011 (both with- and without WEZ) for a wider area, including the Western Extension area. In addition, Figure 3 in Appendix 3 shows the area around Knightsbridge / Cromwell Road / Thurloe Place / Old Brompton Road in more detail.

5.4.35 The figures show that the highest concentrations of PM₁₀ are predicted to occur within the road carriageway itself. TfL's analysis, taking into account contours which lie along the road surface and close to the kerb, and the grid spacing of the modelling methodology, lead to the conclusion that EU limit values are expected to be met within the Western Extension area, both with and without the WEZ scheme.

5.5 NO₂ concentrations in WEZ and Time Extension Notice for NO₂

5.5.1 In response to CCAL's request for information about work on annual mean concentrations of NO₂ in the area covered by Figure 5-1 (in the Supplementary Information) in 2010 and 2011, TfL provided the following information:

5.5.2 Modelling of NO₂ concentrations has been undertaken for 2011 for both with- and without-WEZ scenarios. The focus of this modelling is on the annual mean NO₂ concentrations, since modelling of hourly NO₂ concentrations is more uncertain due to the very local influences within individual streets which affect short-term concentrations. However, recent monitoring across London shows that the hourly concentrations tend to be below 200 µg/m³ (18 exceedences allowed) at the majority of locations except some kerbside and roadside sites which will be undergoing further investigation.

5.5.3 Figure 4 (Appendix 3) shows the predicted concentrations of annual mean NO₂ in 2011 with and without WEZ, within the general Western Extension area, whilst Figure 5 shows the locations around Knightsbridge / Cromwell Road / Thurloe Place / Old Brompton Road in more detail. Concentrations of NO₂ in the areas shown in green or blue are predicted to be below the annual mean limit value of 40 µg/m³, whilst concentrations in those areas shown in yellow, orange or red are close to or above the limit value. The modelling for 2011 shows that in central London, most background locations are above the limit values, whilst within the Western Extension area, background concentrations tend to be lower, but that the limit value is predicted to be exceeded at most roadside locations – both with and without WEZ.

- 5.5.4 The location of the predicted 40 and 60 $\mu\text{g}/\text{m}^3$ annual mean NO_2 contours both with and without WEZ is shown in Figures 6 and 7. The removal of WEZ is not predicted to have any significant impact on NO_2 concentrations, and the position of both contours is largely unaffected by WEZ removal as many sources contribute to overall NO_2 concentrations. The assessments undertaken have considered the 40 $\mu\text{g}/\text{m}^3$ limit value only. Defra is responsible for the assessment of compliance of NO_2 concentrations, including the attainment of 60 $\mu\text{g}/\text{m}^3$ (related to the margins of tolerance assessment) for submission to the EU, and this work is currently ongoing and due to be reported in 2011 through the Time Extension Notification process.
- 5.5.5 The impact of the removal of WEZ is shown in Figure 8 in terms of changes in annual mean NO_2 concentrations. This shows that the main impacts, between 1 and 2 $\mu\text{g}/\text{m}^3$ annual mean, are predicted at the kerbside of roads within WEZ, whilst negligible changes in concentrations are predicted further from roads and at background locations. As shown in Figures 7 and 8 (Appendix 3), these impacts do not affect the overall attainment of 40 $\mu\text{g}/\text{m}^3$ in 2011.

5.6 Additional information provided by TfL in response to EIR request

- 5.6.1 In addition to the information set out in Section 5.5 above, TfL provided a number of maps as listed below and attached at Appendix 3.

Information sent in EIR request:

- Table of Vehicle Fleet Euro standard assumptions. This set out, for 2011 and 2015, the percentages of vehicle stock meeting different Euro Standards
- Figure 1 - Map with contour lines showing where EU limit values for PM_{10} met in 2011 (Knightsbridge, Brompton Rd, Thurloe Place and Cromwell Rd). This map was provided in the Supplementary information in Figure 5-1
- Figure 2 - Map of predicted annual mean PM_{10} concentrations in 2011 with WEZ, in general WEZ area
- Figure 3 - Maps of predicted annual mean PM_{10} concentrations in 2011 with and without WEZ (Knightsbridge, Brompton Rd, Thurloe Place and Cromwell Rd).
- Figure 4 – Maps of predicted concentrations of annual mean NO_2 in 2011 with and without WEZ, in general WEZ area
- Figure 5 - Map of predicted concentrations of annual mean NO_2 in 2011 with and without WEZ, (Knightsbridge, Brompton Rd, Thurloe Place and Cromwell Rd).
- Figure 6 – Maps of predicted 40 and 60 $\mu\text{g}/\text{m}^3$ annual mean NO_2 contours in 2011, with and without WEZ, general WEZ area

- Figure 7 - Maps of predicted 40 and 60 $\mu\text{g}/\text{m}^3$ annual mean NO_2 contours in 2011, with and without WEZ, (Knightsbridge, Brompton Rd, Thurloe Place and Cromwell Rd).
- Figure 8 – Maps of predicted change in annual mean NO_2 concentrations with WEZ removal, general WEZ area and Knightsbridge, Brompton Rd, Thurloe Place and Cromwell Rd.

6. Analysis of Responses by Theme

This chapter sets out TfL's analysis of the responses received to the consultation, by theme. It also sets out TfL's response to these issues, and its recommendations.

Theme A: General Comments on the Congestion Charging Scheme

Representations made within this theme concerned support or opposition to the principle of the central London Congestion Charging scheme and road user charging generally and comments on the operation of the scheme and alternatives.

Analysis of responses

Eighteen stakeholders commented on issues relevant to this section. These were:

The Association of Vehicle Recovery Operators, British Vehicle Rental and Leasing Association (BVRLA), Darren Johnson AM, Environmental Protection UK, the Freight Transport Association, Friends of the Earth, the London Assembly Liberal Democrat Group, the London Cycling Campaign, London TravelWatch, the RAC Foundation, the Road Haulage Association, Roadpeace, the Association of British Drivers, the Disabled People's Transport Advisory Committee (DPTAC), the Royal Borough of Kensington & Chelsea, Val Shawcross AM, London Cycling Campaign and Westminster City Council.

Around a third of responses from the public, businesses and other organisations on this theme raised issues on this theme. These were broadly similar to those raised by stakeholders.

Issues raised

The following is a list of issues raised:

- Support for Congestion Charging and support road user charging in general
- Congestion charging is another form of taxation
- All congestion charging should be removed
- There should be no vehicle exemptions
- Review of road network is needed (e.g. use of one-way systems)
- Overall scheme hours should be longer/shorter
- Oppose proposed CC changes (not specified)
- Operating cost too high; net revenues should be better used

Support for Congestion Charging and Road User Charging in general

Comments generally in support of Congestion Charging and road user charging were made by Darren Johnson AM and the Assembly Liberal Democrat Group, Environmental Protection UK, the London Cycling Campaign, London TravelWatch, the Royal Borough of Kensington & Chelsea and the RAC Foundation. Roadpeace offered support for Congestion Charging but regretted what they described as its regressive effect.

The Royal Borough of Kensington & Chelsea said that they felt there is case for some road user charging but that it should not be a 'blunt instrument' and stated that it was opposed to a system of charging in which the same charge is applied to a vehicle using the zone briefly or for the whole day, and that the development of in-vehicle technology should be encouraged to enable more sophisticated charging structures.

TfL response

TfL notes the support of these stakeholders for Congestion Charging and road user charging in general.

No further extensions to the central London Congestion Charging scheme or other charging schemes are currently envisaged. As set out in the MTS (Proposal 130), further demand management measure such as road pricing could be considered in the future. Any such scheme would need to be fair and flexible, relating charges to the external costs of travel.

Congestion Charging is a tax, and the whole zone should be removed

The Association of British Drivers described the Congestion Charge as a tax, and stated that the whole central London Congestion Charging zone should be removed. Westminster City Council also suggested that the whole charging zone should be removed.

TfL response

TfL notes that the Association of British Drivers holds this view, but stresses that both it and the UK Government are agreed that the central London Congestion Charging scheme is better described as a charge and not a tax.

The area of the central London Congestion Charging zone which would be left following the removal of the Western Extension delivers significant traffic and congestion benefits to the most congested area of central London and should be retained. While concerns have been repeatedly raised regarding the impact of the Western Extension on businesses and communities, the proposed remaining area of the zone has not been the subject of such extensive concerns.

There should be no vehicle exemptions

Three stakeholders, the Assembly Liberal Democrat Group, Friends of the Earth and

the London Cycling Campaign, said that all vehicles should be required to pay something to drive within the Congestion Charging zone to deter traffic and maximise the efficiency of road use in the zone.

TfL response

While tackling congestion by reducing traffic is the key aim of the central London Congestion Charging scheme, there are good reasons to offer discounts or exemptions certain vehicles and individuals. The primary focus of the scheme is reducing congestion but there are a range of other factors, for example social and environmental, that also need to be considered. Those living in the residents' discount zone are entitled to a 90 per cent discount on the standard Congestion Charge because they have less choice than those living outside the zone about whether to drive in the zone, while a 100 per cent discount is available for holders of a Blue Badge in recognition of the greater likelihood that they will be dependent on private car travel. Discounts are also a means of stimulating the development, uptake and use of vehicles which are more environmentally sustainable, such as those lower emission vehicles which would be eligible for the electric vehicle discount or proposed greener vehicle discount. However, as stated in the consultation information, and in Proposal 129 of MTS, the Congestion Charging scheme, including its discounts and exemptions, are kept under review.

Review of road network is needed (e.g. use of one-way systems)

The London Cycling Campaign commented that roads in the West End and Kensington should be made one-way, that traffic should be calmed and that streets should be redesigned to favour pedestrians and cyclists. The Road Haulage Association suggested that there should be better coordination of streetworks and improved traffic management, more appropriate allocation of roadspace and that trucks should be given more access to bus lanes. The LCC called for additional measures to reduce traffic in central and west London – for example workplace parking charges and queue relocation.

TfL response

TfL continually reviews the performance of London's roads, and works in partnership with boroughs and others to assess the case for making adjustments to the network. As demonstrated by the recent implementation of the first of twelve Barclays Cycle Superhighways, the Barclays Cycle Hire scheme, and the Legible London campaign, TfL and the Mayor are also committed to increasing the level of walking and cycling in London. Achieving this increase will depend both on improving road infrastructure and on providing encouragement, information and support to those who could undertake their journey by physically active modes.

With regard to one-way streets, the Mayor is committed to bringing about a cycling revolution in London. The MTS provides scope for consideration of changes to roads

and new road schemes using a criteria-based framework which includes improving conditions for pedestrians, cyclists, public transport and freight users.

TfL and the Mayor are also working hard to improve the efficiency of the road network, for example by coordinating streetworks through the road works permit scheme and implementing computer optimised signalling systems at traffic-light controlled junctions around London. There are no specific plans to increase access to bus lanes for freight users.

The Mayor and TfL recognise that reducing car use in central London would benefit pedestrians and cyclists, and propose to achieve this by promotion of alternative modes, better integration of land use planning with transport planning, and by continuing to improve public transport alternatives. Neither the Mayor nor TfL have any plans or proposals to introduce workplace parking charges, though this remains an option for boroughs to consider if they wish. TfL will continue to work with the boroughs on these issues, regardless of what decision the Mayor takes in regard to the Variation Orders consulted on here.

Overall scheme hours should be longer/shorter

The London Cycling Campaign urged TfL not to shorten the hours of operation of the Congestion Charging scheme.

TfL response

There are no plans to shorten the hours of operation of the Congestion Charging scheme, which is designed to address the all-day congestion suffered in central London. Although a charge restricted to morning peak hours only could potentially dissuade private car trips made by people commuting to work, other traffic would be likely to shift to the interpeak and afternoon peak periods to avoid the charge. Hence, maintaining the current hours of operation will ensure the highest benefits.

Operating cost too high; net revenues should be better used

The Association of British Drivers and the Freight Transport Association both said that the operating costs of the Congestion Charging scheme were too high, with the Freight Transport Association urging TfL to drive down operating costs before passing them on to scheme users.

TfL response

A new contractor, IBM, took over the Congestion Charging contract in November 2009 following a competitive tendering process in which the costs of the bidders' proposals were a key factor alongside a demonstration of their capacity to operate the scheme. TfL is continually seeking to drive down the operating costs of the scheme further by examining the way the scheme is run. The proposed increase to the charge is not related to 'passing on costs' but to maintaining its relative deterrent

effect in the context of changing public transport and motoring costs and real-terms decreases in the cost of the charge since it was set at £8.

By law, all revenue from the Congestion Charging Scheme is used to implement the objectives set out in MTS. Comments regarding the level of the daily charge are considered further in Theme C of this chapter.

TfL Recommendations

No change to either Variation Order 1 or Variation Order 2.

Theme B: Comments on the Consultation Process and related issues

Representations made within this theme concerned the adequacy of the consultation process and related to this, information provided under Fol/EIR legislation.

Analysis of responses

Seven stakeholders commented on issues relevant to this section. These were:

Association of British Drivers, Campaign for Clean Air in London (CCAL), ClientEarth, Friends of the Earth, the London Assembly Liberal Democrat Group, London Borough of Tower Hamlets and the Royal Borough of Kensington & Chelsea.

In response to Question 8 of the questionnaire, one per cent of public responses questioned the validity or value for money of the consultation.

Issues raised

The following is a list of issues raised:

- The consultation process
- Additional matters arising

Consultation process

Three stakeholders – the Campaign for Clean Air in London, Friends of the Earth and Client Earth – commented extensively on the information provided by TfL on the impacts of the removal of the Western Extension on air quality and on equalities target groups.

Two stakeholders made reference to the several consultations which the proposal to remove the Western Extension has gone through (from the Assembly Liberal Democrat Group, the Association of British Drivers), while the London Borough of Tower Hamlets questioned the persuasiveness of the case that the Western Extension has had an undesirable effect on trade in the area.

The Royal Borough of Kensington & Chelsea stated that consultations tend to elicit responses from those who feel most strongly, and expressed disappointment that there was no attitudinal survey to accompany the consultation to gauge the views of a representative sample of Londoners.

TfL response

TfL's position is that the information provided in the consultation was sufficient for stakeholders to form a view on the merits of the proposals and that the level of detail was appropriate to the magnitude of the impacts anticipated. It also supplied

additional materials on request. In providing consultation information, there is a need to strike a balance between providing sufficient detail to inform potential respondents while not overwhelming the general reader with information, or potentially overstating the degree of certainty which is possible to attain. This issue is considered further in the section below entitled “Additional matters arising”.

The future of the Western Extension has been the subject of three consultations since the Mayor announced that he wished to review the scheme. The first, held in September 2008, was a non-statutory consultation on options for the scheme. During this consultation, both the public and businesses raised a number of concerns about the impacts of the scheme and expressed a clear preference for its removal and the Mayor concluded that he was minded to remove the zone.

Road user charging schemes in London must conform with the MTS. Since the previous Transport Strategy stated that there would be a Western Extension, a new Transport Strategy incorporating the proposal to remove the extension was required. In accordance with the GLA Act, stakeholders and the public were consulted on this draft Transport Strategy between 12 October 2009 and 12 January 2010. Having reviewed TfL’s report on the responses to this consultation, the Mayor confirmed the Transport Strategy with this proposal.

This report presents TfL’s analysis of responses to the third public consultation. This consultation was undertaken in accordance with the Mayor’s Guidance. If the Mayor confirms the Order, TfL will commence the work needed to remove the scheme, including the physical removal of infrastructure and alteration of traffic enforcement computer systems.

In light of the fact that attitudes towards the Western Extension had been robustly gauged by representative attitudinal surveys supporting both the informal consultation on the future of the Western Extension and the Mayor’s Transport Strategy, TfL considered that the additional cost of undertaking another attitudinal survey was not justified. The results of the attitudinal surveys done for the non statutory consultation in autumn 2008 suggested that those responding to the consultation were somewhat more likely to support the removal of the Western Extension. At that time, 67 per cent of individual respondents to the consultation supported removal compared with 41 per cent of the public surveyed in the attitudinal survey. For businesses, 86 per cent of consultation respondents supported the removal option, compared with 50 per cent of those surveyed in the attitudinal survey.

Additional matters arising

As noted above, the Campaign for Clean Air in London (CCAL), Friends of the Earth and Client Earth made comments regarding the information provided during the consultation. In summary, these were:

- Inadequacy of consultation materials
- Information provided in response to Freedom of Information (Fol)/ Environmental Information (EIR) requests was not available to other potential respondents
- Information provided in TfL's response Fol/EIR requests is not adequate

These stakeholders suggested that a number of relevant items of information had not been included in the consultation materials, affecting the quality of the consultation and limiting consultees' ability to respond.

TfL's view is that some of this information was in fact provided within the consultation materials published at the start of the consultation (in the IIAs and Supplementary Information document), and TfL provided some additional information when requested to in an EIR request received from CCAL in June 2010 (this information is listed in Chapter 5).

TfL received a number of requests for information under Fol or EIR regulations during the consultation, and it responded to these in accordance with its statutory obligations. CCAL referred to a request that it made in June, which TfL answered, including additional information on emissions modelling as requested (see Appendix 3).

There is a balance to be struck between providing sufficient information to enable people to respond to the consultation, and ensuring that the level of detail neither overwhelms the reader nor potentially exaggerates the degree of certainty which it is possible to attain. Accordingly, while TfL supplied some additional information to CCAL in response to its EIR request, and would make it available to any other applicant as and when a request was received, this does not alter TfL's position that the information provided in the consultation materials on the website was sufficient to inform potential respondents to the consultation.

TfL did not undertake additional modelling to produce some of the additional information requested in the EIR. It is necessary to bear in mind that some of the information requested could not be meaningfully presented beyond a given level of detail or degree of confidence; to produce information that goes beyond this level of detail could result in misrepresentation or distortion. This applies to the request for specific locations of air quality impacts and their impact on vulnerable people. Among the other items requested was modelling of hourly concentration of NO₂, which because of the variability of hourly concentrations is extremely difficult to model and the results are likely to be unreliable (the draft MAQS presents data based on *monitoring* of NO₂ hourly concentrations).

Detailed mapping of PM₁₀ and NO₂ concentrations across the whole Greater London area, which was also requested would have resulted in a level of information that would be inappropriate given that the effects beyond the Western Extension area are minor or neutral; nor is it appropriate to model the possible impacts of the large number of special events (such as the 2012 Games) that take place in London. As for the impacts of possible mitigation measures (such as those in the draft Mayor's

Air Quality Strategy), TfL has not included these in the modelling, in order to take a prudent approach of considering the worst case for the impacts of removing the Western Extension.

TfL considers that the information provided in the consultation materials was at an adequate level to inform the consultation and enable respondents to consider the issues.

TfL Recommendations

No change to either Variation Order 1 or Variation Order 2.

Theme C: Removal of the Western Extension

Representations made within this theme concerned the proposed removal of the Western Extension.

For the purposes of completeness, all stakeholders who responded to the consultation are considered to have responded to this theme, even if they did not directly comment on the proposed removal of the Western Extension. The first three sub-themes below list those who agreed with the proposal, those who disagreed and those who stated their neutrality or did not give an explicit view. A list of all 44 respondents is provided at Appendix 1.

Ninety-five per cent of respondents to the public questionnaire made a comment in the text box which invited comments regarding this proposal (Question 6). The issues raised in the public responses were broadly similar to those raised by stakeholders. Further breakdowns of public responses are given in the subthemes below.

Issues raised

The following is a list of issues raised:

- Agreement that the WEZ should be removed
- Disagreement with the removal of the WEZ
- Has no view or is neutral about WEZ removal
- WEZ not congested before charging/ WEZ has had little or no effect on congestion
- Making changes to rather than removing the WEZ
- Removal will encourage car use and increase traffic emissions and congestion
- The impacts of the WEZ on air quality and climate change (and the draft MAQS)
- Meeting EU Air Quality limit values
- The loss of revenue to TfL from WEZ removal and negative impacts of WEZ removal on public transport investment
- WEZ benefits cyclists and encourages the use of public transport
- The impacts of the WEZ on the local economy
- The impacts of removing the WEZ on residents (including car parking and noise impacts)
- Complementary Measures (including use of cameras and impact on public transport journey times)
- Removal of WEZ is contrary to other Mayoral commitments
- The Residents' Discount
- Additional Matters Arising

Agreement that WEZ should be removed

Fifteen stakeholders stated their agreement with the proposal to remove WEZ. These were: AICES, Association of British Drivers, Automobile Association, British Security Industry Association, British Vehicle Rental and Leasing Association (BVLRA), Freight Transport Association, London Chamber of Commerce & Industry, London Borough of Hammersmith & Fulham, Road Haulage Association, Royal Mail, Society of Motor Manufacturers and Traders, Westminster City Council, London Assembly Liberal Democrat Group, Federation of Small Businesses and the London Borough of Wandsworth.

Some of these noted that they had consistently opposed the implementation of the extension and called for its removal prior to this consultation.

Five of these stakeholders also noted public support for the removal of the WEZ: Automobile Association, London Assembly Liberal Democrats, London Borough of Hammersmith & Fulham, London Borough of Wandsworth and the Royal Borough of Kensington & Chelsea.

FTA said that it welcomed removal provided there were no negative impacts on congestion in either the former WEZ or the original central zone. RHA said that hauliers had little choice over whether to drive in the zone and a charge to them made little impact on congestion. FSB expressed disappointment with the time taken to reach this decision and hoped that it would be removed by the start of 2011.

Those who noted the public support for the removal referred to the non-statutory consultation held on the future of the WEZ in autumn 2008, in which a majority of public respondents supported its removal.

Question 6 of the public questionnaire invited comments regarding the proposed removal of the Western Extension. Sixty-two per cent of these responses commented that the Western Extension should be removed.

TfL response

TfL notes the support for this proposal. The Mayor made it a pledge in his election manifesto to hold a consultation on the future of the Western Extension and a non-statutory consultation in autumn 2008 indicated strong public support for its removal (69 per cent of public respondents selected this option). The information provided for this informal consultation clearly indicated that there would need to be further legal processes before the extension could be removed: on the MTS and, subject to the outcome of this consultation, on a Variation Order to remove the zone. Following consultation with the London Assembly and Functional Bodies, and a public consultation, the Mayor confirmed a new MTS in May 2010, which contained

Proposal 128 (removal of the WEZ). Subsequent to this, TfL began a public consultation on a draft Variation Order from 24 May to 2 August 2010.

Following this consultation the Mayor will decide whether to confirm the VO, with or without modifications, to remove the WEZ. However, the Mayor is reminded that, as stated in the Supplementary Information, it is likely that traffic and congestion will increase to some extent if WEZ is removed. Some stakeholders have indicated support for WEZ removal while adding the caveat that congestion and traffic must not increase: this is an unlikely scenario. While TfL will, in accordance with the policies set out in MTS and in the WEZ consultation material, seek to mitigate the impacts of WEZ removal in terms of congestion as far as is practicable, full mitigation of the congestion impacts of removing the scheme would be likely to require space to be allocated from other transport initiatives, which is not considered desirable.

Disagreement with the removal of the WEZ

Seventeen stakeholders stated that the WEZ should not be removed. These were: CCAL, Client Earth, CTC, Darren Johnson AM, Energy Saving Trust, Environmental Protection UK, Friends of the Earth, Green Chain, Jeremy Corbyn MP, London Borough of Greenwich, London Borough of Hounslow, London Borough of Tower Hamlets, the London Cycling Campaign, London TravelWatch, Roadpeace, Val Shawcross AM and Sustrans.

The most common reasons given for opposition to removal by these respondents concerned a potential rise in traffic and congestion and an increase in related emissions of air pollutants and CO₂. Reference was also made to the loss of revenue to TfL in times of severe financial constraint. These issues are considered separately in more detail in the sections below.

Two stakeholders who stated their opposition also set out additional reasons for their response. The Energy Saving Trust commented that Congestion Charging had helped to change public attitudes to road user charging more generally, as demonstrated by TfL's attitudinal research over time. Val Shawcross AM stated that WEZ removal would be against public interest and is only being pursued by the Mayor as it was an election pledge.

In response to Question 6 of the questionnaire, 24 per cent of responses disagreed with the removal of the Western Extension.

In addition to the respondents listed here, the following respondents to the recent consultation on the draft MAQS stated that the WEZ should stay in place: Jenny Jones AM, the Environment Agency, LACORS and Murad Qureshi AM.

TfL response

While it may be that Congestion Charging has helped to foster a more positive attitude to road user charging more generally, when asked specifically about the future of the Western Extension, the majority of respondents have indicated that they prefer it to be removed. In the informal consultation in autumn 2008, 69 per cent preferred the 'remove WEZ' option and in the recent MTS consultation (which ended in January 2010), 58 per cent agreed or strongly agreed that it should be removed (25 per cent disagreed or strongly disagreed). In the same consultation, 39 per cent agreed or strongly agreed with the principle of demand management for road use (29 per cent disagreed or strongly disagreed). In the public consultation of 2010, 62 per cent commented that the WEZ should be removed.

The Mayor included in his manifesto a commitment to consult on the future of the Western Extension and has made clear his preference for removing the zone, subject to statutory processes. His decision on whether or not to remove it will be informed by the outcome of the statutory public consultation which is the subject of this report, and his consideration of the impacts and any legal advice he may receive. As this theme sets out, there have now been three consultations on the future of the WEZ, and in all of these the majority of public respondents indicated support for its removal. The views of stakeholders in all three consultations have been more mixed, however, and many have highlighted the various adverse impacts that would be expected as a result of WEZ removal. The Mayor will need to weigh the public support for removal against the potential adverse impacts highlighted in Chapter 5.

States no view or is neutral about the removal of the WEZ

Twelve stakeholders did not state their views or stated that they were neutral on the proposed removal of the WEZ. Three of these stated that they were neutral with regard to the proposal: London Borough of Camden, London Councils and City of London. The remaining nine did not comment directly on this proposal, although some made comments related to it: ACFO, AVRO, DPTAC, Kit Malthouse AM, DfT's Office for Low Emission Vehicles, RAC Foundation, Royal Borough of Kensington & Chelsea, Tandridge District Council and UKLPG.

London Borough of Camden and London Councils state that they have a neutral view and that it is for affected boroughs to decide; the City of London also states that it has a neutral view. The RAC says that it has no strong or fixed views and that there will be little difference to congestion whatever the outcome. Kit Malthouse AM and Tandridge District Council did not give a view on this matter but commented on the potential impacts and mitigations associated with WEZ removal. The following made no comment on the proposal in their responses: ACFO, DPTAC, OLEV and UKLPG.

The Royal Borough of Kensington & Chelsea does not explicitly state its view on WEZ removal: it sets out a case in favour of removal while noting its concern about negative impacts. It states that residents should not have to pay to drive around their

own borough, local shops and businesses report adverse effects of WEZ, and that in previous consultation and in representative surveys, public preference for removal was clear. However it also states that there will be an increase in traffic and congestion in the borough if WEZ is removed, and that this will adversely affect its ability to deliver MTS objectives.

Only 5 per cent of respondents to the public questionnaire did not make a comment in response to Question 6, which invited comments on the proposed removal of WEZ.

TfL response

The issues raised by Kit Malthouse AM regarding the residents' discount and the comments of Tandridge District regarding complementary measures are considered in the relevant sections below.

TfL notes these comments. With regard to the view that it is for affected boroughs to decide, where boroughs have made comments, these are described in this theme: the City of Westminster and the London Borough of Hammersmith & Fulham support WEZ removal. As indicated in the comments made by the Royal Borough of Kensington & Chelsea, the Mayor will need to weigh the issues favouring WEZ removal, not least the public support for this, against the likely adverse impacts which could arise directly in and around the zone in terms of traffic and congestion, some increase in emissions, and more widely with regard to TfL's ability to deliver the Mayor's Transport Strategy.

WEZ has had no effect or a detrimental effect on congestion

Five stakeholders made comments which called into question the congestion benefits of the WEZ. These were: Association of British Drivers, Automobile Association, London Assembly Liberal Democrat Group, the London Borough of Hammersmith & Fulham and the London Borough of Wandsworth.

Responses indicated that stakeholders doubted whether congestion had been reduced in WEZ or in areas outside but adjacent to it. There was also a comment that an extension westwards was inappropriate and a doubt expressed about the impact of roadworks in undermining the zone's effects.

In Question 6 of the questionnaire, 10 per cent of responses said that WEZ has had no effect on or increased congestion.

TfL response

TfL has reported on the Congestion Charging Scheme in an annual report since it was first introduced; the last set of data (for 2008/09) was included in the Travel in London 2 (TiL2) Report. All of these reports are publicly available on TfL's website.

The Western Extension has reduced traffic inside the WEZ by about 10 per cent, and initially achieved significant reductions in congestion. However, while the traffic reductions achieved since the scheme was introduced have been maintained, congestion has risen to a level comparable to that which existed before February 2007. This effect is due to a reduction in effective road capacity in the area due to development and road works in the area; however, congestion would have been worse in the absence of Congestion Charging.

With regard to areas adjacent to the zone, monitoring data for the Western Extension boundary route included in TiL2 indicates a stable level of congestion during 2008 and 2009, despite some increase in traffic levels on the western boundary route in 2008, followed by a decline in 2009.

While it is clear that, had the Western Extension not been in place, congestion would have been worse, the congestion reductions achieved in the WEZ were below expectations due to reduced road capacity. It remains uncertain how much of this road capacity will be recovered (and retained) over time; and other factors such as driver response and overall transport demand and supply will also have a bearing on traffic and congestion levels in the area. Therefore in making his decision the Mayor will need to consider the data about the traffic and congestion benefits of the WEZ to date against its potential future benefits as part of his overall consideration of WEZ removal.

The WEZ should be changed rather than removed

Two stakeholders stated that the WEZ should be changed rather than removed; they also stated their preference for WEZ to be retained. These were, LCC and Val Shawcross AM. In addition, the CTC noted that in the non-statutory consultation in autumn 2008, a majority of public respondents were in favour of keeping or changing the WEZ.

Both LCC and the Val Shawcross AM called for the same change to be made: for there to be a restructuring so that WEZ and the original central zone would operate as two separate zones, each with discrete Residents' Discounts and charges.

In Question 6 of the public questionnaire, 3 per cent of responses suggested changes to the Western Extension.

TfL response

The potential to put in place two zones has been raised before, for example in the consultation on the implementation of the Western Extension. TfL's response then was that this would introduce excessive operational and administrative complexity, and would be costly to implement, and would not be warranted in terms of scheme benefits. The MTS (Proposal 129) states that the Mayor will keep the Congestion Charging Scheme under review and make variations to ensure its continued effectiveness, which could include reconfigurations of the zone as suggested here. While this option is not presently under consideration, then, it potentially could be examined if the Mayor was so minded. Any serious reconsideration of this option would have to be informed by an examination of the current situation and if taken forward, would need to be subject to legal processes including public consultation.

However, this option would not address concerns expressed by residents and local businesses about the impact of the charge in the WEZ.

With regard to the support for changing the WEZ in the autumn 2008 informal consultation, 19 per cent of respondents supported the option of keeping it; 12 per cent for changing it and 69 per cent said they preferred its removal.

Removal will encourage car use and increase traffic levels and congestion

Ten stakeholders made comments about the potential for WEZ removal to encourage car use and increase traffic emissions and congestion. These were: CCAL, Darren Johnson AM, Environmental Protection UK, Friends of the Earth, Jeremy Corbyn MP, Val Shawcross AM, London Borough of Greenwich and Royal Borough of Kensington & Chelsea, London TravelWatch and Sustrans.

This section includes some comments which are relevant to the next two sections (air quality and climate change impacts and EU limit values) and vice versa; it may be helpful to consider the three together.

The view most often stated here was that the removal of the Western Extension would increase traffic levels and congestion in the Western Extension; a couple of stakeholders noted that the IIA produced for VO1 indicated that this could happen. One respondent stated that the potential recovery of road network capacity would induce extra traffic; while another stated that with continuing road works in the area, this capacity recovery was not occurring at the expected rate.

Other comments made concerned the success of the Congestion Charge in achieving a modal shift from the private car and a concern that WEZ removal would undermine this. One respondent stated that WEZ removal would increase road accidents and a borough outside the zone was concerned that efforts to mitigate effects of removal would be at the expense of much-needed traffic signal improvements elsewhere in London.

In Question 6 of the public questionnaire, 11 per cent of responses commented that WEZ removal would have negative impacts on congestion and/or encourage car usage.

TfL response

As set out in the Supplementary Information, there are a number of different factors and uncertainties involved in determining the effect of WEZ removal on traffic levels, emissions and congestion. With regard to congestion impacts, TfL modelled two scenarios for 2011 considering different levels of returning traffic (although this is by no means the only determining factor): Scenario 1 assumes all previously-deterred traffic returns; Scenario 2 assumes that 80 per cent of traffic returns. In both cases no change to road network capacity is assumed, nor are mitigation measures taken in to account. This means that, for prudence, a 'worst case' scenario is presented.

In both scenarios, there is an increase in traffic and in congestion in the WEZ (the scale of magnitude differs for the two scenarios), and a small decrease in the original central zone, in the main due to residents of the WEZ area no longer being eligible for the residents' discount.

There are significant uncertainties about the effects of the determining factors on traffic and emissions here, not least the extent to which road network capacity may change, potentially increasing as major developments are completed and measures to manage roadworks, for example, take effect. Rising traffic levels will lead to increases in emissions of air quality pollutants and CO₂ from road transport, although as stated in the Supplementary Information, the introduction of WEZ had no discernible effect on air quality. More information about the air quality impacts is provided in the following section.

TfL has acknowledged the likelihood of increased traffic levels, congestion and emissions in the Western Extension area as a result of WEZ removal. However it is important to understand the scale of these impacts in the context of London as a whole, and in the context of the measures proposed alongside WEZ removal and the commitments set out in the MTS and in the draft MAQS. MTS sets out policies to achieve a shift to more sustainable modes, improve the efficiency of the operation of the road network and smooth traffic flow, and reduce air pollutant and CO₂ emissions from transport. These approaches apply Londonwide but in order to help mitigate the potential effects of WEZ removal, traffic measures could be applied in the WEZ area, as is judged appropriate and necessary, in consultation with the relevant boroughs.

These interventions are not undertaken at the expense of work elsewhere in London, and TfL's annual funding to boroughs in the LIPs programme includes substantial sums for signals and road maintenance. Boroughs are also advised to consider

removing traffic signals where no longer necessary or using alternative traffic management tools.

On mode shift, these approaches include better journey planning information and smarter travel initiatives, policies to encourage people to walk and cycle and supporting car clubs. Encouraging the use sustainable modes will also contribute to reducing emissions from transport.

These measures would be implemented as part of the wider measures for managing the road network and smoothing traffic flow set out in the Mayor's Transport Strategy, for example the use of SCOOT at traffic signals. All but two of the signal-controlled junctions in the Western Extension have been or are planned to be converted to SCOOT. In addition, a review of traffic signal locations and timings is being undertaken generally and will be prioritised in this area. Almost all the funded schemes to improve the TLRN in Kensington & Chelsea are located within the WEZ or in its vicinity.

With regard to road safety, although in theory there could be expected to be a very slight impact, the IIA did not find any evidence that the removal of the WEZ would have any significant effect on road safety. Policies within MTS and in the Cycle Safety Action Plan will continue to address the issue of safety and security for all of London's road users.

The impacts of WEZ removal on air quality and climate change, and mitigation measures for these (including the draft MAQS)

Seventeen stakeholders made a comment on the impacts of WEZ removal on air quality and climate change. These were: Association of British Drivers, CCAL, Client Earth, CTC, Darren Johnson AM, Energy Saving Trust, Environmental Protection UK, Friends of the Earth, Jeremy Corbyn MP, Val Shawcross AM, London Borough of Greenwich, London Borough of Hounslow, London Borough of Tower Hamlets, London Cycling Campaign, Sustrans, Royal Borough of Kensington & Chelsea and Society of Motor Manufacturers and Traders.

All but one of these respondents stated that the removal of WEZ would have an adverse impact on air pollutant and CO₂ emissions. The Association of British Drivers stated that the scheme has not delivered any environmental benefits.

Many respondents stated that the IIA indicates the removal of WEZ would lead to an increase in traffic and therefore more emissions of the air quality pollutants NO₂, NO_x and PM₁₀ (particulates). These emissions are harmful to human health: one respondent stated that information from the GLA indicated that there were 4,300 deaths due to air pollution in London every year; another noted that there were no safe limits for exposure to particulates. Some respondents referred to the proposals contained in the draft Mayor's Air Quality Strategy (MAQS) which are intended to improve air quality in London – and, in part, to mitigate the effects of WEZ removal –

and stated that these would be insufficient, and may take time to materialise. The projected increase in CO₂ emissions from road transport set out in the IIA was also noted and respondents questioned whether the proposal to remove WEZ aligned well with other Mayoral commitments to improve air quality and reduce CO₂ emissions, as set out in MTS and the draft Climate Change Mitigation and Energy Strategy (CCMES). In the context of this, some questioned the Mayor's judgement in deciding to proceed with this proposal.

In Question 6 of the public questionnaire, 8 per cent of responses commented on the negative impact of removing WEZ on air quality and/or the environment.

In addition to the respondents listed here, the following respondent to the recent consultation on the deferral of LEZ Phase 3 stated concerns about the air quality impacts of WEZ removal: Councillor Braithwaite (LB Camden). In its response to the draft MAQS consultation, London Councils stated that WEZ removal will have adverse impacts on air quality and asks if the Mayor has considered reviewing this proposal in the light of his duties with regard to the health of Londoners.

TfL response

TfL's modelling of the potential impacts of WEZ removal on road transport emissions assume that around half of the road network capacity which was lost in the area will be recovered. This is likely to be an overstatement of network capacity recovery and is likely to provide a pessimistic view of the emissions outcomes. The degree of any network capacity recovery will have an impact on traffic levels in the zone, as previously-deterred drivers who return because of the lifting of the charge will be joined by drivers who are attracted because speeds are higher than they would have been without network recovery.

As was the case for the modelling of impacts on traffic and congestion, the modelling does not take into account the effect of measures to reduce air pollutant and CO₂ emissions from transport committed to in the MTS and proposed in the draft MAQS. The potential effects on emissions from the removal of WEZ are likely to be more than offset by the range of air quality improvement and CO₂ reductions measures that will be applied in London.

As stated in the IIA, in 2011 without WEZ there could be an increase of 3 to 4 per cent in PM₁₀ and a 2 to 3 per cent increase in NO_x emissions from road transport emissions in the WEZ. Impacts outside WEZ, including London as a whole are modelled at no effect to a small increase and even a small decrease in both emissions in the original central zone.

These pollutants are harmful to human health and for this reason the EU has set limit values for them (see next section). The GLA report⁸ which is referred to, estimates that fine particles (PM_{2.5}) have an impact on mortality equivalent to 4,267 deaths in London in 2008. It should be noted that this report considers the impact of all sources of particulates and, as the report states, the risks and potential years of life lost are distributed across the whole population and the equivalent mortality rate needs to be understood in this way.

With a size of around 17 square km, the Western Extension is a relatively small part of London and it would be expected that the effects of its removal on overall emissions, and impact on human health would be of a relatively small magnitude. The IIA stated that no significant health effects are likely as a result of the removal of WEZ. It is also important to note that, as set out in the consultation information, although the introduction of WEZ led to a reduction in air pollutant emissions, it did not have a direct discernible effect on air quality.

Air quality is clearly an important consideration, nonetheless (as set out in the section below) it is expected that the EU limit values for PM₁₀ will be met in 2011 even without WEZ. Furthermore, the measures set out in MTS and the draft MAQs will, over time, deliver benefits to air quality which will more than offset any adverse impact from WEZ removal, should the Mayor decide to confirm this. In order to be prudent, modelling for the MAQS assumed that WEZ would be removed.

The published MTS contains proposals to reduce emissions and improve air quality in London. The draft MAQS also provides details on a number of policies to achieve this. Some of the measures are London-wide but others target specific priority locations which have poor air quality. Examples of other measures include the introduction of age-based limits for taxis and private hire vehicles, to take the oldest and most polluting vehicles off the roads. MTS commits to the introduction of cleaner buses, taxis and PHVs (all new buses from 2012 will be low emission) and the Mayor's Electric Vehicle Delivery Plan will increase the proportion of these lower-polluting vehicles in use and in London.

Meeting EU Air Quality limit values

Six stakeholders made a comment with regard to the UK's ability to meet EU air quality limit values in the context of WEZ removal. These were: CCAL, Client Earth, Energy Saving Trust, Environmental Protection UK, Friends of the Earth and the London Borough of Greenwich.

The European Union has set standards for concentrations of certain air quality pollutants which are harmful to human health. Some respondents to this theme

⁸ Report on estimation of mortality impacts of particulate air pollution in London, Dr Brian G Miller, June 2010

stated that the removal of the WEZ would undermine the UK's ability to meet the limit values for NO₂ and PM₁₀, indicating that this would be a failure of the Mayor's duty to contribute to the improvement of air quality and incurring fines on the UK government (one stakeholder raised the possibility of such a fine being passed on to London). The potential for exceeding the PM daily limit value at specific locations in the WEZ was also raised. Finally, given that an extension application for NO₂ had not yet been made, it is not appropriate to take action which may increase emissions of this pollutant.

In Question 6 of the public questionnaire, 1 per cent of respondents commented that the impact of removing WEZ was incompatible with the Government's environmental stance.

In its response to the recent consultation on the deferral of LEZ Phase 3, CCAL stated that information about which boroughs had expressed concern about EU limit values had not been included in the consultation information for the three consultations (draft MAQS, LEZ Phase 3 deferral and WEZ removal consultation).

TfL response

As set out in the Supplementary Information and IIA, TfL's modelling indicates that removal of WEZ would lead to rising traffic levels and local increases in emissions of air pollutants from road transport. The potential impact on emissions of PM₁₀ and NO_x in this context have been quantified for WEZ, the original charging zone, the inner ring road and London as a whole. However, it should be noted that although the Western Extension led to reductions in emissions, this did not have a direct discernible impact on air quality.

It should be noted that the EU limit values apply to the UK as a whole, although PM₁₀ exceedances have so far only been recorded in London and there are locations within London that are potentially at risk of exceeding these values for both pollutants.

The effect of WEZ removal on air quality also needs to be considered in the context of the measures to improve air quality committed to in the MTS and proposed in the draft Air Quality Strategy. The potential effects on PM₁₀ and NO₂ emissions and the ability to meet EU limits are considered separately below but it may be helpful to first reiterate the legal context.

The UK has a duty to meet the EU limit values. Should the EU limit values for PM₁₀ and NO₂ not be met, infraction proceedings against the Government could lead to significant fines, potentially in the region of £300m per year for each pollutant. This would be levied on the Government, which may in turn take steps to try to recover the costs from other parties. The Mayor has a duty to produce an Air Quality Strategy (MAQS) setting out the measures London will take to improve its air quality

and it is expected that, following public consultation, this new Strategy is likely to be adopted before the end of 2010. This contains both Londonwide and, if required, local measures to improve air quality and targeted local measures for specific locations where these might be required, including in locations in the WEZ if deemed necessary.

In April 2009 the UK Government submitted its time extension notification to the European Commission, seeking to extend the deadline for complying with the PM₁₀ EU limit values to 2011. The Commission rejected the Government's notification in December 2009, and the Government has now made a further submission using updated projections to show that compliance is expected to be achieved in 2011, even allowing for the removal of WEZ.

The Government intends to apply to the EU in 2010/11 for a time extension to the NO₂ limit values until 2015. NO₂ is a national problem and the application will cover many regions and cities in the UK, not just Greater London.

Impact of WEZ removal on meeting PM₁₀ target

As set out in the Supplementary Information, it is projected that even with the removal of WEZ in December 2010 the EU limit values for PM₁₀ would be met in the area in 2011. With regard to stakeholder concern about possible exceedances at specific locations within the WEZ (Knightsbridge, Brompton Road, Thurloe Place and Cromwell Road), the modelling indicates that the highest concentrations of PM₁₀ occur in the road and not on the pavement (Fig 5-1 in the Supplementary Information). The highest concentrations of PM₁₀ are predicted to occur within the road carriageway itself and TfL's analysis is that EU limit values would be met within the Western Extension area, both with and without the WEZ. It should be noted that the model is likely to contain some 'noise' and is not primarily set up to provide data at this level of detail.

The modelling does not take account of the effects of other measures to reduce emissions set out in MAQS which means that this map is likely to over-state the prevalence of exceedances.

The MAQS contains a broad suite of measures such as age-based limits for taxis and the London Low Emission Zone in order to reduce air pollutant emissions from road transport. In addition, it provides that local measures could be applied in specific locations should the need arise.

Impact of WEZ removal on meeting NO₂ target

Defra is responsible for the assessment of compliance of NO₂ concentrations, including the attainment of the 60 µg/m³ margin of tolerance that would have to be adhered to should the UK be granted a time extension for compliance with NO₂ limit values.

London is obliged to meet a yearly limit value for NO₂ of 40µg/m³. In line with the Government's approach, the Mayor is working towards achieving the limit values for NO₂ by 2015.

Within the WEZ area, the EU limit value for NO₂ is not expected to be met even with WEZ remaining. The removal of WEZ does not impact in any significant way on the overall ability to meet the EU NO₂ limit values, even though an increase in emissions is predicted to occur. TfL and GLA are working with Government in order to tackle the broader challenges associated with meeting the NO₂ limit values which are also an issue for other parts of the UK and the rest of Europe.

It is for the Mayor to decide whether or not to confirm Variation Order 1 and remove the Western Extension. Although, as highlighted, the removal of WEZ would increase air pollutant emissions, whether or not the WEZ is in place would not in itself have a significant impact on the ability to meet EU limit values for NO₂.

The loss of revenue to TfL from WEZ removal

Fourteen stakeholders commented on the impact of WEZ removal on TfL's revenue. These were: CCAL, CTC, Darren Johnson AM, Energy Saving Trust, Friends of the Earth, Jeremy Corbyn MP, Val Shawcross AM, London Borough of Greenwich, London Borough of Hounslow, London Borough of Tower Hamlets, London Cycling Campaign, London TravelWatch, Sustrans and The Society of Motor Manufacturers and Traders.

Stakeholders commented that the significant reduction in TfL's revenue resulting from WEZ removal could be ill-afforded at a time of public sector cuts, and that this may limit TfL's ability to deliver its programme for delivering the objectives set out in MTS, for example encouraging the use of sustainable modes. Respondents were concerned about the potential negative impacts on public transport provision.

In Question 6 of the questionnaire, 4 per cent of responses expressed concern about the loss of revenue for TfL; 1 per cent of responses were concerned with the cost of WEZ removal.

In addition to the respondents listed here, the following respondents to the recent consultation on the deferral of LEZ Phase 3 made comments about the revenue raised from the Western Extension: CCAL, Campaign for Better Transport (CBT) and Friends of the Earth. These three respondents suggested that this income could be used to provide financial assistance to operators who needed to upgrade their vehicles to comply with Phase 3 of the LEZ.

TfL response

All Congestion Charging revenue is, by law, spent on implementing the Mayor's Transport Strategy – including improving public transport and making provision for cyclists and pedestrians. It is acknowledged that the impact of WEZ removal on TfL revenue would be significant; around £55m (net) per year. In order to factor this into future planning, TfL's Business Plan, published in October 2009, assumes this net loss of income from the end of 2010.

It is also clear that we are currently facing a time of severe financial constraint in the public sector which will have an impact on TfL's overall funding. In common with other non-protected departments, the Department for Transport – which currently provides £3bn a year to TfL – has been asked to model budget cuts of 25 per cent and 40 per cent up to the year 2014, as part of the Government's Comprehensive Spending Review. An announcement is expected from the Government on 20 October; meanwhile TfL has been examining where efficiencies could be made and the possible impact of these scenarios on its spending, while making the case for continued investment in the Tube upgrades and Crossrail. Prior to this review, TfL had already begun a savings and efficiencies programme, which will achieve £5bn savings over the lifetime of the current Business Plan (2009/10 to 2017/18).

Policy 36 of the MTS sets out that the Mayor and TfL will seek to secure further investment from a range of sources for transport services in London; for example, the approach to securing developer contributions to Crossrail is contained in the MTS and the draft Replacement London Plan.

However, the primary aim of the Congestion Charge is to reduce congestion, and not to raise revenue. While the loss of revenue to TfL is unwelcome, particularly given current constraints, it is not considered enough in itself to justify retaining the WEZ. It is for the Mayor to consider the overall effects of removal, the views made during this consultation and to take a decision on this matter.

If the Mayor decides against removing the Western Extension, TfL would be unable to reinvest the net revenue from this part of the zone to subsidise grants for operators affected by LEZ Phase 3, as suggested by some stakeholders. By law, revenue from the Congestion Charge must be used to support the delivery of the MTS. Furthermore, given the constrained funding situation facing TfL, any such revenue would need to be allocated to initiatives already outlined in TfL's Business Plan.

The loss of revenue is unwelcome, particularly in the current circumstances. However, it is not the purpose of the Congestion Charge to raise revenue and the Mayor will need to consider this loss alongside the factors favouring removal, and the extent to which this loss can be managed.

WEZ encourages use of public transport and improves conditions for cyclists

Four stakeholders commented on the adverse impacts of WEZ removal on cyclists and on encouraging the use of public transport. These were: CTC, Val Shawcross AM, London Cycling Campaign and Sustrans.

Respondents noted that London had seen a shift away from private car travel to public transport and cycling, and were concerned that the removal of WEZ and associated traffic increases would undo this effect.

In Question 6 of the questionnaire, 3 per cent of responses stated that WEZ benefits cyclists and 2 per cent that it encouraged the use of public transport.

TfL response

There has been a net shift away from private transport and towards the public modes since the introduction of the Congestion Charging Zone in central London, which continued once the WEZ was introduced. Should the Mayor decide to remove WEZ, the Mayor and TfL would still be committed to encouraging the use of sustainable modes, as set out in the policies and proposals in MTS.

In particular, the Mayor has committed to achieving a Cycling Revolution in London and has set a target to increase cycling by 400 per cent by 2026 from the base in 2001; from a two per cent mode share currently to five per cent by 2026. This will be achieved by a programme of measures, including the Barclays Cycle Hire Scheme which has recently been implemented in central London, with many of the docking stations in RBKC and the City of Westminster (which are in the WEZ area). Two Barclays Cycle Superhighways were launched in summer 2010 and a further four are expected by 2012, two of which will pass through or on the boundary of the WEZ area.

Given the range of measures in place to promote cycling, walking and public transport, and the relative size of the WEZ compared to London as a whole, it is not thought that there would be any significant adverse effect on sustainable modes from WEZ removal.

The impacts of the WEZ on the local economy

Eight stakeholders commented on the impacts of the WEZ on the local economy. These were: London Assembly Liberal Democrat Group, Friends of the Earth, London Borough of Hammersmith & Fulham, London Borough of Tower Hamlets, London Borough of Wandsworth, Royal Borough of Kensington & Chelsea, Automobile Association and Westminster City Council.

Four respondents commented on the negative impacts of the WEZ on local businesses in the zone. One stated that the evidence for this negative impact on local trade was not persuasive; another stated that congestion itself incurred an economic cost to road users.

In Question 6 of the questionnaire, 13 per cent of responses commented that the removal of WEZ would have a positive impact on the local economy and/or small businesses.

TfL response

The IIA notes that there are a number of different aspects of the impact of WEZ and its proposed removal on the economy, including the local economy, and that there is uncertainty within the assessment for each. It assesses the impact of WEZ removal on six objectives which contribute to the primary objective of supporting London's economic development.

It is acknowledged that some businesses in the Western Extension report an adverse effect from the Congestion Charge in this area and could therefore perceive benefit from not having to pay the charge if the WEZ is removed. It is also possible that the removal of the charge could encourage more shoppers to the area and thus benefit local businesses, particularly small-to-medium sized businesses.

That said, increased traffic and congestion from WEZ removal will incur its own cost by making journeys through the area less efficient, especially for freight. Both individuals and businesses would experience travel-related disbenefits from the removal of the charge in this area, with these costs to businesses being greater due to higher value of time. However, in terms of financial and compliance-related benefits, these disbenefits would be offset by the savings made by no longer having to pay the charge to drive in the WEZ. Businesses would gain more from this aspect, but, as described, would also experience more disbenefits in terms of time-related impacts. The net effect would depend on which of the two Scenarios for returning traffic proves most accurate. Overall, since it is assumed that Scenario 2 (80 per cent of traffic returns) is most likely, there would be some modest net benefits to businesses and consumers could be expected from removing the WEZ.

There are convincing arguments on both sides with regard to the impacts on businesses if WEZ were to be removed, and much may depend on individual businesses and the decisions taken by them and their customers. On balance, it is considered that there may be modest net benefits to businesses and consumers from removing the WEZ (as set out in the Supplementary Information). Meanwhile, the cost of removing the WEZ, and the ongoing loss of revenue, would be borne by TfL.

The impacts of removing the WEZ on residents (including car parking and noise impacts)

Six stakeholders made comments about the impact of WEZ removal on residents in and around the zone. These were: Kit Malthouse AM, Val Shawcross AM, London Borough of Hammersmith & Fulham, London Borough of Wandsworth, Sustrans and Westminster City Council.

Three stakeholders commented that WEZ removal would have a positive effect because the cost of the charge has deterred local people from entering the zone and using shops and services; Sustrans said there would be a negative effect. The London Borough of Hammersmith & Fulham stated that the WEZ had exacerbated parking stress in the borough. Kit Malthouse AM was concerned about the effects of removal on parking availability for residents of Hyde Park ward and who use parking zones F1 and F4. Val Shawcross AM said that noise would increase in the WEZ if it was removed.

In Question 6 of the questionnaire, 10 per cent of responses commented that there would be a positive impact on residents from WEZ removal, and 1 per cent that it would be negative. Several letters and emails were received from residents and residents' associations in the WEZ close to the western boundary of the original zone, stating that their ability to park in Controlled Parking Zones (CPZs) F1 and F4 would be limited if the WEZ was removed.

TfL response

On-street parking is a matter for the relevant London borough and CPZs are in operation in this area; TfL is happy to work with affected boroughs in their consideration of how to address any traffic and parking management issues. Residents and their representatives who are concerned about this issue are also encouraged to raise this issue with their borough, so that modifications to parking zones, for example, can be considered. However, it would not be possible to, for example, change the proposed boundary of the scheme in order to include Hyde Park Ward in the central zone, because of the need for an appropriate diversionary route. In addition, this type of adjustment would be likely to lead to claims of special treatment being given to this group, and set a precedent for other such claims for other areas where parking zones straddle the charging zone. It should also be noted that there is no Congestion Charge for cars parked in residents' bays and not moved within charging hours.

There may be small increases in noise as a result of the decommissioning work to remove WEZ infrastructure; however this would be temporary and would be subject to the usual controls on road and streetworks. Overall WEZ removal is not expected

to affect noise levels. Electric vehicles can help to cut noise pollution from road traffic and if confirmed, the proposed changes to the electric vehicle discount could help to incentivise their take-up, as would other measures included in MTS.

In making his decision, the Mayor will need to consider the impacts of WEZ removal on particular residents of the area, and how far these might be mitigated, for example by boroughs deciding to make alterations to parking zones. The matter of CPZs is one for the relevant boroughs and it is for them to decide whether these need to be changed in the context of WEZ removal.

Complementary Measures (including use of cameras and impact on public transport journey times)

Twelve stakeholders made comments regarding complementary measures for WEZ removal. These were: London Assembly Liberal Democrat Group, Environmental Protection UK, Freight Transport Association, Friends of the Earth, Kit Malthouse AM, Val Shawcross AM, London Borough of Hammersmith & Fulham, London Borough of Tower Hamlets, London Borough of Wandsworth, Sustrans, Tandridge District Council and the Automobile Association.

Stakeholders said that there needed to be complementary measures to mitigate the effect of WEZ removal on traffic levels, congestion and parking. One respondent stated that bus journey times would increase as a result of WEZ removal; another called for TfL to assess whether there was a potential adverse impact in areas contiguous to Greater London. Two stakeholders stated that complementary measures should be introduced regardless of whether WEZ was removed and there was a concern that roadspace might be taken from other users. One respondent said that the camera infrastructure in WEZ should be retained for use in other schemes.

In Question 6 of the questionnaire, comments regarding the negative impact on public transport journey times and the need for complementary measures were made in 1 per cent of responses.

Note that air quality mitigation measures are considered in the Air Quality Impacts section above.

TfL response

This matter needs to be considered in the context of the overall transport objectives and policies set out by the MTS, as well as the specific mitigation and complementary measures which would accompany WEZ removal. The Transport Strategy commits to mitigating the impacts of WEZ removal as far as possible, while

it is acknowledged that full mitigation of congestion impacts would be likely to require re-allocation of roadspace, which is not considered feasible or appropriate.

Measures included in MTS that would be available for use in WEZ and surrounding area include improving the efficiency of junction operation by use of SCOOT technology; improving the TLRN in the area; encouraging mode shift by promoting cycling and walking; and funding the provision of car club bays (to reduce the need for drivers to own a car) in the WEZ. Bus journey times would be adversely affected by WEZ removal, but would be mitigated to some extent by other measures to smooth traffic flow and improve journey planning information. TfL has also committed to a review of bus services, including those in the WEZ.

Complementary and mitigation measures will be applied as deemed appropriate: some are already underway in advance of removal as part of broader programmes of action, some would follow removal when a fuller picture of the impacts emerges, and some may require a longer implementation timescale. Decisions about this matter would need to be made on a case-by-case basis, weighing the impacts on the Mayor's transport objectives and road users.

It is not expected that there would be any adverse effects on areas outside Greater London. TfL is considering, and discussing with interested boroughs, whether and how some cameras can be retained for traffic monitoring purposes.

Removal of WEZ is contrary to other Mayoral commitments

Ten stakeholders commented that WEZ removal would be contrary to other Mayoral commitments. These were: CCAL, Client Earth, CTC, Friends of the Earth, Val Shawcross AM, London Borough of Hounslow, London Borough of Tower Hamlets, Royal Borough of Kensington & Chelsea and Sustrans.

Stakeholders commented that by removing the WEZ, the Mayor's policies to reduce emissions of CO₂ and air quality pollutants from transport, as set out in the MTS, Climate Change Mitigation and Energy Strategy (CCMES) and draft MAQS would be undermined, including the commitment to reduce CO₂ emissions overall by 60 per cent. Respondents also referred to a reduced ability to deliver on other objectives in MTS such as increased walking and cycling. One respondent commented that it would undermine its ability to deliver on these objectives in its Local Implementation Plan. Finally, two stakeholders stated that, were he to decide to remove the WEZ, the Mayor would not be fulfilling his duties with regard to improving the health of Londoners and addressing health inequalities.

In Question 6 of the questionnaire, less than 1 per cent of responses were about WEZ removal being contrary to other Mayoral commitments.

Please see the separate section above with regard to meeting the EU limit values for air quality pollutants.

TfL response

The Mayor announced his intention to remove the WEZ, subject to consultation, well in advance of the publication of these strategies and the proposed removal of the WEZ has informed their development. The proposal to remove the WEZ is in conformity with the MTS as confirmed in May 2010 and is contained within it as Proposal 128.

While TfL acknowledges that WEZ removal will result in small increases of CO₂ and air pollutants from road traffic in the zone (see sections above), this needs to be considered both in terms of its relatively small impact on London as whole and in the context of the range of other measures to reduce these emissions, as set out in the MTS, draft CCMES and draft MAQS. The Mayor remains committed to a 60 per cent reduction in CO₂ emissions in London, and policies set out in CCMES and MTS will enable an appropriate reduction of the emissions from transport.

However it is recognised that the reduction in revenue to TfL associated with WEZ removal will have an impact on the amount of money available to spend on measures in the MTS, albeit relatively small as a proportion of annual investment.

With regard to boroughs and LIPs, the new Guidance on Developing the Second Local Implementation Plans gives boroughs the flexibility to set targets that are “challenging and realistic in the local context”. Therefore the borough can set targets that reflect the removal of the WEZ, along with appropriate evidence to demonstrate the impact of WEZ on the delivery of their targets and their LIP in its entirety. TfL and borough officers are continuing to meet to discuss proposed targets and the LIPs in general.

The Mayor has duties with regard to Londoner’s health and health inequalities. However WEZ removal needs to be considered in the light of broader policies to fulfil these duties (including the recent Health Inequalities Strategy) and the IIA assessment of its impact on health and health inequalities. These suggested that no significant effects on health inequalities are expected as a result of the removal of the WEZ and that there are unlikely to be any significant health effects from changes in emissions.

However it is clear that WEZ removal in itself will not contribute directly to some of the objectives in the MTS, for example smoothing traffic flow and reducing vehicle emissions. However, this needs to be considered alongside its contribution to

meeting other objectives in the MTS, for example economic development and quality of life objectives. It is unlikely that any individual proposal could meet all the objectives and therefore this proposal needs to be considered in the overall context of the MTS and the Mayor's other strategies and duties.

The Residents' Discount and the Western Extension

Five stakeholders commented on the future of the Residents' Discount. These were: London Assembly Liberal Democrat Group, Kit Malthouse AM, London Borough of Camden, London Borough of Hounslow and Westminster City Council.

Three stakeholders supported the proposal to make the Residents' Discount unavailable to residents of the WEZ area, with one stating that the discount had contributed to congestion in the original central zone. Kit Malthouse AM stated that residents of Hyde Park ward should retain the discount (because some residents need to access medical services in the central zone) while Westminster City Council stated that there should be a continuation of the discount for residents in Edgware Road, Bressenden Place and Pimlico and also stated that it should be extended to all Westminster residents.

In Question 6 of the questionnaire, the proportion agreeing with the removal of the Residents' Discount from WEZ residents was the same as for those disagreeing: 1 per cent.

TfL response

The rationale for having a residents' 90% discount is that drivers living within the zone do not have the same opportunity to choose to avoid the zone during charging hours. However it is considered appropriate to set a relatively small charge because these journeys still contribute to congestion and to encourage residents to consider other modes of transport.

Additional residents' discount zones also exist in certain specific locations around both the WEZ and original central zone based on criteria including the presence of a physical barrier which impedes the use of an alternative route. If the Mayor decides to remove the WEZ, this scenario would no longer apply for residents of the former Western extension area. Residents in the additional discount zones associated with the Western extension would no longer be eligible for this discount; additional discount zones associated with the original charging zone, and those put in place when the WEZ was implemented but which relate to the original zone would stay in place.

TfL does not consider that providing a residents' discount to specific locations which would now fall outside the charging zone would be appropriate, and notes that these locations were not designated as additional zones before the introduction of WEZ. Modifications of this kind are not considered to be warranted and would set a precedent which could potentially undermine the scheme. It should also be noted that there is no Congestion Charge for cars parked in residents' bays and not moved within charging hours. With regard to the issue of residents needing to access hospitals or services in the central zone, public transport provision is excellent and access to services in this area (even if the central zone is excluded) is at a very high level. Additionally, the 100% discount for Blue Badge holders and the NHS Reimbursement Scheme would still be available with regard to the remaining charging zone.

The issue regarding an extension of the discount to all Westminster residents has been raised before (for example in the public consultation on the Scheme Order implementing the WEZ) and TfL has not changed its view that this would not be appropriate. Additional residents' discount zones have to meet criteria including the presence of a physical barrier (as in the case of the West London Railway Line), limitations to access to services and the need to provide an appropriate diversionary route.

TfL notes support for ending the Residents' Discount for residents in the WEZ area.

Additional Matters Arising

As described in Section 1.2 of Chapter 1, Friends of the Earth, CCAL and Client Earth raised a number of issues regarding the information presented in the consultation information and in information provided in response to an EIR request about the impacts of WEZ removal. Some of the issues have been addressed in the earlier part of this theme, but for clarity they have also been separated into two sections below. The first section concerns the modelling undertaken by TfL, the second concerns air pollutant emissions and EU limit values.

TfL's modelling

Issues raised:

- There was insufficient information presented about the impacts on health of Londoners, and on equalities groups
- The road network capacity assumptions underlying TfL's modelling of traffic and emissions were questioned
- MAQS measures are uncertain and unquantified
- TfL's modelling indicates breaches of EU limit values if WEZ is removed

TfL Response

Information about the impacts of the proposal on the health of Londoners and on equalities groups is provided in the IIA, and summarised in the Supplementary Information, both of which were made publicly available for the consultation. There is a balance to be struck between providing sufficient information to enable people to respond to the consultation, and ensuring that the level of detail neither overwhelms the reader nor potentially exaggerates the degree of certainty which is it is possible to attain. Additionally, it is important to keep in mind the scale of the impact of WEZ removal on London as whole, given the size of the zone and the many other factors affecting the health of Londoners, and present information at a level commensurate to this impact.

As the consultation information states, the modelling has to take account of a number of uncertainties, for example, changes in road network capacity and driver response. With regard to health impacts, the IIA states that the health of any individual is determined by many factors, and also that the effects will be influenced by a number of factors including the behaviour of drivers and users of public transport. As a prudent response to these uncertainties, TfL has assumed worse case scenarios in its modelling of traffic and air quality emissions impacts, and it has not included the effect of potential mitigation measures.

TfL considers that the information provided was at a level of detail appropriate to the consultation, and reflected the scale of the impacts and the uncertainties involved in modelling these.

The road network capacity assumptions used in the modelling are set out in the Supplementary Information. In modelling the traffic and congestion impacts (Table 4-1), it is assumed that no capacity is recovered, and in considering road transport emissions (Tables 4-2, 4-3 and 4-4), it is assumed that around half of the lost capacity is recovered. While these are indeed different assumptions, in each case they represent the *worst case* for the impacts under consideration. As stated above, there are uncertainties around the impacts of WEZ removal, and in order to manage these, TfL chose to take a cautious approach.

This cautious approach extended to TfL's consideration of how the impacts of WEZ removal on air quality might be mitigated. The complementary and mitigation measures are set out in the Supplementary Information. In addition there are measures to reduce road transport emissions set out in MTS and in the draft MAQS, along with a proposal to apply specific local measures if required. However, none of these potential mitigations was factored into the modelling of the impacts of WEZ removal and therefore it is not necessary in this context to quantify their effects, nor make any assumptions about the success of innovative approaches. Even without

the incorporation of these measures into the modelling, WEZ removal would produce only a small increase on air pollutant and CO₂ emissions within WEZ, and have a neutral or small positive effect on London as a whole. In addition, it is projected that EU limit values for PM₁₀ would be met in 2011.

It is reasonable to expect that the measures set out in the draft MAQs, and those in MTS and WEZ complementary measure, would more than offset any undesirable air quality impacts from WEZ removal, and deliver greater reductions in emissions. In particular, the proposal to apply age-based limits to taxis set out in the draft MAQS will be important, given the relatively high number of taxis in the area, and their contribution to road transport emissions.

Figure 6-2 in the IIA is a detailed map of PM₁₀ concentrations along Cromwell Rd. It shows that the highest concentrations of PM₁₀ are predicted to occur within the road carriageway itself. TfL's analysis, taking into account contours which lie along the road surface and close to the kerb, and the grid spacing of the modelling methodology, lead to the conclusion that EU limit values are expected to be met within the Western Extension area, both with and without the WEZ scheme.

TfL's modelling indicates that WEZ removal has no impact on meeting the EU daily limit value for PM₁₀ concentrations in the area in 2011.

Information on Air pollutants and EU Limit Values

Issues raised:

- Information on whether the margin of tolerance for meeting NO₂ limit values should have been provided
- Levels of NO₂ indicated on Brompton Road (in map provided in EIR response) would be unlawful
- Inappropriate for WEZ removal to be considered at a time when the UK is applying for a Time Extension Notification (TEN) for PM₁₀ limit values and risk of incurring a fine

TfL Response

The assessment of compliance with margins of tolerance with regard to EU limit values is undertaken by Defra as part of its national assessment. It is not TfL's responsibility to do this, although TfL and the GLA continue to work with Defra on their assessment and associated matters. TfL has however assessed the potential impact of WEZ removal on annual mean concentrations of NO₂ and concluded that these are minor, and do not affect the likelihood of the UK attaining the EU limit values.

In response to an EIR request, TfL provided a map which showed predicted annual mean concentrations of NO₂ in and around Brompton Rd with and without WEZ. As

was set out in the accompanying letter, the modelling for 2011 shows that in central London, most background locations are above the limit values, whilst within the Western Extension area, background⁹ concentrations tend to be lower, but that the limit value is predicted to be exceeded at most roadside locations – both with and without WEZ. Within the WEZ area, the EU limit value for NO₂ is not expected to be met even with WEZ remaining. The removal of WEZ does not have a significant impact on the overall ability to meet the EU NO₂ limit values, even though an increase in emissions is predicted to occur. TfL and GLA are working with Government in order to tackle the broader challenges associated with meeting the NO₂ limit values which are issue for other parts of the UK and the rest of Europe.

The TEN application for PM₁₀ has been made by the UK Government, with the assistance of TfL and the GLA. As already indicated, TfL's analysis leads to the conclusion that EU limit values are expected to be met within the Western Extension area, both with and without the WEZ scheme. However, the policies contained in the draft MAQS and in the MTS will ensure that road transport emissions in London are reduced, and as indicated earlier, in order to give a prudent assessment, no mitigation measures have been factored into TfL's modelling of the impacts of WEZ removal.

With regard to a potential application for a TEN for NO₂, again the submission of an application would be a decision for the UK Government. The consultation information sets out the expected increases in emissions from WEZ removal but this needs to be understood in the context of the overall approach to reducing road transport emissions in London as set out in the draft MAQs and in the MTS. The fact that the Government may make an application for a TEN does not prevent other developments taking place.

While the WEZ was not primarily intended as a measure to improve air quality, there will nevertheless be some adverse impacts on emissions should the Mayor decide to remove it. These impacts need to be considered in the context of measures set out in the MTS and the MAQS to improve air quality.

TfL Recommendations

No change to Variation Order 1

⁹ Background in this context refers to locations which are further from roads and affected by a mixture of emissions from different urban sources. While road traffic emissions are still important at these locations, they come from many different roads in the area, rather than being dominated by a single road source which tends to be the case immediately next to roads. Background concentrations tend to be highest in central London due to the density of emissions from the urban area and road network, along with more limited dispersion in built up environments.

Theme D: Increase in the level of the charge

Representations made within this theme concerned support and opposition to the proposed increase in the level of the Congestion Charge, comments on the fairness of the proposed charge increase, suggestions that the charge should be increased further than the proposed amount, or that it should not be increased so much. Other comments considered here include: that increasing the charge was inappropriate in the current economic climate, that a better justification was required, or that an alternative charging tariff should be introduced. A few miscellaneous comments are also analysed here.

Analysis of responses

25 stakeholders made comments relevant to this proposal. These were:

The British Security Industry Association, the British Vehicle Rental and Leasing Association (BVLRA), the London Assembly Liberal Democrat Group, the City of London, CTC, the Energy Saving Trust, Environmental Protection UK, the Federation of Small Businesses, the Freight Transport Association, Friends of the Earth, the London Boroughs of Camden, Greenwich, and Tower Hamlets, the London Chamber of Commerce & Industry, London Councils, the London Cycling Campaign, London TravelWatch, Sustrans, the Association of British Drivers, the Automobile Association, Westminster City Council, the Royal Mail, the Royal Borough of Kensington & Chelsea, Roadpeace, and the Association of International Courier and Express Services.

Question 7 of the public questionnaire invited comments regarding the other changes to the Congestion Charging scheme, one of which is the proposed charge increase. Fifty-six per cent of respondents to the public questionnaire made a comment in this text box, while 43 per cent made no comment here.

Analysis of responses to Question 7 shows that 13 per cent of responses opposed the charge increase and eight per cent supported it. Two per cent of responses stated that there was a need for alternative charging system and the charge increase is not appropriate in the current economic climate. One per cent of responses stated the following: that the charge increase should be higher; that a better justification should be made; and that the charge should be less. Other comments on the proposal were made by less than one per cent of respondents.

Issues raised

The following is a list of issues raised:

- Support for or opposition to the proposed increase in the level of the charge
- Comments on the fairness of the proposed charge increase

- Increasing the charge is inappropriate in the current economic climate, requires a better justification or an alternative charging tariff should be introduced
- Suggestions that the charge should be increased further than the proposed amount or that it should not be increased so much
- Other/irrelevant

Support for and opposition to the proposed charge increase

Twelve stakeholders (the Assembly Liberal Democrat Group, the City of London, CTC, the Energy Saving Trust, Environmental Protection UK, the Federation of Small Businesses, the Freight Transport Association, Friends of the Earth, the London Boroughs of Camden, Greenwich, and Tower Hamlets, the London Chamber of Commerce & Industry, London Councils, the London Cycling Campaign, Sustrans, the Association of British Drivers, the Automobile Association, Westminster City Council, the Royal Mail, and the Royal Borough of Kensington & Chelsea) made comments explicitly in support of the proposed increase in the level of the charge.

Meanwhile, six stakeholders (British Vehicle Rental and Leasing Association (BVLRA), the Federation of Small Businesses, the Association of British Drivers, the Automobile Association, Westminster City Council, and the Royal Mail) made comments opposing the proposed increase.

TfL response

TfL notes these comments in support or opposition to the proposal. It is perhaps not surprising that some stakeholders are opposed to an increased charge, however TfL is pleased to note that more stakeholders express support for the proposal than opposition. Further information regarding TfL's position on the charge increase can be found in the following sections.

Comments on the fairness of the proposed charge increase

Six stakeholders (the British Security Industry Association, the British Vehicle Rental and Leasing Association, the Federation of Small Businesses, the Freight Transport Association, and the London Chamber of Commerce & Industry, the Association of International Courier and Express Services) suggested that the proposed charge increase was unfair, particularly on those operating fleets of vehicles. Some stated that delivery and freight vehicles do not have the same capacity to alter the time or location of their journeys that private motorists do.

Many also felt that it was unfair that registered fleet vehicles would be required to pay £9 in future (along with all CC Auto Pay users) where currently they pay £7, in comparison to the standard daily charge of £8, suggesting that this amounted to a removal of a discount.

TfL response

While TfL recognises that private motorists may have more flexibility than commercial vehicles in choosing the time, destination or route of their journeys, commercial vehicles nonetheless contribute to congestion. Commercial traffic with high values of time benefit most from the relative reductions in congestion achieved by the Congestion Charging scheme. Commercial operators may also be able to pass on their costs to customers.

TfL does not agree that the proposal to charge registered fleet vehicles £9 per day amounts to an unreasonable removal of a discount. The £7 charge for registered fleet vehicles was introduced in July 2005, when the headline charge was increased to £8. The £1 discount on the £8 charge was intended to mirror the discount offered to chargepayers purchasing monthly or annual period charges, which were discounted by around 15 per cent. As part of the proposal to introduce CC Auto Pay, the discount for purchasing these charges monthly or annually would be removed as the new payment option would mean that people are charged only for the days that they drive in the zone. TfL therefore considers it appropriate that the fleet vehicle discount also be removed. Both Fleet and CC Auto Pay users will pay £1 less than those who chose to pay the charge manually, and additionally drivers with vehicles registered for Fleet Auto Pay would continue to benefit from the support of a dedicated Fleet Team to handle account-related enquiries.

Increasing the charge is inappropriate in the current economic climate, requires a better justification, or an alternative charging tariff should be introduced

Nine stakeholders (the British Vehicle Rental and Leasing Association, the Federation of Small Businesses, the London Chamber of Commerce & Industry, Westminster City Council, the Freight Transport Association, the Automobile Association, London TravelWatch, the Royal Mail, Roadpeace and the Association of International Courier and Express Services) made comments suggesting that the proposed increase in the charge was inappropriate in the current economic climate, that a better justification than that given by TfL was required in order to do so, or that TfL should introduce a tiered charging tariff to vary the price of driving in the Congestion Charging zone for different types of vehicle or to distinguish between different journey purposes or time of day.

TfL response

TfL recognises the difficulties that many businesses are facing in the current economic climate. The Mayor's Transport Strategy sets out TfL's commitment to ensuring that the transport system supports London's economic development, alongside its other objectives.

While TfL acknowledges the proposed charge increase would represent an increase in costs to those paying the charge, it notes that the real-terms cost has been

gradually eroded over the five years since it was last increased in July 2005 and considers that it is necessary to increase the charge in order to maintain the effectiveness of the scheme.

The proposed increase from £8 to £10, or to £9 for CC Auto Pay users, would address this and help to maintain the relative deterrent effect of the charge in comparison to other transport costs and fares, ensuring that the decongestion effects of the scheme are maintained. This would benefit all who travel in the Congestion Charging zone, including private and commercial motor traffic and those using public transport or physically active modes to access employment markets or retail and leisure facilities. The real-terms increase in the charge is very small.

TfL considers that the rationale it has presented for the proposed change is sufficient.

TfL keeps the performance of the Congestion Charging scheme under review, and monitors emerging examples of best practise in sustainable transport and traffic management around the world. In central London, where heavy traffic and congestion are all-day phenomena, TfL continues to regard the all-day flat-rate area charge as the most appropriate and effective way to restrain traffic and keep it moving in the most congested part of the Capital.

The feasibility and appropriateness of introducing lower charges for commercial traffic is uncertain, not least because of the difficulty of defining such a discount, and as noted above, commercial traffic contributes just as much to congestion as private traffic. Commercial traffic, with high values of time, tends to benefit more than private traffic from the reduction in congestion delivered by the Congestion Charging scheme. Likewise, although TfL proposes to stimulate a switch to some of the most environmentally-friendly vehicles through the Greener Vehicle Discount and changes to the existing Electric Vehicle Discount, TfL has no plans to discourage the use of larger or more polluting vehicles through higher charges.

Suggestions that the charge should be increased further than the proposed amount or that it should not be increased so much

Two stakeholders (the London Chamber of Commerce & Industry and the Automobile Association) made comments suggesting that the proposed increase in the level of the charge is too great. Meanwhile, Friends of the Earth suggested that the proposed increase does not go far enough.

TfL response

The extent of the proposed charge increase reflects the change in the real-terms value of the £8 charge over time and the need to maintain a relative deterrent value compared to other transport costs in order to maintain the benefits of the scheme. TfL does not consider that a greater increase is necessary, or that a smaller one would achieve the same benefit.

Other

Eight stakeholders (the City of London, Environmental Protection UK, the Federation of Small Businesses, the London Borough of Tower Hamlets, the London Chamber of Commerce & Industry, the London Cycling Campaign, the Automobile Association, and the Royal Borough of Kensington & Chelsea) made various comments that did not fit into any particular category. These included comments that the charge should keep pace with increases in wages rather than price inflation, or that it should be increased to reflect rises in public transport costs, that the proposed increase in the charge serves only to raise revenue for TfL, or that TfL should pursue other measures before raising the charge.

TfL response

TfL notes these comments. As stated in the description of the rationale for increasing the charge, the real-terms value of the charge has fallen. While wages may not in all cases have increased to compensate for this, they will in many cases have done so and the charge also needs to keep pace with increases in other transport costs and fares so that its relative deterrence (and hence its effectiveness) can be maintained. The proposed increase in the charge is not designed to raise revenue for TfL nor make up for the loss of revenue following the removal of the WEZ.

As set out in the Mayor's Transport Strategy, TfL is pursuing a wide variety of measures to combat the unwanted effects of traffic and reduce congestion across London. However, the pressures on the road network are intense, and the central London Congestion Charging scheme is a key means of addressing this problem. TfL does not take lightly the decision to propose a charge increase, but considers that it is necessary to do so for the reasons set out in consultation materials and above.

TfL Recommendations

No change to Variation Order 2

Theme E: Introduction of Congestion Charge Auto Pay

Representations made within this theme concerned the proposed introduction of Congestion Charge Auto Pay, an automated payment channel available to all drivers with five vehicles or fewer.

Analysis of responses

Twenty-one stakeholders commented on issues relevant to this section. These were:

Association of International Courier & Express Services, British Security Industry Association, London Assembly Liberal Democrat Group, City of London, Energy Saving Trust, Environmental Protection UK, Federation of Small Businesses, Freight Transport Association, Friends of the Earth, London Borough of Camden, London Borough of Greenwich, London Borough of Tower Hamlets, London Chamber of Commerce & Industry, London Councils, Sustrans, Road Haulage Association, Royal Borough of Kensington & Chelsea, The Association of British Drivers, The Automobile Association, The Society of Motor Manufacturers and Traders, Westminster City Council

Question 7 of the public questionnaire invited comments regarding the other changes to the Congestion Charging scheme, one of which is the proposal to introduce Auto Pay. Fifty-six per cent of respondents to the public questionnaire made a comment in this text box, while 43 per cent made no comment here.

Analysis of responses to Question 7 shows that 11 per cent of responses said that Auto Pay is a good idea. Two per cent of responses said that it was fairer and would cut the number of PCNs. Comments about the changes to the penalty charge system and suggested changes to Auto Pay were made in one per cent of responses. Other comments on the proposal were made by less than one per cent of respondents.

Issues raised

The following is a list of issues raised:

- Support for the introduction of CC Auto Pay
- Opposition to introduction of CC Auto Pay
- Differences between Fleet Auto Pay and CC Auto Pay

Support for the introduction of CC Auto Pay

Eighteen stakeholders expressed support for the introduction of CC Auto Pay as a simpler method of payment, with nine citing specific support for the reduced likelihood of receiving Penalty Charge Notices (PCNs) as a reason. Friends of the Earth expressed support for the introduction of CC Auto Pay but proposed that a

higher charge be applied to compensate for the increased ease of payment. The Association of British Drivers expressed acceptance of the lower charge for those paying through CC Auto Pay as necessary to encourage uptake of the payment channel. The Royal Borough of Kensington & Chelsea proposed that monthly and annual payments should be removed completely following the introduction of CC Auto Pay.

TfL Response

Support for the proposed introduction of CC Auto Pay has been noted. The discount for those using CC Auto Pay is intended to encourage adoption of the payment channel. Large numbers of drivers paying through CC Auto Pay would lead to reduced administrative costs. It is proposed that monthly and annual payments would continue to be available but offer no discount. This allows flexibility for any users unable to access CC Auto Pay to continue paying the charge through these other channels.

Opposition to the introduction of CC Auto Pay

The Energy Saving Trust expressed opposition to the introduction of CC Auto Pay on the grounds that the increased convenience would reduce the deterrent to drive, and that there would be a substantial reduction in revenue due to the decrease in the number of PCNs issued. This stakeholder also objected to the availability of the residents' discount under CC Auto Pay due to the increased potential for drivers to drive without being observed and therefore without paying.

TfL Response

The introduction of automated payment accounts would make payment of the charge easier for those able to use this method; it will also reduce costs for TfL. TfL research indicated that over half of people would be likely to choose to use automated payment accounts.

The saving in transaction cost through using Auto Pay could be between £0.50 and £1.50 depending on the payment method currently used. This may lead to a slight increase in the number of vehicles driving in the charging zone, however this impact is expected to be insignificant given the relatively small amount of money and time saved for most likely users.

The introduction of CC Auto Pay would be likely to lead to fewer PCNs being issued, which would reduce revenue. However, the operational costs of administering and processing charges under CC Auto Pay are lower compared to using the existing channels, and in any case PCNs are not put in place to increase revenue.

A daily payment option for residents has been one of the most requested amendments to the scheme. There are presently around 68,000 residents registered for the residents' discount and the proposed removal of the WEZ would reduce this

to around 20,000. Currently the minimum charge payable by residents is for five consecutive charging days at £4. Residents can also make payments monthly at £16 or annually at £201.60. The introduction of a daily payment options for residents through CC Auto Pay would benefit those residents who take up the CC Auto Pay option and drive less than five times a week. Allowing residents to pay for a single day would also reduce the incentive to make discretionary journeys as may currently be the case for those paying the weekly, monthly or annual charge.

Differences between Fleet Auto Pay and CC Auto Pay

Four stakeholders expressed support for the proposed reduction in the minimum number of vehicles required to register for Fleet Auto Pay from ten to six alongside the introduction of CC Auto Pay for up to five vehicles. Two of these noted that Fleet Auto Pay would continue to operate through payment in advance, while CC Auto Pay would operate through payment in arrears. These stakeholders proposed that an option for payment in arrears should be available for Fleet Auto Pay users.

The Freight Transport Association proposed that Fleet Auto Pay and an associated discount should be available only to those using vehicles for delivery and servicing, and that those using fleets for other purposes should use CC Auto Pay with no discount. Similarly, the Road Haulage Association proposed that the fleet scheme should be linked to TfL's Freight Operator Recognition Scheme (FORS) and should offer discounts to FORS members who demonstrate that they are applying best practice in terms of the environment and safety. The Road Haulage association also proposed that the Residents' Discount should be available through Fleet Auto Pay to fleet operators based within the Congestion Charging zone, and that the level of the charge should remain at £7.00 for those using Fleet Auto Pay. AICES requested the proposed increased charges for express and freight vehicles to be reconsidered, and that CC Auto Pay would enable private users to achieve parity of daily payment with express and freight vehicle drivers. AICES also stated that it would be more logical to use the charge to deter private road users, many of whom will be undertaking non-essential journeys given that public transport exists as an alternative.

TfL Response

Support for the reduction in the minimum number of vehicles required to register for Fleet Auto Pay and the availability of an automatic payment channel for fleets of all sizes has been noted. The changes will offer automatic payment options to businesses with smaller fleets (who may choose to register up to five vehicles on CC Auto Pay) as well as widening entry to Fleet Auto Pay by reducing the minimum number of vehicles from ten to six.

It is considered impracticable to allow payment in arrears for Fleet Auto Pay. Fleets consisting of many vehicles could incur large debts in the course of a month, and it is considered that the risk to TfL of non-payment would be too high.

TfL does not consider it appropriate to provide an exemption or discount from the Congestion Charging Scheme for delivery, goods and commercial vehicles. It is not feasible to distinguish between 'essential' and 'non-essential' journeys or vehicles. Such a discount would be very difficult in practice to define or enforce and could erode significantly the decongestion benefits of the Congestion Charging scheme. The current criterion based on the number of vehicles is simple to define and operate. While it is not practicable to make Fleet Auto Pay available only to those making 'essential' journeys, as some respondents have suggested, TfL continues to work with users of Fleet Auto Pay to develop the scheme.

The Fleet Auto Pay discount was introduced in order to provide fleet operators with a discount comparable to that offered to drivers who chose to buy the charge monthly or annually (around 15 per cent discount). Due to the introduction of CC Auto Pay, these 'bulk-buy' discounts are being withdrawn, and therefore so is the discount for Fleet Auto Pay users.

TfL Recommendations

No change to Variation Order 2

Theme F: Removal of the Alternative Fuel Discount and introduction of the Greener Vehicle Discount

Representations made within this theme concerned the proposed removal of the Alternative Fuel Discount (AFD) and introduction of the Greener Vehicle Discount (GVD).

Thirty-one stakeholders made representations under this theme. These were:

ACFO (Fleet Operators Association), AICES , British Security Industry Association, British Vehicle Rental and Leasing Association (BVLRA), London Assembly Liberal Democrat Group, CCAL, City of London, CTC, DPTAC, Energy Saving Trust, Environmental Protection UK, Federation of Small Businesses, Freight Transport Association, Friends of the Earth, Val Shawcross AM, London Borough of Camden, London Borough of Greenwich, London Borough of Tower Hamlets, London Borough of Wandsworth, London Chamber of Commerce & Industry, London Councils, RAC Foundation, Road Haulage Association, Royal Borough of Kensington & Chelsea, Sustrans, The Association of British Drivers, The Automobile Association, The Society of Motor Manufacturers and Traders, UKLPG, Westminster City Council, and DfT's Office for Low Emission Vehicles (OLEV).

Question 7 of the public questionnaire invited comments regarding the other changes to the Congestion Charging scheme, one of which is the proposal to phase out the AFD and introduce the GVD. Fifty-six per cent of respondents to the public questionnaire made a comment in this text box, while 43 per cent made no comment here.

Analysis of responses to Question 7 shows that 2 per cent support the introduction of GVD and less than one per cent opposed it. One per cent of responses stated that the AFD should be maintained or made another comment regarding GVD. Other comments on the proposal were made by less than one per cent of respondents.

Issues raised

The following is a list of issues raised:

- Agree with closure of the AFD
- Sunset period of the AFD
- Disagree with closure of AFD
- Support introduction of the GVD
- Suggested alternative GVD criteria
- Oppose introduction of GVD

Agree with closure of the AFD

Seven stakeholders including several boroughs agreed with the proposed removal, largely recognising that vehicle technology has moved on and the AFD no longer represents best practice.

TfL response

TfL notes the support for the closure of the AFD and move to a technology neutral approach.

Sunset period of the AFD

Four stakeholders agreed with the proposal to remove the AFD, but called for the discount to be maintained until vehicle ownership changed. Another stakeholder stated the same principle but called for the discount only to be maintained for owners of LPG vehicles. Meanwhile, three other stakeholders did not express an explicit opinion about closure but raised concerns about compliance costs and the lack of grandfather rights for current AFD recipients.

TfL response

TfL has always stated that no discount would exist in perpetuity. However, in recognition of the fact that many owners of AFD qualifying vehicles have purchased them in order to try to lower their emissions, people registered with TfL for the AFD on 24 December 2010 will continue to receive the discount until 24 December 2012. No action will be required by vehicle owners to maintain the discount during this sunset period. New registrations for the AFD would cease to be taken from 24 December 2010. However, in order to ensure there is sufficient processing time (as set out in the Scheme Order), any AFD application should be made 10 charging days in advance of 24 December 2010.

TfL considers that a two year sunset period allows sufficient time for people to consider replacing their vehicle with one that qualifies for the GVD and/or recoup much of (and in many cases all) of the premium paid for the AFD eligible vehicle. For example, a regular user of the zone who has owned an alternatively fuelled vehicle for three years would have saved around £6,000 from the AFD, contributing significantly if not completely to offsetting the premium paid for such a vehicle. In addition, other benefits would have been gained from the ownership of this vehicle and contributed to the decision to buy one, for example savings in fuel costs. Some of these vehicles have relatively high CO₂ emissions, and so it is not considered appropriate to maintain the discount beyond this date.

Owners of cars registered for the AFD that also have CO₂ emissions of 100g/km or less and meet the Euro 5 standard for air quality, would, subject to TfL's review of the GVD, be able to register the GVD following the end of the sunset period in 2012.

Disagree with closure of AFD

Three stakeholders disagreed with the closure of the AFD, stating that alternative fuels should continue to be incentivised and that it was unfair on those who had paid the premium for such vehicles that the discount would now be removed.

TfL response

The AFD favours certain technologies that reduce emissions of local air quality pollutants. The proposals to close the AFD recognise that vehicle technology has advanced significantly since the AFD was introduced in 2003. The AFD is now outdated, and there are a sizeable proportion of vehicles that qualify for the AFD that have high CO₂ emissions. TfL does not consider it appropriate that such vehicles should receive a discount to the Congestion Charge. It is also considered appropriate to take a technology neutral approach to an environmental based discount, and introducing the GVD to replace the AFD delivers this. The GVD includes criteria for both air pollutant and CO₂ emissions.

As discussed above, TfL believes that for many drivers in the zone, the existence of the AFD has already helped recoup the premium paid for alternative fuel vehicles. Furthermore, businesses and individuals continuing to use alternative fuel vehicles will continue to benefit from lower fuel costs and reduced road tax.

Support introduction of the GVD

Three stakeholders expressed explicit support for the GVD without requesting any changes stating that there should be initiatives that encourage the purchase of lower carbon emitting vehicles and acknowledging that a discount should be based on emissions not fuel type. One, while stating that environmental aims should be secondary to a congestion charge, considered that a technology neutral approach was appropriate.

TfL response

TfL welcomes the support for the introduction of the GVD and believes that the introduction of such a discount aligns with attempts by all levels of government to promote a switch to more fuel efficient vehicles. TfL considers it appropriate that such a discount should be based on both air quality and CO₂ criteria.

Suggested alternative GVD criteria

While supportive of the introduction of the GVD, some stakeholders requested changes to the criteria. These were as follows:

- Eight stakeholders stated that a similar discount should be available for commercial and/or light goods vehicles
- Three stakeholders stated that the discount level should be reduced, largely in order to prioritise electric vehicles above all other vehicles.
- Two mentioned that the criteria should be widened to include biofuels and/or compressed natural gas vehicles
- Two stakeholders were concerned about the impact the discount could have on congestion in the longer term and therefore called for the proposed review to occur earlier
- Two stakeholders expressed concerns over the air quality impacts of the discount as it includes diesel vehicles

TfL response

The GVD proposal aims to incentivise a switch to some of the cleanest vehicles currently available on the market. TfL believes that any discount for commercial vehicles is likely to be less of an incentive as the Congestion Charge represents a small proportion of the total running cost. Therefore, any discount would tend to reward companies and drivers for their standard practice and not necessarily incentivise different purchasing decisions. There are also practicalities with such a discount, including the fact that the CO₂ performance of vans and HGVs is not recorded by the DVLA on the V5C registration document making administration of any discount very difficult. Additionally, the level of CO₂ emissions of a commercial vehicle is very hard to determine as it can vary significantly depending on the load being carried by the vehicle at the time.

However, given that operators of commercial vehicles are likely to continue driving in the Congestion charging Zone, it is important to explore opportunities to promote best practice. Therefore TfL will continue to work with industry to see if there are options for incentivising low carbon or alternative fuel commercial vehicles.

TfL has long recognised the benefits of electric vehicles and is therefore proposing to widen the electric vehicle discount to ensure that plug-in hybrid electric vehicles qualify for the 100 per cent discount from the Congestion Charge. In the short-term, with the types of electric vehicles available on the market (often small and with a limited range) and without the necessary infrastructure in place, they may not be a viable option for some groups of people (for example, families or people who have more irregular driving patterns). Once plug-in hybrid electric vehicles (PHEVs) and extended range electric vehicles become available on the market (this is expected around late 2011 or early 2012), they will initially be expensive even with grant support from the Office for Low Emission Vehicles (OLEV). TfL therefore considers

that the GVD offers a realistic environmental discount option for many people until that point in time when electric vehicles become a more viable option.

In relation to biofuels, TfL considers that a technology-neutral approach such as the GVD, which focuses on emissions rather than type of fuel used, is more appropriate. As long as a car meets the discount criteria (i.e., has CO₂ emissions of 100g/km of CO₂ or less and meets the Euro 5 standard for air quality) it would receive the 100 per cent discount from the charge. In addition, and while TfL acknowledges that biofuels could potentially offer a means of reducing a vehicle's contribution to climate change, it is currently difficult to ensure that the particular type of biofuel has a positive CO₂ benefit overall, as the source and production methods can have a large impact on the net CO₂ saving.

While it is correct that there is a divergence in the Euro 5 standard for diesel and petrol cars in terms of NO_x emissions, this is the agreed European standard reflecting current best practice. The difference in performance in this respect is, however, smaller than for earlier Euro Standards. It would not be practical for TfL to attempt to develop its own standards, and limiting the discount to petrol only cars would restrict the discount to two models of petrol hybrids, and one conventional type – the Toyota Auris, Toyota Prius and Toyota IQ. In developing the GVD, TfL has sought to take a technology-neutral approach, which has been welcomed by many stakeholders. However, the GVD will be kept under review by TfL.

Oppose introduction of GVD

Four stakeholders expressed concerns over the introduction of the greener vehicle discount. One was wary of creating a discount for a large number of vehicles, another because the discount should be limited to petrol vehicles only, one did not believe there should be any discounts for any vehicles as they all contribute to congestion and the fourth considered that there should be no need for a GVD and an electric vehicle discount.

One stakeholder did not express an opinion on the proposal either way, but stated that there should be a discount for LPG vehicles.

TfL response

The primary aim of Congestion Charging remains to reduce congestion and traffic levels. However, for those people who continue to drive, the introduction of a greener vehicle discount will help incentivise a switch to some the cleanest cars currently available. At present, few cars would qualify for the Greener Vehicle Discount, with only 18 specific models meeting the discount criteria. TfL therefore considers that it is unlikely that the discount would have a significant impact on congestion and traffic levels in the zone in the short-term. As already indicated, Euro 5 standard is the agreed European standard reflecting current best practice. TfL considers it

appropriate that the discount is in line with this. Limiting the discount to petrol vehicles only would move away from the technology neutral premise of the GVD.

TfL recognises in the medium term, as more GVD qualifying vehicles become available on the market, that there may be a need to adjust the level of discount or qualifying criteria to ensure that the discount does not have an adverse impact on congestion and traffic levels in the zone. In recognition of this, TfL stated in the consultation materials that a review of the discount would be undertaken by 2013 (or earlier if required). It is important that the primary aim of the Congestion Charge is not undermined.

TfL does not believe that the introduction of the GVD will distort the market for pure electric or plug-in hybrid electric vehicles. TfL strongly supports the uptake of such vehicles and is working towards the targets set out in the Mayor's Electric Vehicle Delivery Plan to facilitate greater uptake of these vehicles. In the short-term, however TfL considers that the GVD offers a viable option for many people to switch to a cleaner vehicle, who cannot take advantage of the electric vehicle discount at this stage.

While there could be a case for limiting this discount to electric vehicles only, on balance this is not considered to provide an incentive to switch to the cleanest vehicles in the short term. TfL's planned review of the GVD will provide an opportunity to consider the impacts and look at how vehicle technology and emissions have developed more generally, in order to see if the GVD is still appropriate in its current form.

TfL Recommendations

No change to Variation Order 2

Theme G: Extension of the electric vehicle discount to include plug-in hybrid electric vehicles

Representations made within this theme concerned the proposed extension of the electric vehicle discount to include Plug-in Hybrid Electric Vehicles (PHEVs).

Analysis of responses

Sixteen stakeholders commented on issues relevant to this section. These were:

ACFO, City of London, Energy Saving Trust, Environmental Protection UK, London Borough of Camden, London Borough of Greenwich, London Borough of Tower Hamlets, London Councils, DfT's Office for Low Emission Vehicles (OLEV), RAC Foundation, Royal Borough of Kensington & Chelsea, Royal Mail, The Automobile Association, The Society of Motor Manufacturers and Traders, UKLPG and Westminster City Council.

Question 7 of the public questionnaire invited comments regarding the other changes to the Congestion Charging scheme, one of which is the proposal to change the Electric Vehicle Discount (EVD). Fifty-six per cent of respondents to the public questionnaire made a comment in this text box, while 43 per cent made no comment here. Analysis of responses to Question 7 shows that one per cent of responses supported the PHEV discount. Other comments on the proposal were made by less than one per cent of respondents.

Issues raised

The following is a list of issues raised:

- Support for a 100% discount for PHEVs
- Opposition to a 100% discount for PHEVs

Support for a 100% discount for PHEVs

Nine stakeholders expressed support for a 100% discount for PHEVs. OLEV stated support for the discount due to EVs and PHEVs being capable of 0g CO₂ tailpipe emissions. The Royal Borough of Kensington & Chelsea stated support for the proposed new discount due to being concerned that the EVD had encouraged people to buy additional (electric) vehicle but that the extension of the discount to PHEVs makes it more likely they will buy a replacement car, and also will not be reliant on the charging points network. London Councils expressed support for the proposed discount, but stated that electric vehicle use should be monitored to ensure that the use of private electric vehicles does not serve to shift travellers from more sustainable modes of travel such as public transport, walking and cycling. The Energy Saving Trust proposed that only PHEVs with CO₂ emissions below 75g/km

should be eligible for a 100% discount, and that only vehicles that are eligible for the OLEV electric car grant scheme should receive a 100% discount.

TfL Response

Support for the proposed 100% discount for PHEVs has been noted. This discount would be available for PHEVs with CO₂ emissions of 75g/km or less.

Opposition to a 100% discount for PHEVs

Four stakeholders expressed opposition to the proposed 100% discount for PHEVs citing increased traffic and congestion in the long term, environmental impacts, and a lack of practical vehicles and infrastructure in the short to medium term as reasons. Three stakeholders proposed that only PHEVs meeting an additional criterion for emissions should qualify for the discount. Two stakeholders proposed a discount of less than 100% for PHEVs, the City of London proposing a lower charge of £5 for PHEVs and the London Borough of Camden suggesting a sliding scale for the discount based on tailpipe emissions.

TfL Response

The 100% discount offers an incentive for uptake of PHEVs. The Mayor's Electric Delivery Plan has set a target for 100,000 electric vehicles to be in use in London as soon as possible. PHEVs will play an important part in reaching this target, and incentivising their use through a 100% discount will help to accelerate the development of the technology and infrastructure required to support use of electric vehicles in London.

The discount for electric vehicles will be monitored and reviewed. In the case of a substantial long-term rise in use of PHEVs and a resulting increase in traffic and congestion, the discount could be reviewed.

TfL Recommendations

No change to Variation Order 2

Theme H: Registration charge for 9+ seat vehicle discount

Representations made within this theme concerned the proposed introduction of a discount registration charge for vehicles registered for the 9+ seats discount. Four stakeholders commented on this theme. They were: British Vehicle Rental and Leasing Association (BVLRA), City of London, CTC and Westminster City Council.

Introduction of a registration charge

Responses

Three stakeholders were in support of the introduction of the registration charge, considering that it was appropriate to bring the discount process in line with all other discounts to the Congestion Charge. One stakeholder disagreed with the introduction of a charge, stating that there should be no need for registration charges for any discounts.

Question 7 of the public questionnaire invited comments regarding the other changes to the Congestion Charging scheme, one of which is the proposal to introduce a registration charge for the 9+ seat vehicle discount. Fifty-six per cent of respondents to the public questionnaire made a comment in this text box, while 43 per cent made no comment here. Analysis of responses to Question 7 shows that less than one per cent of responses concerned this proposal.

TfL Response

TfL welcomes the support for the introduction of a discount registration charge. All other vehicles registered for a discount to the Congestion Charge must pay a £10 discount registration charge and a £10 annual charge to maintain the discount. To bring the registration process for the 9+ seat discount in line with all others, TfL considers it appropriate that the registration charge be introduced for this discount category.

TfL Recommendations

No changes to Variation Order 2

Theme I: Ministry of Defence vehicles

Representations made within this theme concerned the proposed amendment to the Scheme Order to include all Ministry of Defence (MoD) vehicles in the Congestion Charge exemption. Three stakeholders commented on this theme. They were: City of London, CTC and Westminster City Council.

Question 7 of the public questionnaire invited comments regarding the other changes to the Congestion Charging scheme, one of which is the proposal to exempt MoD vehicles. Fifty-six per cent of respondents to the public questionnaire made a comment in this text box, while 43% made no comment here. Analysis of responses to Question 7 shows that one per cent of responses disagreed with this proposal.

Scheme Order amendment to include all MOD vehicles

Responses

Two stakeholders were in support of the amendment, accepting that the exemption should be widened to include all MOD vehicles. One stakeholder disagreed with the proposal, but did not give any reasons.

TfL Response

Primary legislation was recently enacted with the aim of consolidating the various Acts relating to the armed forces. The Armed Forces Act 2006 included the following provision, which came into force at the end of 2009, in relation to road user charges:

s349 Exemption from tolls and charges

- (1) No toll or charge within subsection (2) is payable in respect of a vehicle which—
 - (a) belongs to any of Her Majesty's forces; or
 - (b) is in use for the purposes of any of those forces.
- (2) A toll or charge is within this subsection if it is payable—
 - (a) for passing over a road or bridge, or through a tunnel, in the United Kingdom or the Isle of Man; or
 - (b) under a scheme for imposing charges in respect of the keeping or use of vehicles on particular roads in the United Kingdom or the Isle of Man.

The effect of this provision was to broaden slightly the exemption from road user charges for HM forces vehicles beyond that previously provided for by the Scheme

Order. Following legal advice, TfL decided to propose a variation to the Scheme Order to ensure conformity with primary legislation.

TfL Recommendations

No changes to Variation Order 2

7. Modifications

7.1 Variation Order 1 – the removal of the Western Extension

7.1.1 TfL recommends that the Mayor confirms VO1 as published for consultation. No recommendations for modifications to this variation order are made. If the Mayor decides to make modifications to the variation order, this may affect the date that these can be implemented.

7.2 Variation Order 2 – Changes to the remaining Congestion Charging scheme

7.2.1 TfL is recommending two minor modifications to VO2. The first sets out the position with regard to the Congestion Charging NHS reimbursement scheme and CC Auto Pay; the second introduces a pre-registration period for CC Auto Pay. These are described below.

CC Auto Pay and the NHS Reimbursement Scheme

7.2.2 Where the daily charge is purchased via CC Auto Pay, it will not be possible for a refund to be made under the Congestion Charging NHS reimbursement scheme. To take advantage of this scheme, the charge will need to be purchased via one of the other payment methods. This will not prevent customers with an Auto Pay account from being reimbursed, it merely requires them to make a manual payment when entering the zone for purposes of attending a scheduled hospital appointment if they wish to be reimbursed via this scheme. Auto Pay is designed in such a way that this payment will take precedence, meaning the customer will not be charged twice.

7.2.3 TfL recommends that a modification is made to the CCZ Changes VO in order to make this provision clear.

Pre-registration for CC Auto Pay

7.2.4 In order to better manage the applications for CC Auto Pay, TfL has worked with the service provider to develop a pre-registration facility, so that users may apply for an account in advance of the date that CC Auto Pay goes live (4 Jan 2011). The date from which applications may be made for pre-registration is 22 November 2010. TfL recommends that a modification is made to the CCZ Changes VO to allow for pre-registration from this date.

7.2.5 The Mayor is asked to approve these modifications to Variation Order 2.

8. Conclusions and Recommendations

8.1 TfL's conclusions

8.1.1 TfL considers that this report to the Mayor on the outcomes of the consultation (alongside the IIA and Supplementary Information that was provided for the consultation) provides the information and analysis needed for the Mayor to make an informed decision as to whether confirm the two Variations Orders (VO1 and VO2) or not (with or without modifications). The Mayor has also been provided with copies of all the consultation responses. This report and the consultation responses will thus allow the Mayor to take into account the range of views expressed during the consultation.

8.1.2 In this report, TfL has analysed the consultation responses and set out its views on the representations received on individual themes. The themes have been set out so that it is clear to which Variation Order each pertains: only Themes A and B consider matters relevant to both VOs and to the Congestion Charging Scheme more generally.

8.2 VO1 – The Removal of the WEZ

8.2.1 TfL does not recommend any changes to Variation Order 1, which sets out that the Western Extension will be removed. However, the Mayor is asked to consider carefully the consultation responses made with regard to this issue, which are summarised in this report and which have been provided to him.

8.2.2 Responses to the consultation from the public indicated agreement with the proposed removal: 62 per cent of all questionnaire respondents supported it (61 per cent of individual respondents and 66 per cent of business and other organisation respondents). Just under a quarter (24 per cent) of all public respondents disagreed with the proposal. Whether or not the respondent stated that they lived in the WEZ made little difference to the response¹⁰: 63 per cent of WEZ residents supported removal (25 per cent disagreed) and 64 per cent of people not living in WEZ supported removal (21 per cent disagreed). Of the 44 stakeholders who responded to the consultation, 15 stated that they agreed with the proposal; 17 stated their disagreement and a further 12 did not state a view or were neutral.

8.2.3 Stakeholders who supported the proposal often noted the results of previous consultations on this matter and cited public support for WEZ removal. Some noted that they had opposed the implementation of the WEZ in 2007. Those

¹⁰ Based on an analysis of those respondents who provided a postcode, which was 77% of respondents.

who opposed the proposal, and some of those who did not state a view, expressed concerns about the likely negative impacts of removal. These include the increases to traffic levels and congestion; the effect on air quality and the impact of a significant reduction in revenue on TfL's finances and its ability to deliver the objectives set out in the MTS. These concerns are summarised in the following section.

- 8.2.4 It should be recalled that the statutory consultation on the removal of the WEZ carried out by TfL in 2010 is in effect the third time that the public and stakeholders have been consulted on this matter. As described in Chapter 3, there was a non-statutory consultation on this matter in autumn 2008, in which the majority of public respondents (69% overall) supported removal, although views from stakeholders were mixed, with around half supporting the option to retain the WEZ, albeit some made their support conditional on other changes being made to the scheme.
- 8.2.5 The second time was the consultation on the public draft MTS, which took place from October 2009 to January 2010. In response to the question on the proposed WEZ removal, 58 per cent of all public respondents stated that they agreed or strongly agreed with it (25 per cent disagreed or strongly disagreed). Again, stakeholders who stated a view were more likely to disagree with the proposal: of the 33 who gave an explicit view, 23 opposed WEZ removal while 10 supported it. A further 10 stakeholders made comments which suggested that they were concerned about the removal of the scheme. As in the VO consultation which is the subject of this report, stakeholders were concerned about the air quality, traffic and revenue impacts of the proposal.
- 8.2.6 It may also be useful to reiterate here the stated views of the London boroughs most directly affected by the Western Extension. The Royal Borough of Kensington & Chelsea did not explicitly state a view on whether or not the WEZ should be removed: it noted that there has been strong public support for removal and that local businesses have reported adverse effects, while raising concerns about the impacts on traffic and congestion in the borough if it is removed. The City of Westminster and the London Borough of Hammersmith & Fulham support the proposal to remove WEZ.
- 8.2.7 Chapter 6 provides TfL's analysis of all the matters raised by respondents. The next section summarises the main issues which are considered to be of particular importance, and the Mayor is requested to consider them carefully before reaching a decision.

Adequacy of consultation materials provided

- 8.2.8 Some respondents commented that the level of information provided in the consultation regarding the air quality impacts of WEZ Removal was insufficient, and that information which TfL provided in responding to FoI/EIR requests, should have been available to all potential respondents. In addition, it was noted that the information provided in TfL's response was inadequate.
- 8.2.9 Chapter 5 of this report describes in detail the information requested and what TfL provided in response to requests received during this consultation (and the additional information is attached at Appendix 3). For the sake of brevity, specific details about the information will not be restated here. However, TfL considers that some of the information requested was in fact provided in the consultation materials. Further information was provided and this would have been provided to anyone who requested it; those who did request it were free to disseminate it as they wished.
- 8.2.10 There is a balance to be struck between providing sufficient information to enable people to respond to a consultation and ensuring that the level of detail neither overwhelms the reader nor potentially exaggerates the degree of certainty which it is possible to attain. Although most of the information requested was provided (or was already published), TfL did not undertake additional modelling to produce some of the additional information requested in the EIR application. Some of this information could not be meaningfully presented beyond a given level of detail or degree of confidence; to go beyond these limits could result in misrepresentation or distortion.
- 8.2.11 Notwithstanding that the SEA Regulations do not apply to the making or confirmation of a Variation Order, TfL's approach has been to provide the same level of information about the likely significant environmental impacts as would be required of an environmental report under the SEA Regulations (i.e. on the basis the Regulations did apply). The two IIA Studies published for each Variation Order met the requirements of an environmental report under the Regulations, and combined this with information about the other non-environmental impacts covered by the integrated assessment (discussed above). This was considered to be the appropriate "yardstick" for the public and stakeholder consultation, particularly given that environmental reports under the SEA Regulations are designed to be suitable for public consultations. TfL's view is that the information available on the website during the consultation was sufficient to inform potential respondents to the consultation.

Traffic and congestion impacts

8.2.12 TfL's modelling shows that there is likely to be increased traffic and congestion levels in the Western Extension area if WEZ is removed, although there would be a small decrease of these in the central zone.

Respondents stated that this was undesirable: it would also lead to increased emissions of air quality pollutants and CO₂ and would undermine other Mayoral objectives as set out in MTS, including smoothing traffic flow and improving air quality.

8.2.13 As stated in the consultation materials, there are a number of factors and uncertainties involved in determining the effect of WEZ removal on traffic and congestion. TfL's modelling considered two scenarios : one where 100 per cent of traffic returns and one where 80 per cent returns. No change to road network capacity was assumed in either; nor were any mitigation measures included in the modelling. In this way, TfL sought to provide a worst case assessment of the possible effects.

8.2.14 These impacts need to be considered in the context of London as a whole, and the commitments set out in the MTS to encourage a shift to more sustainable modes, improve the efficiency of the road network and smooth traffic flow. While these policies apply to all of London, specific measures could be applied to the WEZ area as deemed appropriate. However, as stated in the Supplementary Information, full mitigation of the congestion impacts of removing WEZ would be likely to require space to be allocated from other objectives or uses and is not considered either practicable or desirable.

Air Quality impacts and meeting EU air quality limit values

8.2.15 As stated in the IIA, in 2011 without WEZ there could be an increase of 3 to 4 per cent in PM₁₀ and a 2 to 3 per cent increase in NO_x emissions from road transport emissions in the WEZ. Impacts outside WEZ, including London as a whole are modelled at no effect to a small increase and even a small decrease in both emissions in the original central zone. Respondents commented that increases in air pollutant emissions was an undesirable impact, may adversely affect human health and could affect the UK's ability to meet EU limit values.

8.2.16 While air quality is an important consideration for the Mayor, the IIA stated that no significant health effects are likely from changes in emissions as a result of WEZ removal. The Western Extension area is a relatively small part of London and the effects of its removal on air quality would be expected to be commensurate with this scale. Also, it is important to note that the WEZ has not had a direct discernible effect on air quality.

8.2.17 In modelling the air quality impacts of WEZ removal, TfL did not include any potential mitigations. This enabled a prudent assessment. The measures set

out in the MTS, and in the draft MAQS which is expected to be in place later in 2010, will allow improvements to air quality in London which, over time, will more than offset any adverse impact from WEZ removal. Specific local measures could be applied if necessary.

8.2.18 With regard to the limit values, it is projected that even with the removal of WEZ in December 2010, the EU limit values for PM₁₀ will be met in the area in 2011. Within the WEZ area the EU limit value for NO₂ is not expected to be met even with the WEZ remaining in place. TfL and the GLA are working with Government to tackle the challenge of meeting the NO₂ limit values.

Impacts on health of Londoners and the Mayor's duties

8.2.19 Following on from the sections above, respondents were concerned that increased air pollutant emissions would adversely affect the health of Londoners, particularly vulnerable groups, and that this contravenes the Mayor's duties. As stated above, the IIA found that no significant health effects are likely as a result of WEZ removal.

8.2.20 In revising his statutory strategies (eg the MAQS and the MTS), the Mayor has duties under the GLA Act to have regard to the effect that his strategies would have on four cross-cutting themes of health, health inequalities, sustainable development and climate change. The Mayor considered these matters when he approved Proposal 128 as part of the new MTS adopted in May 2010. He is asked to consider them again when deciding upon the two Variation Orders.

Overall costs and benefits

8.2.21 As shown in Table 11 below, under both the scenarios, individuals would be likely to experience disbenefits in their travel (for instance, private car users and bus passengers would face longer and less reliable journey times in the Western Extension), though some people would experience some benefit (drivers who had previously been deterred by the charge). There would also be some small benefits as a result of journey time improvements in the remaining central London Congestion Charging zone.

8.2.22 For businesses, the disbenefits associated with increased journey times, reduced journey time reliability and increased vehicle operating costs are likely to be greater, due to their higher value of time.

Table 11¹¹: monetised travel-related benefits of removing WEZ for individuals and businesses (£m, 2008 prices)

	Scenario 1 100% traffic returns			Scenario 2 80% traffic returns		
	Road	Bus	Total	Road	Bus	Total
Individuals						
Travel time	-11	-6	-17	-8	-6	-14
Travel time reliability	-1	-2	-3	-1	-2	-2
Vehicle operating costs – fuel	-3	-	-3	-2	-	-2
Benefit to previously deterred users	3	-	3	2	-	2
Individual users sub-total	-12	-8	-20	-8	-8	-16
Businesses						
Travel time	-44	-	-44	-32	-	-32
Travel time reliability	-4	-	-4	-4	-	-4
Vehicle operating costs – fuel	-2	-	-2	-2	-	-2
Benefit to previously deterred users	2	-	2	2	-	2
Business users sub-total	-48	-	-48	-36	-	-36
Private sector providers						
Net revenues	-	-	2	-	-	2
Private sector providers sub-total	-	-	2	-	-	2
Net business/provider benefits	-	-	-46	-	-	-34
Total traffic-related benefits	-	-	-66	-	-	-50

Note that figures have been rounded

8.2.23 However, the disbenefits experienced by individuals in terms of increased traffic and congestion would be more than offset overall by the savings they make from no longer having to pay the charge (both financial savings and compliance costs), with the balance being more positive for Scenario 2 in which only 80 per cent of currently deterred traffic returns. There would be some users (those resident in the Western Extension area who would no longer be eligible for the residents' discount but drive within the remaining central London Congestion Charging zone) who would face increased costs.

8.2.24 Businesses would gain more from no longer paying the charge, because they currently pay more, but because the time cost to them resulting from the removal of the Western Extension would also be greater, they might see little overall benefit in Scenario 1 (though the impact is broadly neutral). However, under Scenario 2, in which traffic and congestion are lower, their gain from no longer paying the charge to travel in the Western Extension would outweigh the costs to them of increased congestion.

¹¹ Table 7-1 in Supplementary Information

Table 12¹²: financial and compliance-related benefits of removing WEZ for individuals and businesses (£m, 2008 prices)

	Scenario 1 100% traffic returns			Scenario 2 80% traffic returns		
	Road	Bus	Total	Road	Bus	Total
Individuals						
Compliance costs	2	-	2	2	-	2
User charges	28	-	28	28	-	28
Individual users sub-total	30	-	30	30	-	30
Businesses						
Compliance costs	5	-	5	5	-	5
User charges	42	-	42	42	-	42
Business users sub-total	47	-	47	47	-	47
Total	77	-	77	77	-	77

Note that figures have been rounded

8.2.25 Overall, taking these two elements into account, and assuming that the likely impact of removing the Western Extension lies closer towards that suggested by Scenario 2, there may be some modest net benefits to business and consumers from removing the Western Extension.

8.2.26 As highlighted in the previous sections, removing the Western Extension would be likely to result in some disbenefits in terms of increased emissions of atmospheric pollutants and CO₂ from road transport. As noted in the IIA, however, these increases are relatively small in practice and thus the monetised costs associated with them are also small. Projected small increases in road traffic accidents, a function of a model which relates total vehicle kilometres to overall accident numbers, also contribute a small disbenefit, though as noted in the IIA the introduction of the Western Extension did not have a discernible impact on the numbers of accidents and hence its removal is not likely to lead to any discernible increase in accidents.

Figure 13¹³: impacts of removing the Western Extension on society (£m, 2008 prices)

	Scenario 1 100% traffic returns			Scenario 2 80% traffic returns		
	Road	Bus	Total	Road	Bus	Total
	-	-	-4	-	-	-4
	-	-	-1	-	-	-1
	-	-	0 to -1	-	-	0 to -1
	-	-	-5	-	-	-5

Note that figures have been rounded

¹² Table 7-2 in Supplementary Information

¹³ Table 7-3 in Supplementary Information

8.2.27 The key impact on Public Accounts would be the reduction in net revenues from the Congestion Charging scheme (from both reduced charge payments and penalty payments) estimated at £55m (net) annually if the WEZ were to be removed. A range of respondents commented on this, suggesting that this could be ill-afforded at time of severe financial constraint and that it would adversely affect TfL's abilities to deliver the MTS.

8.2.28 By law, all revenue from the Congestion Charging scheme is used to implement the aims of the Mayor's Transport Strategy, so it is fair to say that a reduction in income could affect public transport improvements and other measures in the Strategy. In common with other public bodies, TfL awaits the outcome of the Comprehensive Spending Review on 20 October, which will confirm the level of savings required by the Government. While the primary aim of the Congestion Charge is to reduce congestion, not to raise revenue, it is certainly true that this loss of income would be unwelcome at any time, and is likely to be more keenly felt in the current circumstances.

8.2.29 There might be some small increases in parking receipts for local authorities and increases in fuel duty receipts for the government as a result of increased vehicle usage. There would also be likely to be some increase in VAT receipts for the government from higher expenditure on goods and services which attract VAT as a result of the increase in disposable income from the removal of the charge. However, the net impact on Public Accounts is clearly negative.

Figure 14¹⁴: impacts of removing the Western Extension on Public Accounts (£m, 2008 prices)

	Scenario 1 100% traffic returns	Scenario 2 80% traffic returns
Transport for London		
WEZ charge + enforcement revenue	-70	-70
(of which individuals)	(-28)	(-28)
(of which businesses)	(-42)	(-42)
Revenues from remaining zone	3	3
Removal works	-1	-1
Annual operating costs (saving)	15	15
TfL sub-total	-53	-53
Central government		
Fuel duty	7	6
VAT	7	7
Boroughs		
Parking revenue	2	2
Non-TfL sub-total	16	14
Total	-37	-38

Note that figures have been rounded

¹⁴ Table 7-4 in Supplementary Information

8.2.30 Combining the assessment of the benefits of reduced charges and compliance costs with the estimates of time savings disbenefits, society impacts, and loss to the public accounts shows a potential net loss from removing the Western Extension of around £20m to £40m, in 2008 prices.

8.2.31 In terms of a purely economic appraisal, the charges no longer paid by drivers to TfL and the consequent loss of revenue (termed 'transfer payments'), would be excluded. The main component of the economic cost / benefit appraisal is the monetised traffic and transport disbenefits arising from the proposal (estimated at between -£50 to -£66 million). It is for the Mayor to consider this matter (including the priorities in regard to the incidence of the losses / benefits) alongside the other issues highlighted in relation to WEZ removal in order to make his decision.

The Residents' Discount

8.2.32 As stated in the consultation materials, it is proposed that if the WEZ is removed, residents of the WEZ area and its associated residents' discount zones would no longer be eligible for the 90% Discount and would have to pay the daily charge to drive in the original central zone. A number of respondents requested that certain areas of the WEZ area retain this discount, referring to their need to access Controlled Parking Zones (CPZs) and health services within the central zone.

8.2.33 The matter of the CPZs concerns Westminster CPZs F1 and F4, which straddle the WEZ and the original charging zone. TfL does not consider that a change to the boundary route is feasible because of the need to provide a diversionary route; nor is it desirable to create an additional residents' discount zone as these areas need to meet specific criteria and it is not appropriate to create a precedent in this case (which had not been designated as a 'buffer zone' prior to the implementation of WEZ). It should be noted that there is no Congestion Charge for cars parked in residents' bays and not moved within charging hours. CPZs are the responsibility of the relevant borough (in this case, Westminster City Council); rather than making changes to the Residents' discount area, TfL considers it would be more appropriate to change the parking zones if deemed necessary to address the issues raised. Residents should thus take this matter up with their borough. With regard to the need to access health services in the central zone, there continues to be excellent public transport provision in the area and the 100% Blue Badge discount and the NHS Reimbursement scheme remain in place with WEZ removal.

8.2.34 The decision as to whether to confirm Variation Order 1, with or without modifications, is clearly difficult. It is almost inevitable that traffic and congestion will increase to some extent, although there are uncertainties

about the precise impacts, and that there will be some increase in emissions, with many stakeholders expressing concern over this. There will also be a loss in revenue for TfL. The Mayor will need to balance the implications of this with other factors such as the benefits for those no longer paying the charge, the concerns of small businesses and the support expressed by a majority of people through this and previous consultations for the removal of WEZ.

8.2.35 If the Mayor decides to confirm this VO without modifications, the Western Extension would be removed at the end of the charging day on 24 December 2010. It should be noted that if the Mayor decides to confirm the VO with modifications, this may have an effect on the date at which changes can be implemented.

8.3 VO2 – Changes to the remaining Congestion Charging scheme

8.3.1 TfL recommends that the Mayor confirms the changes set out in VO2. In summary these are: the introduction of CC Auto Pay; an increase in the daily charge to £9 per day for those using CC Auto Pay and to £10 if paid in advance or on the day of travel (£12 if paid the next charging day after driving in the zone); the phasing-out of the Alternative Fuel Discount and the introduction of a new Greener Vehicle Discount and the widening of the Electric Vehicle Discount to include plug-in hybrid electric vehicles. The number of vehicles required as a minimum for registration for Fleet Auto Pay would be reduced from 10 to 6 and the discount which is currently available through Fleet Auto pay would be removed, as would the discount when purchasing the Congestion Charge for a month or for a year. In addition the VO makes changes to the registration process for 9+ seat vehicles (introducing a £10 annual registration charge) and extends the Congestion Charge exemption to all MoD vehicles, in line with new legislation.

8.3.2 TfL recommends two minor modifications to VO2, as described in Chapter 7. In summary, these are:

- Addition of text to clarify that payments made via CC Auto Pay cannot be reimbursed on the Congestion Charging NHS Reimbursement Scheme. Users who wish to take advantage of this scheme should pay by other channels
- Introduction of a pre-registration period for CC Auto Pay. This will commence from 22 November 2010.

8.3.3 In addition, TfL recommends that the Mayor confirm that there will be review of the Greener Vehicle Discount by 2013. This would potentially consider and recommend changes to the qualifying criteria or level of discount. The range

of vehicles which could be eligible for the GVD is expanding quickly and this will need to be a factor in the review. If this review led to a proposal to change the GVD, there would be a public consultation on a Variation Order for these changes.

- 8.3.4 Furthermore, we would highlight the concerns of commercial operators of vehicles that they would not be eligible for the Greener Vehicle Discount. TfL will work with the industry to see if it is possible to develop a workable option. The Mayor is asked to note this planned approach
- 8.3.5 TfL has always stated that no discount or exemption will necessarily apply in perpetuity; from time to time it is appropriate to review these and consider potential adjustments. In line with the MTS, all the discounts, including the change to the Electric Vehicles Discount (noting that this is a developing market), will be kept under review. Changes to discounts would be subject to public and stakeholder consultation on a Variation Order.
- 8.3.6 The matters raised in the consultation responses on this matter are summarised below and in Chapter 6.

The 100% Greener Vehicle Discount (GVD)

- 8.3.7 Although there was support for the GVD in principle, a number of respondents called for changes to the discount criteria.
- 8.3.8 This included reducing the discount level from 100% to reflect that these vehicles still contribute to congestion and, albeit to a lesser extent, to emissions. There was also some concern about the air pollutant emissions from diesel cars which would be eligible for the GVD.
- 8.3.9 The Secretary of State for the Department for Transport pressed for a greater incentive for electric vehicles over conventionally-fuelled vehicles which met the GVD requirements. TfL made it clear in the consultation materials that the GVD will be kept under review and strongly recommends that such a review is undertaken by 2013, including considering and recommending changes to the qualifying criteria or level of discount. The range of vehicles which could be eligible for the GVD is expanding quickly and this will need to be a factor in the review. While the range of electric vehicles is still relatively small, and may not yet be a viable option for many drivers, clearly the development of this market will need to be considered in relation to the GVD. The Mayor is asked to confirm that this review will take place.
- 8.3.10 There was concern that the phasing-out of the Alternative Fuel Discount (AFD) and the introduction of GVD effectively removed the opportunity for owners and operators of commercial vehicles such as LGVs to benefit from an 'environmental' discount. Respondents from business and freight

organisations raised concerns that they had invested in vehicles eligible for the AFD (for example, LPG-fuelled vans) and would not recoup this investment nor be able to purchase vehicles which could be eligible for the GVD. TfL notes the concerns of commercial operators of vehicles. At present, the CO₂ performance of vans and HGVs is not recorded and there are practical difficulties in developing this. In addition, any discount for commercial vehicles is likely to be less of an incentive than for the private driver given that it is a smaller proportion of overall operating costs. However, it is important to incentivise a switch to these vehicles where possible and TfL will work with the industry on developing options in this area. The Mayor is asked to note this planned approach.

8.4 Public Inquiry

- 8.4.1 This section examines the issue of whether the Mayor should hold some form of inquiry as part of a process of determining whether or not to confirm the Variation Orders. The GLA Act provides that the Mayor may 'hold an inquiry, or cause an inquiry to be held, for the purposes of any order containing a charging scheme'. Whether an inquiry should be held to consider the removal of the Western Extension and/or on the changes to the remaining Congestion Charging scheme is a matter for the Mayor to decide.
- 8.4.2 None of the respondents to the consultation asked for a public inquiry.
- 8.4.3 An inquiry could take a number of forms, including a public inquiry. The decision whether to hold an inquiry (and if so its scope) is one for the Mayor to make. Whilst he has a broad discretion he must approach the matter with an open mind. He needs to ask himself whether he has sufficient information available without holding an inquiry; and whether the issues raised, by objectors in particular, are sufficiently clear to him so that he can properly access this information and weigh conflicting views (including taking account of representations and objections) without the benefit of an independent report following an inquiry.
- 8.4.4 A Congestion Charging case, *R (Westminster City Council) v Mayor of London* [2003] LGR 612, held at common law that the Mayor had to apply his mind genuinely and rationally to the issue of whether to hold an inquiry, taking into account all relevant considerations, and that, save perhaps exceptionally, Article 6 of the European Convention did not require an inquiry to be held.
- 8.4.5 TfL does not consider that any significant quantitative evidence beyond that already supplied by TfL and GLA officers would emerge in an inquiry which would assist the Mayor's decision. An inquiry would also delay the confirmation of the Variation Orders. TfL does not consider there are any issues which point strongly to the holding of an inquiry and does not

recommend that an inquiry be held. However, the Mayor is advised that these issues should not be the prime focus in determining whether to hold an inquiry.

8.5 Recommendations

8.5.1 TfL recommends that the Mayor should:

- Consider the whole of this report and other relevant information available to him, including advice from GLA officers and the contents of the Integrated Impact Assessments undertaken for each Variation Order
- Consider the responses to the consultation, together with the considerations of TfL, particularly with relation to Chapter 6 of this report
- Consider whether further consultation, further information or the holding of some form of inquiry is necessary or appropriate prior to his decision whether or not to confirm the Variation Orders, and
- If the Mayor considers that no further consultation is necessary or appropriate and that the holding of a public inquiry is not necessary or appropriate, to confirm Variation Order 1 in its original form, and Variation Order 2 with the minor modifications as described.