

Variation Order 2

Integrated Impact Assessment

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1 Introduction

1.1 Background

- 1.1.1 Congestion Charging was introduced into central London in February 2003. In July 2005, the basic daily charge was raised from £5 to £8 per day. In February 2007 the original central London congestion charging zone was extended westwards, creating a single enlarged congestion charging zone.
- 1.1.2 The Congestion Charging scheme requires periodic modifications to ensure that it remains effective in reducing traffic in central London. The scheme also reflects best practice or other developments in relation to its operation and discounts and exemptions. For example, as vehicle technology and payment methods evolve it may be beneficial for the scheme to respond to this by adapting discounts and exemptions and introducing new payment methods. Similarly, as prices inflate in the economy, the level of the charge must reflect this to have the same continued effect.
- 1.1.3 A Variation Order (VO) is the means by which changes to the Congestion Charging scheme can be made and this Integrated Impact Assessment (IIA) accompanies the Variation Order (known as VO2).
- 1.1.4 For clarity, another Variation Order (known as VO1) for the removal of the Western Extension to the Congestion Charging Zone (WEZ) is being consulted on concurrently. A separate Integrated Impact Assessment accompanies that Variation Order.

1.2 Proposed changes included in this assessment

- 1.2.1 The following changes to the Congestion Charging Scheme are proposed in Variation Order (VO2):
- **An increase to the level of the charge.** The charge would increase from £8 to £10 if paid on or before the day of travel and from £10 to £12 if paid the day after travel. For those who choose the new payment method CC Auto Pay, the daily charge would be £9
 - **The introduction of a new automated payment method: Congestion Charging (CC) Auto Pay.** CC Auto Pay would allow drivers, including residents, to set up an account with TfL and pay for the charge automatically via credit or debit card for each day they drive in the zone
 - **The removal of the alternative fuel discount.** The alternative fuel discount has become outdated and does not reflect vehicle technology advances in emissions reduction over the last few years
 - **The introduction of a new greener vehicle discount.** The greener vehicle discount would replace the alternative fuel discount and provides a 100% discount to vehicles that have 100g/km of CO₂ or less and meet the Euro 5 standard for air quality
 - **A change to the electric vehicle discount.** The electric vehicle discount would include plug-in hybrid electric vehicles

- **Alteration to the process of registering for the discount for vehicles with nine or more seats.** Those wishing to register vehicles with nine or more seats for a discount would have to pay a £10 registration charge
- **Incorporation of all Ministry of Defence Vehicles in the current exemption.** Currently, vehicles for naval, air force and military purposes are exempt from the charge but this exemption would be widened to include all vehicles belonging to the Ministry of Defence.

1.3 Purpose of the Integrated Impact Assessment

- 1.3.1 This IIA Report sets out, for the purposes of public consultation, the findings from an Integrated Impact Assessment of Variation Order 2. It assesses the proposals summarised in Section 1.2.1.
- 1.3.2 The IIA Report follows the same approach as an earlier IIA undertaken to support the new Mayor's Transport Strategy (MTS) published on 10 May 2010, which incorporated the requirement for, and components of, an Environmental Report under the Strategic Environmental Assessment Regulations¹. Although there is no requirement under these Regulations for a further Environmental Report to address the effects of the Variation Order as the changes introduced are in conformity with the new MTS, the current report has nevertheless been written to the same standard both to ensure quality and for consistency with the IIA for Variation Order 1, which is undergoing concurrent consultation.
- 1.3.3 The purpose of an IIA is to bring together the findings of a variety of different impact assessments, including Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA), Equalities Impact Assessment (EqIA), and Habitats Regulations Assessment (HRA), as appropriate, in a single document.
- 1.3.4 An essential part of the assessment process is to identify the current baseline conditions (i.e. journey times, costs, revenues, etc) and where possible the likely evolution of these conditions following a 'business as usual' scenario (i.e. one without the proposed changes in effect), taking account of other impacts and trends (e.g. modal shifts induced through improvements to public transport, pedestrian and cycling infrastructure, etc). It is only with sufficient knowledge of the existing conditions that the key issues may be identified and addressed through the assessment process by providing the context for determining the contribution that the proposals may make towards the achievement of the objectives.

1.4 Scope of the Integrated Impact Assessment

- 1.4.1 In line with the assessment of the proposal to remove the WEZ, six primary objectives, with several subsidiary secondary objectives, were used to assess the impacts of the new MTS (as shown in Table 1-1). Section 2 of this report provides a macro-level analysis of each VO2 proposal and Sections 4 to 7 assess the impact of each VO2 proposal against the relevant objectives.
- 1.4.2 The appraisal framework used to assess the new MTS is more comprehensive than necessary to assess the impacts of VO2. In particular, as the Congestion Charging Scheme is already in operation, some of the secondary objectives will clearly not be affected in any way by the proposals. Consequently an initial screening was undertaken as part of the IIA, based on

¹ The Environmental Assessment of Plans and Programmes Regulations 2004 (Statutory Instrument 2004 No 1633).

professional judgement, to ensure only the relevant objectives were included. Those not considered relevant are also indicated in Table 1-1.

Health Impact Assessment Screening

- 1.4.3 The Variation Order 2 proposals were subject to a Health Impact Assessment Screening. This determined that the proposals were not likely to have significant effects on health (as covered by Primary Objective C) and that there would be no need to carry out a Health Impact Assessment upon them. The screening checklist is included in Appendix 1 of this report.
- 1.4.4 With regards to Primary Objective F, the VO2 proposals for a scheme already in operation were not considered to have an impact on this objective (and sub-objectives) and therefore have not been assessed in this report.

Table 1-1: Primary and secondary MTS objectives considered in the IIA (those not considered in the IIA are indicated using an *)

Primary Objective A – To contribute to, and facilitate, more sustainable and efficient economic progress within London
Secondary Objectives
<ul style="list-style-type: none"> Promote more sustainable transport and travel patterns for all users and potential users of the London transport system Increase the economic efficiency and environmental and social sustainability of freight transport and transfer within and around London and the South East Facilitate and contribute to regeneration across all communities in London Contribute to enhanced productivity and competitiveness amongst all businesses within the London area To help facilitate and contribute to increased employment and earnings especially in low-waged areas To contribute to the alleviation of poverty and its contributory factors
Primary Objective B – To enhance equality and actively mitigate the barriers to this
Secondary Objectives
<ul style="list-style-type: none"> To address the key barriers to equality of access for all users and potential users of the London transport system To give all users and potential users equal opportunity to access the London transport system and sustainable transport choices
Primary Objective C – To contribute to enhanced health and wellbeing for all within London*
Secondary Objectives
<ul style="list-style-type: none"> To address health inequalities and factors which negatively impact upon health and wellbeing* To promote enhanced health and wellbeing for all* Improve air quality and the noise climate across London*
Primary Objective D – To promote safety and security for all working, travelling and using London transport services and facilities
Secondary Objectives
<ul style="list-style-type: none"> Increase security and resilience to major incidents on the network* Increase road safety for vehicular and pedestrians Increase staff and passenger safety on all modes of transport*

- Contribute to the reduction of crime and fear of crime for all users and potential users of the London transport system*

Primary Objective E – To contribute to the mitigation of and adaptation to climatic change

Secondary Objectives

- To contribute to the reduction of GHG emissions arising from within the London area
- To reduce GHG emissions arising from operations and service provision
- To enhance and facilitate adaptation to the impacts of climate change*

Primary Objective F – To protect and enhance the physical, historic, archaeological and socio-cultural environment and public realm*

Secondary Objectives

- To promote more sustainable resource use and waste management*
- To protect and enhance the built environment and streetscape through planning and operations*
- To protect and enhance the historic, archaeological and cultural environment through planning and operations*
- To protect and enhance the natural, physical environment, including biodiversity, flora and fauna through planning and operations*
- To protect and enhance greenspaces, riverscapes and waterways through planning and operations*

1.4.5 The assessment against the objectives is based upon the impact rating shown in Table 1-2.

Table 1-2: Impact rating criteria

++	+	0	-	--	X
Significant Positive	Minor Positive	Neutral	Minor Negative	Significant Negative	No effect

2 Overview analysis of each VO2 proposal

2.1 Introduction

- 2.1.1 This section provides an overview analysis of the likely impacts of the VO2 proposals related to the operation of the Central London Congestion Charging Scheme (CLoCCS). The analysis assumes a scenario where the WEZ has been removed. Overall, none of the proposals are expected to have any significant impact at a macro level. Nonetheless, the potential impacts on various groups or sectors are detailed.

2.2 Overview impact of introducing automated payment accounts (Congestion Charging Auto Pay)

- 2.2.1 The introduction of automated payment account (Congestion Charging (CC) Auto Pay) would make payment of the charge, for those who are able to use this method, easier and is likely to lead to fewer Penalty Charge Notices (PCNs) being issued. This may lead to a slight increase in the number of vehicles driving in the charging zone.

2.3 Overview impact of an increase the level of daily charges

- 2.3.1 An increase in the level of daily charges is likely to act as a slight deterrent to drivers entering the charging zone. The specific impact of the charge increase would be dependent on the elasticity of demand for each user, the current charge they pay and the future charge they would pay. This is expected to lead to a slight decrease in the number of vehicles driving in the charging zone.

2.4 Overview impact of introducing changes to discounts and exemptions

- 2.4.1 The impact of the introduction of changes to the discounts and exemptions available to users of the CLoCCS will be dependent on the specific circumstances of the drivers. However, whilst some discounts and exemptions are being removed, others are being proposed in their place. Consequently the overall impact on vehicles driving in the charging zone is expected to be broadly neutral.

3 Primary Objective A: Economy

3.1 Introduction

3.1.1 This section of the Impact Assessment describes the likely economic impacts of the proposals in relation to the operation of the CLoCCS.

3.2 Policy Context

3.2.1 At a London-wide level, strategic transport networks play an important role in London's economy. Radial connections into central London are important for commuters and other travellers, as are radial connections into, and out of, metropolitan town centres, Areas for Regeneration, Opportunity Areas, employment and service hubs and residential areas.

3.2.2 The Spatial Development Strategy for London ('The London Plan') provides the overarching strategic framework for the development of London over the next 20–25 years and integrates aspects contained in other Mayoral strategies including the new MTS and the Economic Development Strategy (EDS).

3.2.3 The strategies prepare for London's predicted growth of 1.3 million more people and 0.75 million more jobs by 2031 and supports sustainable growth across central, inner and outer London. The London Plan, EDS and MTS recognise that the provision of reliable and efficient transport, with the capacity and connectivity to accommodate this growth sustainably, is crucial to the continued success of the London and UK economies. Relevant policies from each of the strategies are outlined below:

3.2.4 The new MTS sets out 12 policies in support of economic development and population growth. These focus primarily on enhancing the capacity and efficiency of the existing transport network in order to:

- Expand and improve access to business and employment markets, as well as to wider social and economic opportunities, recognising that improving the speed and reliability of passenger and freight movements will maximise the efficiency of business operations and improve productivity (Policies 1, 2, 3, 4)
- Improving connectivity and capacity for people and goods in central London, along corridors and in town centres (Policy 5, 6, 7)
- Maintain the vitality and economic viability of London's town centres by providing better access for people and freight to jobs, services and leisure opportunities and by improving the public realm and security and making them more attractive to both existing and prospective residents and businesses (Policy 8)
- Reduce the costs to businesses by reducing congestion on strategic transport routes (Policy 9)
- Bring transport assets to a good state of repair and maintain them (Policy 10)
- Make the best use of London's limited road space by encouraging modal shift through investment in infrastructure, service improvements and the implementation of appropriate demand management measures (Policy 11)

- Improve the efficiency of freight distribution to increase the operational efficiency of the road network, reduce congestion and ultimately to allow London to function as a dynamic world city (Policy 12).
- 3.2.5 Proposal 5G of the EDS specifically states the Mayor's intention to "work with the LDA, TfL and partners to achieve the full economic development benefits of London's transport schemes and to bring forward the necessary further investment in London's infrastructure".
- 3.2.6 Policy 2.7 of the London Plan sets out the Mayor's vision for achieving sustained renewal of designated Areas for Regeneration. This includes a requirement for Boroughs in their Local Development Frameworks (LDFs), Community Strategies, and Neighbourhood Renewal Strategies, to identify Areas for Regeneration and set out integrated spatial policies that bring together regeneration, development and transport proposals with improvements in learning and skills, health, safety, access, employment, environment and housing.
- 3.2.7 Policy 6.11 of the Plan deals specifically with traffic flows and congestion and the measures that must be considered in Local Development Frameworks and Local Implementation Plans to smooth traffic flows and tackle congestion. These include promoting services that reduce the need to travel, improving the extent and quality of pedestrian and cycle routes and public transport, smoothing traffic flow and promoting sustainable and efficient arrangements for the transportation and delivery of freight.

3.3 Methodology

- 3.3.1 The economic assessment of the proposed changes has been undertaken using an objectives-led approach which is consistent with the overall approach to the IIA of the new MTS. It examines how the proposed policy changes impact upon the objectives set out in the MTS insofar as these relate to supporting economic growth, productivity, competitiveness and regeneration within the CLoCCS and within London as a whole. Specifically, the economic assessment considers the extent to which the proposal contributes towards achieving the IIA objectives when considered against the baseline. A series of 'guide questions' have been used to assist the assessment of the potential effects in a qualitative manner, ensuring consideration is given to relevant influencing factors. All of the secondary objectives were considered in the assessment.

3.4 Baseline Conditions

- 3.4.1 A reliable and efficient transport network is fundamental to economic growth and business productivity both within the Congestion Charging Zone and also for London as a whole². Similarly, the costs of doing business (which include transport costs) are a consideration in businesses' decisions about where to locate, freight and servicing operators' decisions about how to operate, and in customers' decisions about where to shop.
- 3.4.2 The economic impacts of the proposed changes to the operation of the Congestion Charging scheme are therefore assessed with reference to:
- The effects on journey times and journey time reliability which in turn affect economic productivity. This in turn requires an understanding of how the proposed changes may impact upon congestion within the CLoCCS

² Mayor of London (2008) *The London Plan (Consolidated with Alterations since 2004)*. Greater London Authority: London.

- The effects on TfL revenue and hence investment in transport improvements elsewhere on the network. This in turn requires an understanding of the impact on traffic levels within the congestion zone
- The effects on income of those who regularly pay the Congestion Charge in order to access places of employment and/or residence as well as services and retail and leisure centres
- Effects on business, including freight and servicing, and particularly the costs of doing business within the CLoCCS.

Road Traffic

- 3.4.3 The volume of traffic on the network affects congestion levels which impact upon business efficiency and sustainability.

Current characteristics

- 3.4.4 The operation of CLoCCS has resulted in sustained reductions in traffic over time. These reductions have also intensified, reflecting a wider trend towards reduced traffic in central and inner London³.
- 3.4.5 Traffic had been relatively stable for most vehicle types from the introduction of charging in 2003 until 2007. However, in 2008 significant incremental falls were observed for some vehicle types. More specifically, annualised flows for cars (including minicabs) declined by 11 per cent in 2008 compared to 2007, while numbers of vans and powered two-wheelers fell by 4 per cent. In the same period pedal cycle numbers increased by 14 per cent, leading to an overall decline for all vehicles of 4 per cent. This trend continued into 2009, with a 13 per cent decline in powered two-wheelers, and lorries and other vehicles, when comparing annualised results between 2008 and 2009. In addition van numbers fell by 8 per cent in the same period while bus and coach numbers fell by 4 per cent, taxis by 3 per cent and cars and minicabs by 2 per cent. The only vehicle type showing consistent increase over the years is pedal cycles, which increased by a further 4 per cent between 2008 and 2009. This led to an overall decline across all vehicle types of 4 per cent in 2009 compared to 2008⁴. This notable decline is reflected in other traffic data and mirrors the downturn in the economy which will have affected travelling patterns in central London.

Expected trends under the status quo

- 3.4.6 In the case where no changes are made to the existing operation of the Congestion Charging scheme, it is expected that road traffic levels will return to levels similar to those seen in early 2007 (pre-recession) in the short- to medium-term. There would also be the potential for some traffic to be attracted back in to the zone if the deterrent effect of the charge, in real terms, decreased. Over the longer term, road traffic levels are expected to remain relatively stable.

Congestion

- 3.4.7 Time spent travelling during the working day is a cost to business. It is assumed that savings in travel time convert non-productive time to productive use and that, in a free labour market, the value of an individual's working time to the economy is reflected in the wage rate paid. This

³ TfL (2003-2008) Central London Congestion Charging Impacts Monitoring, First to Sixth Annual Reports. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/roadusers/congestioncharging/6722.aspx> on 20/05/2010.

⁴ TfL (2010) *Travel in London, Report 2*. Transport for London: London. Accessed online at http://www.tfl.gov.uk/assets/downloads/corporate/Travel_in_London_Report_2.pdf on 20/05/2010.

benefit is assumed to be passed into the wider economy and to accrue in some proportion to the producer, the consumer and the employee, depending on market conditions.

- 3.4.8 Congestion impacts upon journey times and journey reliability which in turn impacts upon business efficiency. The effective capacity of the road network (which is a function of roadspace and the timing of traffic signals at junctions) is an important influence on congestion levels and hence on accessibility to employment, markets and suppliers.
- 3.4.9 An efficient and reliable transport network is essential for moving people between their homes and workplaces. Transport contributes to the efficient working of labour markets if people are able to access a wide choice of jobs within reasonable travelling time.
- 3.4.10 Similarly, the freight and servicing sector is dependent on a reliable transport network for goods and providing services in a timely and efficient manner. Transport and congestion therefore impact on the efficiency of businesses in their access to suppliers, customers and markets.

Current characteristics

- 3.4.11 There has been a long-term trend of increasing road congestion in London. This has affected all parts of London, but has been particularly intense in central and inner London, where it dates back at least two decades, although there is some evidence of reduced congestion during 2009. Increases in congestion levels are thought to reflect a range of planned and unplanned interventions on the road network that have combined to reduce the effective capacity of the network for general traffic. These include an increase in roadworks, a range of other traffic management and road safety initiatives, together with unplanned interventions such as security alerts and emergency utility repairs.
- 3.4.12 Time-series measurements of congestion inside the CLoCCS, show that there was a marked decrease in congestion in the months immediately after the introduction of the Congestion Charge in 2003. However, from 2004 to mid-2007, a general upward trend in congestion is apparent. In the latter months of 2008 and during 2009 congestion in the CLoCCS, appeared to have reduced slightly compared to the earlier surveys in equivalent months⁵.
- 3.4.13 This apparent reduction in congestion coincides broadly with reductions in the level of traffic in the area associated with the economic downturn, as discussed above. These observations may also be an indication that the intensity of roadworks may have lessened in the last year. The level of congestion experienced in the central zone is still relatively high; however, conditions would be worse in the absence of Congestion Charging.

Expected trends under the status quo

- 3.4.14 Future congestion levels will depend upon the effectiveness of measures to improve the effective capacity of the road network and the demand for travel. Population growth within London is expected to increase the demand for travel (including by road) and TfL data suggests that improvements to road network capacity could induce additional trips on the road network⁶.
- 3.4.15 In the scenario where no changes are made to the operation of the Congestion Charging scheme, it is predicted that congestion will stabilise around current levels as the positive impacts of signalling improvements and reduced intensity of roadworks are offset by a slight short-term increase in traffic levels following economic recovery. However, there would be the potential for

⁵ *Ibid.*

⁶ *Ibid.*

some traffic to be attracted back in to the zone if the deterrent effect of the charge, in real terms, decreased.

Business (excluding retail)

- 3.4.16 In general, transport costs are a relatively minor aspect of much business activity and the broad effects of Congestion Charging on the cost of business operations and on customer disposable income are marginal⁷. However, it is possible that some businesses may benefit or disbenefit more than others although attributing this specifically to Congestion Charging can be difficult.
- 3.4.17 A concern amongst businesses, particularly small businesses, is that Congestion Charging imposes additional direct and administrative costs on them as well as on their customers/clients who may choose to shop/eat or do business elsewhere where the transactions costs are lower.
- 3.4.18 Also, as noted above, time spent travelling during the working day is a cost to business.

Current characteristics

- 3.4.19 Analysis of business performance (sales and profitability) and the rate of new business formation (measured by VAT registrations) shows stronger (both absolute and relative) growth in the CLoCCS after the introduction of charging than in the years before. In comparison, average annual sales growth has deteriorated in other inner London and outer London areas over the same period⁸. This suggests that the introduction of charging has had no material impact, at the aggregate level, on business.
- 3.4.20 In terms of employment growth, a comprehensive analysis undertaken by TfL as part of the Fifth Annual Impacts Monitoring Report, found that business and employment growth in the charging zone had been higher since 2003 than prior to the introduction of charging in early 2003, reflecting strong macroeconomic growth more generally across London.

Expected trends under the status quo

- 3.4.21 It is important to note that from late 2007, there have been a number of exogenous impacts on the business and economic activity in central London, including the 'credit crunch', difficulties at financial institutions, and oil price rises, all of which are unrelated to the introduction of charging itself.
- 3.4.22 Furthermore, over time the charge is no longer perceived as an 'additional' cost but is built into business planning and decision-making in the context of 'business as usual' for both existing businesses and new businesses thinking of locating within the charging zone.
- 3.4.23 Based on detailed monitoring data and analysis undertaken by TfL, it is predicted that job growth, net business formation and profitability will continue to increase in line with broader trends in a scenario in which there are no changes made to the operation of the Congestion Charging scheme.

Retail

- 3.4.24 Charging those who drive into the charging zone reduces the disposable income of households where somebody pays the charge and may encourage some people to avoid the charging zone

⁷ TfL (2008) *Central London Congestion Charging Sixth Annual Impacts Monitoring Report*. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/assets/downloads/sixth-annual-impacts-monitoring-report-2008-07.pdf> on 20/05/2010.

⁸ *Ibid.*

altogether. For these reasons, retailers were found to be amongst the most vocal in expressing their concerns about the introduction of charging. Retailers have argued that lower car borne traffic levels following the introduction of charging has reduced the number of shoppers and visitors, which in turn has adversely affected their sales and profitability⁹.

- 3.4.25 Furthermore, without the convenience of a private car or van, a small number of shoppers may limit both the bulkiness and volume of purchases thereby adversely impacting upon retail sales.

Current

- 3.4.26 Shopper footfall data reveals strong seasonal trends, with peaks during Christmas and troughs during the spring and summer months.
- 3.4.27 TfL monitoring of retail traffic indicators has shown that retail footfall in the CLoCCS has been relatively stable over time, notwithstanding seasonal fluctuations. By comparison, there appears to be a falling long term background trend in footfall at a selection of retail sites in Greater London and in the UK as a whole¹⁰.
- 3.4.28 Time-series analysis of sales and profitability datasets shows that sales growth in the retail sector has been among the lowest of all sectors since 2000¹¹. The retail sector across London has faced variable conditions since 2000. Despite this, charging does not appear to have adversely affected the retail sector as a whole in the central London charging zone.

Expected trends under the status quo

- 3.4.29 In the scenario where no changes are made to the operation of the Congestion Charging scheme, retail footfall is expected to remain around present levels while sales growth, profitability and employment growth continue to grow.

TfL Revenues and Investment

- 3.4.30 By law, the net revenues from the Congestion Charging scheme must be spent on measures to support the Mayor's Transport Strategy. Any change in net revenue will therefore impact upon the level of money available to fund other improvements to the transport network in London.

Current

- 3.4.31 TfL reported provisional total revenue from the Congestion Charging scheme as £268 million in financial year 2007/8 and provisional costs for the same year as £131 million.

Expected trends under the status quo

- 3.4.32 With no changes to the operation of the Congestion Charging scheme, it is predicted that TfL net revenues from charging would exhibit a slightly increasing trend in the short-term as economic recovery prompts a general increase in travel demand and as TfL reduces the costs associated with administering the charging scheme. In the medium to longer term, net revenues are predicted to stabilise at around 2007 levels (at constant prices).

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ *Ibid.*

3.5 Likely Significant Effects on the Economy

- 3.5.1 While none of the proposals are expected to have a significant effect at a macro level, there would still be some particular impacts and these are described below.

Introduction of automated payment accounts

- 3.5.2 The introduction of CC Auto Pay would allow registered drivers to pay the charge automatically, thereby reducing the transaction costs incurred in paying the charge manually and eliminating the risk of incurring a Penalty Charge Notice. It is estimated that the transaction cost may be between £0.50-£1.50 depending on the payment method used.
- 3.5.3 Reduced transactions costs and the fact that payment is easier may encourage some additional trips on the road network within the charging area compared to the baseline case (i.e. where only existing payment channels are available), thereby contributing to traffic volumes and congestion levels. However, this impact is expected to be insignificant given the relatively small amount of money and time saved.
- 3.5.4 The reduction in transactions costs would be expected to have a positive but minor impact on business productivity. The results of an attitudinal survey of London businesses in 2008¹², revealed that the introduction of such a system was strongly supported with over half (58%) of surveyed businesses supporting it. However, the same survey also revealed that around 30% of all businesses in London who opposed the introduction of an automated payment account, did so because they did not trust TfL with account details/money, and this may reduce the numbers choosing CC Auto Pay.
- 3.5.5 Furthermore, with the minimum number of vehicles that can be registered to the Fleet Auto Pay accounts being reduced from 10 to 6 vehicles, this should impact positively upon business, particularly smaller businesses operating fleets of less than 10 vehicles.
- 3.5.6 Although account holders would be subject to a once-off £10 registration charge for each vehicle they add to their account and an annual £10 renewal charge for each of these vehicles, they would pay a lower daily charge than non-account holders. Non-account holders would continue to be able to pay the charge through existing manual payment channels.
- 3.5.7 It is expected that TfL would face some additional costs associated with the implementation and initial operation of the scheme but that these would be offset in the longer term through the lower operational costs of administering and processing charges compared to using the existing channels. This assumes that a sizeable proportion of users switch to the automated payment system. TfL research indicated that over half of people may be likely choose to use automated payment accounts.
- 3.5.8 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 option through CC Auto Pay for residents would benefit those residents who live in the CLoCCS and who take up the CC Auto Pay option and drive less than five times a week.
- 3.5.9 In light of an attitudinal survey of businesses quoted above, it could be reasonably expected that some residents would feel the same and therefore that not all residents would join CC Auto Pay.

- 3.5.10 Overall, the introduction of an automated payment account system is assessed as having a minor positive effect on economic productivity within the CLoCCS.

Increase in daily charge

- 3.5.11 The impacts of an increased charge on congestion and hence on journey reliability would be expected to be positive but minor as the increase in costs may deter some drivers from travelling by car. The strength of this effect would depend on the price-elasticity of those liable to the charge. However, as noted above, the greater convenience and cost-savings for those drivers who choose to use CC Auto Pay may slightly increase the demand for travel into the CLoCCS. The net result is expected to be no significant change in congestion levels.
- 3.5.12 The increase in the daily charge would impact negatively on charge payers. However, in real-terms the value of the charge has decreased since the last charge increase in 2005 and therefore the effect on the spending power of individuals would be expected to be minimal.
- 3.5.13 Given that the charge would increase by nearly 30% for fleet account holders, there would be a minor adverse impact upon those businesses that operate fleet vehicles. However, this effect is assumed to be short-lived as in the longer term both existing and new businesses would incorporate this cost into business planning. Additionally, transport costs for most businesses generally represent a small proportion of overall business production costs.
- 3.5.14 Increases to the daily charge alongside the introduction of CC Auto Pay would provide additional revenue to TfL, although it is likely that some of this would be used to offset the costs of implementing the CC Auto Pay system and reduced revenue from Penalty Charge Notices (PCNs).
- 3.5.15 The increase in the charge would not be expected to have a significant impact on retail and leisure businesses in the charge zone as the vast majority of customers come to central London by public transport.
- 3.5.16 Overall, the minor journey time reliability improvements, the relatively small additional costs to drivers and fleet operators in real terms, and the minimal impact that the charge increase would have on TfL revenue (reduced revenue from PCNs offset against the increased revenue from the charge) are assessed as having a neutral effect overall on economic productivity.

Changes to discounts and exemptions

Removal of Alternative Fuel Discount (AFD)

- 3.5.17 Estimates of the payback period (based on fuel cost savings alone) of alternative fuel vehicles with and without the AFD show a significant lengthening in the payback period for alternative fuel vehicles that regularly enter the zone with the AFD removed. For hybrid cars, the payback period would be increased by as much as 6 years once the discount is removed, while for cars and vans that convert to Liquefied Petroleum Gas (LPG), the breakeven time would increase by around 3 and 1 years respectively. The increased payback period of alternative fuel vehicles, together with the high initial capital costs (relative to conventional petrol- and diesel-fuelled vehicles) may suppress uptake of these vehicles (although the introduction of the greener vehicle discount – see below – would encourage the uptake of other types of more CO₂ efficient vehicles also with stringent air quality emissions targets). The running costs of these vehicles are often lower than conventional vehicles and therefore owners would continue to benefit in other ways.

- 3.5.18 The scale of the total loss in financial terms to AFD recipients is estimated to be in the order of £40,000 per day, assuming on the basis of TfL camera data, that just under 25% of AFD-registered vehicles travel in the zone on an average charging day. For individual drivers though, the annual disbenefit would be worth around £465 (assuming again that just under 25% of AFD-eligible vehicles travel in the zone on an average charging day). For businesses operating fleets of AFD eligible vehicles, the annual disbenefit would be higher. The two-year sunset period would allow alternative fuel vehicle owners to continue benefitting from the discount until 2013, and mitigate these impacts.
- 3.5.19 While the numbers of LPG vehicles has reduced dramatically in recent years – in the Society of Motor Manufacturers Traders' (SMMT) Ninth Annual Sustainability Report (2007) it is noted that in 2003 over 3,000 such vehicles were newly registered in comparison to only three in 2007 – the removal of the AFD would affect businesses that offer LPG-related services, such as servicing, refuelling and conversions.
- 3.5.20 There are a limited number of LPG conversion companies based in Greater London, and the impact on these businesses would be negative. For most however, LPG conversions are part of a wider range of services offered.
- 3.5.21 In terms of refuelling stations, LPG is offered at many larger refuelling stations, however, the refuelling stations are standard forecourts offering petrol and diesel, as well as a variety of other automotive products. Consequently, it is not felt that a change in demand for LPG-fuelled cars would have a significant effect on these businesses.
- 3.5.22 In addition, it is worth noting, that even with the changes proposed, there would remain other attractions to LPG-fuelled vehicles, including lower costs of fuel and other tax incentives.
- 3.5.23 Given the relatively small numbers of vehicles affected and the scale of the impact, the expected economic effect of the removal of the AFD overall is assessed as being neutral.

Greener Vehicle Discount (GVD)

- 3.5.24 Owners of Euro 5 passenger cars up to 100g/km CO₂ that are not currently eligible for the AFD would benefit from the introduction of the discount as the costs of travelling into and within the CLoCCS are significantly reduced (from £9-10 per day to zero).
- 3.5.25 The overall impact of this discount is expected to be relatively small at first because of the low number of Euro 5 cars up to 100g/km on the road, but to increase over time as people begin to replace existing vehicles with newer ones that are manufactured to conform to European vehicle emissions standards that become mandatory in January 2011.
- 3.5.26 Overall, the GVD is not expected to have any significant economic impact given the small numbers of vehicles these would make up in the zone.

Electrically propelled vehicles (EVs)

- 3.5.27 There are presently around 1,700 EVs registered and active in the Congestion Charging zone. By extending the definition of EVs to incorporate plug-in electric hybrid electric vehicles, more people would be able to benefit from the discount once these types of vehicles become available on the market. Until this point however, the overall impact of this discount is insignificant.

Monthly and annual charge

3.5.28 The removal of the monthly and annual discount (coupled with the proposed daily charge increase) would impact negatively upon those who previously benefitted from the “free days” offered as part of these bulk charges (to benefit from the “free days” customers need to drive on nearly 85% of charging days). The potential costs of losing this discount would most likely be offset by joining the CC Auto Pay scheme (where they would pay £9 rather than £10). Additionally, by joining CC Auto Pay drivers would minimise the risk of receiving a Penalty Charge Notice, which is currently a large incentive for regular users to purchase the bulk charges. It is likely that the total annual costs to most drivers would fall as they would only be charged for the days they drive.

3.5.29 Overall, the impact of the monthly and annual discount is assessed as being neutral.

Vehicles with nine or more seats

3.5.30 The introduction of an annual registration charge would be expected to have a minor adverse impact upon businesses (e.g. tourism) and organisations that regularly use such vehicles (e.g. services for the elderly). The total economic cost is estimated to be around £160,000 although the impact on individual businesses is assessed as being minor.

Overall conclusions

3.5.31 Overall, the introduction of CC Auto Pay is assessed as having a minor positive economic impact due to the reduced transaction costs to users, and the benefits to residents who drive in the zone less than five days a week.

3.5.32 Overall, the charge increase is assessed as having a neutral impact on the economy, due to the economic benefits of reduced congestion being offset against the additional costs to Congestion Charge users.

3.5.33 At a macro-level, the changes to discounts and exemptions are expected to have a neutral impact overall on business profitability.

3.5.34 The assessment against the relevant IIA Secondary Objectives is as follows:

+	Promote more sustainable transport and travel patterns for all users and potential users of the London transport system: the proposals would have a minor positive impact on achieving this objective
-	Increase the economic efficiency and environmental and social sustainability of freight transport and transfer within and around London and the South East: the impact of the proposals the on attainment of this objective is assessed as being negative given the increase in the charge for fleet Auto Pay customers, however this is considered to be minor overall
0	Facilitate and contribute to regeneration across all communities in London: the impact of the proposals the on attainment of this objective is assessed as being neutral

0	To help facilitate and contribute to increased employment and earnings especially in low-waged areas: the impact of the proposals the on attainment of this objective is assessed as being neutral
0	To contribute to the alleviation of poverty and its contributory factors: the impact of the proposals the on attainment of this objective is assessed as being neutral

3.6 Mitigation

3.6.1 No significant effects have been identified and therefore no mitigation measures are proposed.

3.7 Monitoring

3.7.1 As stated in Proposal 129 of the MTS, the Mayor, through TfL, will operate and monitor Congestion Charging in the original Central London 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. The proposals outlined in Variation Order 2 will be monitored in this context.

4 Primary Objective B: Equalities

4.1 Introduction

- 4.1.1 TfL proposes to make changes to some discounts and exemptions to the Congestion Charge, as well as introducing an increase to the charge and making methods of automatic payment available to individuals.
- 4.1.2 Any given proposal may affect certain groups differently to the mainstream population because of their inherent human characteristics (gender or ethnicity), lifestyle (lesbians, gay or bisexual people), beliefs (faith groups) or historical patterns of disadvantage (disabled people).
- 4.1.3 Other groups may be particularly sensitive to potential impacts of specific proposals. For example, the removal of the monthly and annual discount to the Congestion Charge may seem fairer to people on lower incomes as they would have found this more difficult to afford than others.
- 4.1.4 This section of the IIA aims to set out a review of the potential equalities considerations and issues linked to this proposal.

4.2 Policy Context

- 4.2.1 The proposals for making changes to the CLoCCS have been assessed within the context of relevant national, regional and local equality policy and legislation. The principal policy elements have been identified below:

National Legislation and Policy

- 4.2.2 TfL has statutory duties to promote equal treatment as well as to tackle discrimination in three areas – race, disability and gender. The statutory duties are defined by the following legislation:
- Race Relations (Amendment) Act 2000
 - Disability Discrimination Act 2005 and
 - Equality Act 2010
- 4.2.3 Equality legislation places a duty on all public bodies to have regard to the need to promote equal treatment on the grounds of race, disability and gender, as well as the need to eliminate discrimination and to promote good relations between different racial groups.
- 4.2.4 The Single Equality Act 2010, a new streamlined public sector equality duty, has replaced existing duties and will be extended to cover all strands of discrimination, including measures to eliminate discrimination against transgender people and those suffering socio-economic disadvantage. In line with best practice and in recognition of the future intent to promote equal treatment across all equality strands in draft equality legislation, this assessment recognises the connections between socio-demographic circumstances and other equalities issues.

Regional Legislation and Policy

- 4.2.5 In addition to legislation, the London Plan also includes policies of direct relevance to the proposal in relation to equality¹³. The London Plan recognises a number of equality priority groups: disabled and deaf people, older people, younger people, children, women, Black, Asian and minority ethnic groups (BAME), gay men, lesbians, bisexuals and transgender people. The London Plan also recognises the differing spatial needs of immigrants, refugees and asylum seekers, travellers and gypsies and people belonging to particular faith groups.
- 4.2.6 The London Plan is supplemented by further guidance on Planning for Equality and Diversity¹⁴. This sets out in detail how to implement policies from the London Plan intended to address the needs of different communities in London.

Local Policy Context

- 4.2.7 With the exception of the City of London – which has a very small resident population - all boroughs have large and diverse resident populations. All boroughs have equality schemes which aim to meet the needs of these communities.

4.3 Methodology

The EqIA Process

- 4.3.1 The EqIA process was based principally on the Equality and Human Rights Commission (EHRC) Equality Impact Assessment guidelines¹⁵.
- 4.3.2 As Figure 4-1 shows, the EqIA was conducted in two key stages:

Stage 1 involved screening the proposed changes to see if it is relevant to (or could have implications for) equality.

Stage 2 involved fully assessing the proposals to make sure they do not have negative or adverse effects on different sections of the impacted communities. Specific steps included:

- a) Identifying the aims of the proposals
- b) Gathering evidence and facilitating involvement
- c) Assessing impact, including the potential to cause unlawful direct or indirect discrimination, or whether any opportunities to promote equality have been missed
- d) Establishing what practical actions are required to mitigate any adverse or negative impact and what actions will help promote equality
- e) Making arrangements to monitor and review the proposal and
- f) Publishing the results of the EqIA.

¹³ Mayor of London (2008) *The London Plan*. Greater London Authority: London. Accessed online at <http://www.london.gov.uk/thelondonplan/> on 20/05/2010.

¹⁴ GLA (2007) *Planning for Equality and Diversity in London – Supplementary Planning Guidance to the London Plan*. GLA: London. Accessed online at <http://www.london.gov.uk/mayor/strategies/sds/spg-planning-for-diversity.jsp> on 20/05/2010.

¹⁵ Equality and Human Rights Commission (EHRC) (undated) Equality Impact Assessment Guidelines. Accessed online at <http://www.equalityhumanrights.com/our-job/our-equality-impact-assessments/> on 20/05/2010.

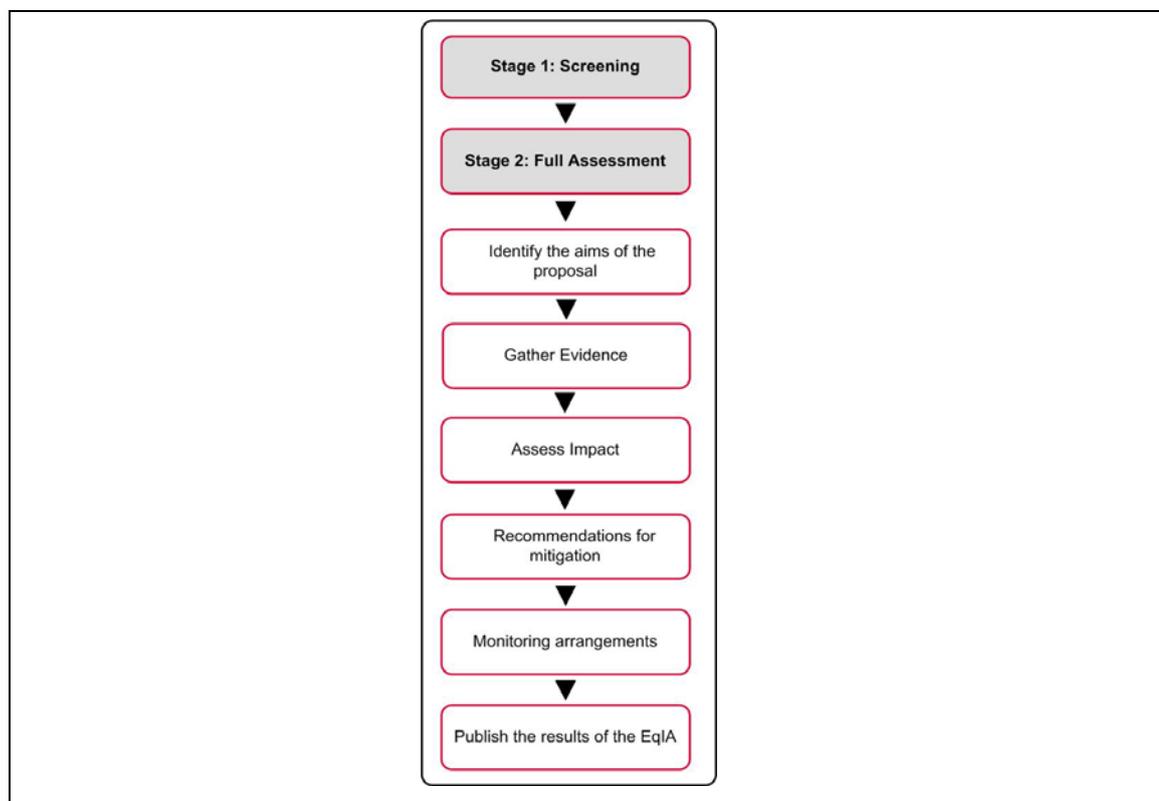


Figure 4-1: Equalities Impact Assessment process

4.3.3 The EqIA approach meets the requirements of the guidance set out in Transport for London's 'Equalities Impact Assessments: How to do them' (June 2004)¹⁶.

Assessment of Potential Impacts

4.3.4 The appraisal process followed the process identified in Figure 4-1. The analysis considered in turn:

- where equality priority groups might be affected, according to geographical criteria, using maps to support this analysis
- evidence indicating that people from equality priority groups may be more sensitive to the effects than the rest of the population and
- what second round effects might result for equality priority groups.

4.3.5 The scaling of significance of equalities impacts is based on the following key concepts:

- **Differential effects** are defined as those impacts that potentially affect an equality priority group more than the rest of the population as opposed to an impact that affects everyone equally
- **Geographically distributive effects** are defined as those which would lead to an area experiencing a change in impact in relation to the base case

¹⁶ See TfL (2004) *Equalities Impact Assessments: How To Do Them*. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/assets/downloads/corporate/eia-06-04.pdf> on 20/05/2010.

- **Disproportionate representation** is defined for equality priority groups where their proportional representation in an area is 10% or more than the London regional average
 - **Sensitivity differential effects** apply to those belonging to a particular equality priority group which could be more sensitive to impacts than other people, on the basis of their individual status, their stage in life or their social or economic circumstances
 - **Indirect / second round impacts:** Some impacts may not yet have been identified or may exist as secondary effects. Indirect impacts include factors such as impacts on economic activity as a result of a reduced bus service. Second round impacts could include wider productivity effects or deepening levels of deprivation
 - **Cumulative Impacts:** This is where an equality priority group may be affected by more than one positive or adverse impact. Cumulative impacts are identified in the following ways:
 - where more than one impact is found to have an effect on the same equality priority groups
 - through the greater sensitivity of equality priority groups to the effects or,
 - where a number of impacts are experienced in the same geographical area and within this area where an equality priority group is over-represented.
- 4.3.6 The conclusions in this report were prepared following completion of the above analysis and are based on consideration of findings that indicated potential differential impacts.
- 4.3.7 The EqIA addresses each of the primary and secondary objectives relating to equality listed in Table 1-1.

4.4 Baseline Conditions

City of Westminster

- 4.4.1 A review of relevant sources shows that¹⁷:
- With a high number of workers and tourists coming into the City of Westminster each day, the daytime population of Westminster swells to over 1 million
 - There are a large number of unemployed young people in the borough; the number of young people aged 16 to 24 claiming the Jobseekers Allowance (JSA) increased by 11% (110 young people) in 2009. This was a much larger increase than for the total number of claimants in Westminster
 - The borough is ethnically diverse with 30% of the population being from various BAME communities, which rises to 44% for children. Ethnic minorities are over represented on the homelessness list — 65% in 2007/8
 - The proportion of full time employees is similar to London at 42%, but there are more self employed persons in the borough. There are also a much higher proportion of highly qualified people than London or England. There are around 16,621 carers which is around 7% of the population. Of these around 9,000 are female and 7,000 are male

¹⁷ City of Westminster (2010) *Single Equality Scheme 2010-13*: Consultation draft. Accessed online at <http://www.westminster.gov.uk/workspace/assets/publications/APPENDIX-1-and-2-Action-Plans-1261657910.pdf> on 20/5/2010. and the Office for National Statistics

- 56% of households have no car or van and there is a low proportion of people who travel to work by car or van
- Up to 5,200 of the people who live in Westminster over the age of 16 are disabled.

City of London

4.4.2 A review of relevant sources¹⁸ shows that:

- The City of London has a small but increasing residential population (7,185 in 2001), with a larger proportion of 'higher professional' residents (23%) than Greater London (8%). There is also a very large number of people working in and visiting the Square Mile
- Together all BAME groups constitute just over one sixth (16%) of the residential population; the majority of population is White British.

London Borough of Lambeth

4.4.3 A review of relevant sources¹⁹ for the borough shows that:

- A third of Lambeth's population is from ethnic minorities (2001 figures), the seventh highest proportion in the country. About a third of all people were born outside the UK. Over 150 languages are spoken
- 51% of Lambeth's households have no car or van; 20% of the population travels to work by car, while 20% takes public transport. This is the reverse of the average situation in England and Wales.

London Borough of Southwark

4.4.4 A review of relevant sources²⁰ for the borough shows that:

- There is a higher proportion of benefit claimants than London averages, under JSA, Incapacity benefits and Lone Parents benefits
- 34% of the population is from BAME groups
- 52% of households have no vehicles, which is 14% more than London averages.

London Borough of Camden

4.4.5 A review of relevant sources²¹ for the borough shows that:

- 27% of Camden residents are from black or minority ethnic groups
- 65% of residents aged 16-74 are economically active while 8% of economically active people are unemployed

¹⁸ Corporation of London, Department of Planning and Transportation (2005) *City of London Resident Population – Census 2001: Demographic Information*. Accessed online at http://www.cityoflondon.gov.uk/Corporation/LGNL_Services/Environment_and_planning/Planning/Planning_information/census_2001.htm on 20/05/2010; the Office for National Statistics

¹⁹ Lambeth First (2008) *All Together Better: the State of the Borough Report*. Accessed online at http://www.lambethfirst.org.uk/community-strategy/State_of_the_Borough/ on 20/05/2010; the Office for National Statistics

²⁰ Southwark Analytical Hub (2008) *Southwark Vital Statistics*. Accessed online at <http://www.southwarkalliance.org.uk/populationprofiles/index.htm> on 20/05/2010.

²¹ London Borough of Camden (2009) *Camden Profile 2009*. Accessed online at <http://www.camden.gov.uk/ccm/content/council-and-democracy/about-the-council/camden-statistics/demographic-profile-2005.en> on 20/05/2010.

- Some 32% of Camden residents travel to work by tube, 16% walk to work, 15% travel by car or van and 12% travel by bus.

London Borough of Islington

4.4.6 A review of relevant sources²² for the borough shows that:

- Islington has a multi-ethnic population with 40% of residents from backgrounds other than white British. The breakdown of ethnicity is changing, with growing Asian communities and reducing African and Caribbean communities
- 16% of residents describe themselves as having impairment or a disability. The equivalent of 20% of the working age population in Islington claim incapacity or disability benefits.

4.5 Likely Significant Effects on Equalities

4.5.1 While none of the proposals are expected to have a significant effect at a macro level, there would still be some impacts for some groups of people and these are described below.

Introduction of automated payment accounts

4.5.2 The CC Auto Pay scheme may not be accessible to some equality target groups. Some people in lower income groups (including unemployed people) may be ineligible for the criteria for setting up an account as they do not have a bank account or credit or debit card, however the numbers of people would be very small. It is thought that there would be very few people who drive a car in central London who do not have a bank account.

4.5.3 Some older people, people with certain types of disabilities and people of ethnic minorities may find the registration process complicated due to technology or language barriers.

Increase in daily charge

4.5.4 The daily charge and pay next day charge are proposed to rise from £8 to £10 and from £10 to £12 respectively. For customers who choose Auto Pay, the charge would rise from £8 to £9. The charge increase would be likely to be felt most acutely by people on low incomes who may drive into the zone. While the impact would be limited overall in relation to the numbers of people, those who do continue to drive could suffer a significant negative impact.

4.5.5 While there is a 90% discount available for CLoCCS residents that would help mitigate this increase for people on low incomes within in the zone, and car ownership amongst low income central Londoners is low, research of the original scheme found that those on a low income found even a discounted charge difficult to afford. An increase, however small, would be likely to affect this group of people.

4.5.6 Around one in three WEZ users have reported that they find it difficult to afford to pay the charge, particularly those who pay the charge from lower income or economically inactive households, disabled people and those with young children²³. If this proportion is replicated amongst the

²² Islington Strategic Partnership (2008) *Islington's Borough profile*. Accessed online at <http://www.islington.gov.uk/Community/islingtonstrategicpartnership/scs.asp> on 20/05/2010.

²³ TfL (2008) *Central London Congestion Charging Scheme Impacts Monitoring, Sixth Annual Report*. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/assets/downloads/sixth-annual-impacts-monitoring-report-2008-07.pdf> on 20/05/2010.

residents of the WEZ the combination of the loss of the discount and increase in the charge could impact these groups. This is covered in further detail in the WEZ Integrated Impact Assessment.

Changes to discounts and exemptions

- 4.5.7 If the alternative fuel discount is removed, cars that were previously entitled to a discount would have to pay the standard charge, unless they qualify for the new greener vehicle discount. It is estimated that individual drivers of cars that would no longer qualify would lose around £465 per annum (see 4.5.17 above). It seems likely that low income groups, who cannot afford to replace their cars that currently qualify for the alternative fuel discount with one that would qualify for the greener vehicle discount, would be disproportionately and differentially impacted due to their socio-economic circumstances. However, given the premium paid for vehicles that qualify for the AFD it is unlikely that many, if any, people on a low income would currently own these vehicles and therefore be affected by its removal.
- 4.5.8 No evidence was found to enable a reliable prediction of the effects of changing the definition of electrically propelled vehicles.
- 4.5.9 The removal of the monthly and annual discount has the potential to 'feel' fairer to low income groups who may have cash flow issues that have prevented them from being able to purchase the monthly or annual charge. However, these groups would also be more sensitive to losing relatively small discounts such as 3 free charging days a month or 40 free charging days a year.
- 4.5.10 It is proposed that a new annual registration charge be introduced for vehicles with nine or more seats. Door to door 'Hopper' bus services for older people and disabled people use such vehicles. An annual registration charge may be considered a catalyst to shrink fleets of voluntary organisations that run these services. However, this is not considered very likely given the charge is set at £10 per annum and the fact that most voluntary organisations will have a small fleet.

Overall conclusions

- 4.5.11 The assessment against the relevant IIA Secondary Objectives is as follows:

-	<p>To address the key barriers to equality of access for all users and potential users of the London transport system: people on low incomes and reliant on the car as a means of transport in central London may be disproportionately adversely impacted as a result of the proposals</p>
X	<p>To give all users and potential users equal opportunity to access the London transport system and sustainable transport choices: no significant effects on equalities groups are expected as a result of the proposals</p>

4.6 Mitigation

- 4.6.1 TfL will be undertaking consultation on the Variation Order to introduce the proposed changes. This represents an opportunity to investigate whether there are any equalities implications for the

removal of the alternative fuel discount and the change in definition of electrically propelled vehicles.

- 4.6.2 As part of the consultation process information will be made available in different languages and formats so that older people, people with certain types of disabilities and people of ethnic minorities can access information about the proposals. TfL makes information about the Congestion Charge available in different languages and in a variety of formats.

4.7 Monitoring

- 4.7.1 As stated in Section 3.7, proposals contained in Variation Order 2 will be monitored in accordance with Proposal 129 of the MTS.

5 Primary Objective D: Safety

5.1 Introduction

5.1.1 The effect of Variation Order 2 on transport safety is considered in this assessment which provides a high level review of the potential impact of the proposed changes on safety.

5.2 Policy Context

5.2.1 In March 2000 the Government published its road safety strategy and casualty reduction targets for 2010 in their report entitled "Tomorrow's Roads: Safer for Everyone"²⁴. The targets, compared with the average for the period 1994-1998 are:

- A 40% reduction in the number of people killed or seriously injured in road collisions
- A 50% reduction in the number of children killed or seriously injured
- A 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.

5.2.2 Following this, TfL produced "London's Road Safety Plan"²⁵, which recognised the national targets, and also recognised the particular issues for vulnerable road users. Consequently, the 40% reduction target for fatal or serious casualties was applied in London to pedestrians, bicycles and powered two wheelers.

5.2.3 By 2004, these targets had been achieved in London and the then Mayor therefore announced more challenging targets (in March 2006), to be achieved by 2010.

5.2.4 In April 2009, the DfT published "A Safer Way: Consultation on Making Britain's Roads the Safest in the World"²⁶, which seeks views on the vision, targets and measures for improving road safety in Great Britain for the period beyond 2010. The document provides an overview of the proposed methodologies for improving road safety, with the consultation covering seven key areas.

5.2.5 Finally, the Integrated Impact Assessment undertaken for the new MTS recognised that there has been a declining trend in casualties in recent years. However the document also states that with increases in road vehicle kilometres, there are likely to be increases in collisions and number of people killed or seriously injured.

5.3 Methodology

5.3.1 The IIA for the MTS included an objective "To promote safety and security for all working, travelling and using London transport services and facilities". The effect of VO2 on security is considered negligible and thus the focus of this assessment is on safety. The approach to the safety assessment considers the past effect of Congestion Charging on the accident rates in

²⁴ Department for Transport (2000) *Tomorrow's Roads: Safer for Everyone*. DfT: London. Accessed online at <http://www.dft.gov.uk/pgr/roadsafety/strategytargetsperformance/tomorrowsroadssafeforeveryone> on 20/05/2010.

²⁵ Transport for London (2001) *London's Road Safety Plan*. TfL: London. Accessed online at <http://www.tfl.gov.uk/assets/downloads/corporate/Londons-road-safety-plan.pdf> on 20/05/2010.

²⁶ Department for Transport (2009) *A Safer Way: Consultation on Making Britain's Roads the Safest in the World*. DfT: London. Accessed online at <http://www.dft.gov.uk/pgr/roadsafety/roadsafetyconsultation/> on 20/05/2010.

CLoCCS and infers from this what is likely to happen should the proposed changes be introduced.

5.4 Baseline Conditions

5.4.1 A clear trend of falling numbers of accidents in the CLoCCS has been observed in recent years. The total number of accidents in the CLoCCS declined by 28% from 2,598 (February 2001-January 2002) to 1,865 (March 2004-Feb 2005), while the number of accidents involving pedestrians coincidentally fell by the same proportion (28%) from 532 to 383 in the same period. As this reflects a similar decline across London as a whole, much of this is attributable to unrelated safety initiatives undertaken across London by TfL and the boroughs in accordance with Mayoral and local priorities²⁷.

5.5 Likely Significant Effects on Safety

5.5.1 None of the proposals are expected to have any significant impact on safety and the reasons why are outlined below.

Introduction of automated payment accounts

5.5.2 It is possible that the automated payment accounts may encourage some people to drive who would not have otherwise. However, it is very unlikely that the scale of the change would be sufficient to cause any change to safety within the CLoCCS.

Increase in daily charge

5.5.3 It is possible that the increase in the charge could deter additional traffic from entering the CLoCCS and this might be expected to have an indirect effect on casualty rates in the CLoCCS. However, any decrease in traffic from entering the CLoCCS could be offset by the possible increase as a result of the automated payment accounts.

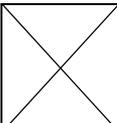
5.5.4 Given that previous reductions in accidents in the CLoCCS are thought to be largely a result of specific safety initiatives rather than Congestion Charging itself, it is probable that any change would not be significant.

Changes to discounts and exemptions

5.5.5 It is very unlikely that there would be any significant change to safety within the CLoCCS as a result of changes to discounts and exemptions.

Conclusions

5.5.6 The assessment against the relevant IIA Secondary Objective is as follows:

	Increase road safety for vehicular and pedestrians: no significant effect on road safety is expected as a result of the proposals
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²⁷ TfL (2006) *Central London Congestion Charging Scheme Impacts Monitoring, Fourth Annual Report*. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/roadusers/congestioncharging/6722.aspx> on 20/05/2010.

5.6 Mitigation

- 5.6.1 No significant effect on transport safety and security is anticipated as a result of the proposed changes and no mitigation measures are recommended. It is anticipated that TfL will continue to take appropriate measures to promote transport safety.

5.7 Monitoring

- 5.7.1 As stated in Section 3.7, proposals contained in Variation Order 2 will be monitored in accordance with Proposal 129 of the MTS.

6 Primary Objective E: Climate Change Mitigation and Adaptation

6.1 Introduction

- 6.1.1 This section of the IIA deals with the likely impacts of the proposals on the Mayor's objectives for climate change mitigation and adaptation. Climate change mitigation refers to measures that will reduce emissions of greenhouse gases (GHG) in the atmosphere. Climate change mitigation is achieved through the implementation of low carbon technologies, improvements in the energy efficiency of the various operations, as well as changes in people's behaviour to support reductions in GHG emissions.
- 6.1.2 The Department for Environment, Food and Rural Affairs (Defra) defines adaptation as "Changing our behaviour to respond to the impacts of climate change'." In practice, adaptation is concerned with changes that need to be made (including to infrastructure and processes) in order to cope with the impacts of future climate.

6.2 Policy Context

- 6.2.1 The Climate Change Act (2008) set a target for the year 2050 that the net UK carbon account should be at least 80% lower than the 1990 baseline. Furthermore the Act creates a framework for building the UK's ability to adapt to climate change and requires adaptation to be embedded in all policies and activities. The Act identifies transport as one of the sectors that is most likely to be affected by climate change.
- 6.2.2 Under the GLA Act (2007), the Mayor should take action to address both the causes and the consequences of climate change and to ensure that all GLA strategies consider climate change mitigation and adapting to climate change.
- 6.2.3 The Mayor's draft London Climate Change Mitigation and Energy Strategy, sets out a number of policy commitments or requirements to achieve a 60% reduction in London's CO₂ emissions by 2025 from a 1990 base. One of these commitments is to reduce transport's contribution to climate change and improving its resilience. The Mayor proposes to structure his approach to achieving the contribution of the transport sector to this target around three key themes:
- Improved operational efficiency – to minimise unnecessary CO₂ emissions
 - Supporting and encouraging the development and use of low carbon vehicles technology, energy and design principles, including working with third parties
 - Encouraging and facilitating low-carbon travel behaviour. This includes the activities underway and planned to increase cycling, walking and the use of public transport.
- 6.2.4 The new MTS sets out the Mayor's vision for transport in the Capital over the next 20 years including the policies and the necessary actions to reduce emissions from transport. Policy 24 states that the Mayor, through TfL and a range of other delivery partners will take the necessary steps to deliver the required contribution from ground-based transport to achieve a 60% reduction in London's CO₂ emissions by 2025 from a 1990 base, and to contribute to any further targets that may be set by the Mayor from time to time. The aim is to reduce emissions through

changing travel patterns, efficient use of resources, energy and fuel and promoting the use of new fuels and technologies and making an appropriate contribution toward the 2025 target.

6.3 Methodology

6.3.1 The likely effects of the proposed changes to be introduced through Variation Order 2 are considered in relation to the headline objective and the mitigation sub-objectives developed for the IIA of the new MTS in 2009. The VO2 proposals are not considered to have any impact on climate change adaptation and are therefore not assessed against the relevant sub-objectives. Although the proposed changes do not require alterations to the MTS the objectives are nevertheless considered an appropriate means of assessing their effects.

6.4 Baseline Conditions

6.4.1 Carbon dioxide (CO₂) is London's dominant greenhouse gas and ground-based transport is a significant source²⁸ (see Figure 6-1). In 2008 ground-based transport accounted for 22% of London's total CO₂ emissions or 9.7 million tonnes (including the electricity consumed by rail inside London). Road transport emissions accounted for 72% of the ground-based transport emissions (approximately 7.0 million tonnes), with the major emitters being cars, HGVs and LGVs.

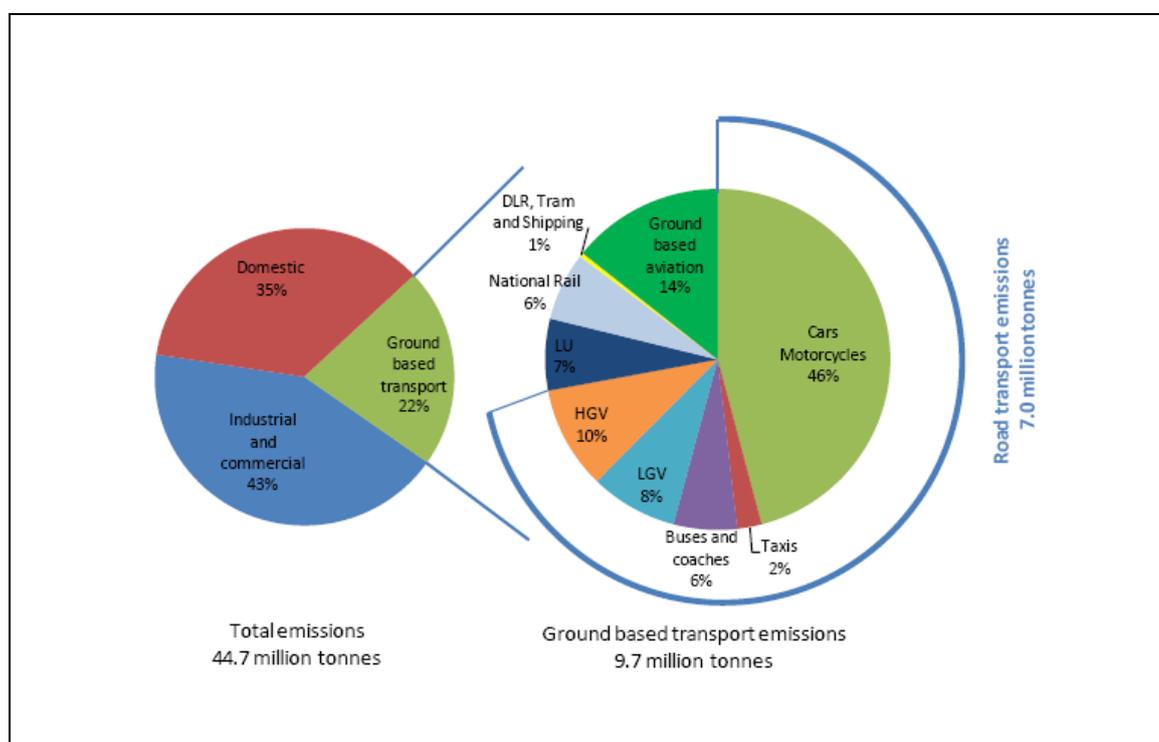


Figure 6-1: Basic source breakdown for London's CO₂ emissions for 2008²⁹

6.4.2 TfL estimates that CO₂ emissions in the CLoCCS fell by some 16% following the introduction of congestion charging in 2003. This was split relatively evenly between savings due to a reduction

²⁸ TfL (2010) *Travel in London, Report 2*. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/corporate/about-tfl/publications/1482.aspx> on 20/05/2010.

²⁹ *Ibid.*

in the number of vehicles entering the CLoCCS and more fuel efficient driving conditions resulting from lower congestion. However this was offset to some extent by increases in emissions elsewhere from traffic deterred from entering the CLoCCS. Nevertheless TfL estimates that there was a net reduction overall³⁰.

6.4.3 The baseline conditions and key related issues are summarised in Table 6-1 below.

Table 6-1 Baseline summary (key figures)

Baseline issue	Current characteristics	Issues identified
GHG emissions	<p>In 2008, road transport accounted for 72% of London's ground-based transport CO₂ emissions or 7.0 million tonnes.</p> <p>The major emitters are cars, HGV and LGV.</p>	<p>CO₂ emissions from transport depend on traffic flows, fleet composition and congestion.</p> <p>Increased traffic flows within a zone mean higher CO₂ emissions, but the intensity of these emissions will vary depending on:</p> <ul style="list-style-type: none"> - Fleet composition - older vehicles have higher emissions per km - Congestion - congestion increases fuel consumption and thus CO₂ emissions
Car usage	<p>The car mode share for average weekday trips by London residents during 2007/08 was 38%.</p>	<p>The composition of vehicles by mode affects CO₂ emissions.</p> <p>HGV, LGV and Buses have higher emissions than cars and minicabs. However the latter are significantly more numerous thus producing more CO₂ emissions in total.</p>

6.5 Likely Significant Effects on Climate Change Mitigation and Adaptation

6.5.1 None of the proposals are expected to have any significant impact on climate change mitigation and adaptation. This discussed in further detail below.

Introduction of automated payment accounts

6.5.2 The introduction of automatic payment accounts would be likely to marginally reduce transactions costs for drivers which may result in a slight increase in traffic and a corresponding marginal increase in CO₂ emissions, assuming that fleet composition and age remain constant.

Increases in daily charges

6.5.3 A slight increase in the charge would be unlikely to significantly reduce the number of visits into the CLoCCS and so unlikely to contribute in any significant way to the reduction of GHG emissions arising from within the London area. In any case, it is expected that any traffic that is deterred would largely be cancelled out by any increase in traffic as a result of the automated payment accounts.

³⁰ TfL (2006) *Central London Congestion Charging Scheme Impacts Monitoring, Fourth Annual Report*. Transport for London: London. Accessed online at <http://www.tfl.gov.uk/roadusers/congestioncharging/6722.aspx> on 20/05/2010.

6.5.4 The potential for increased traffic over time if the charge was not increased could increase CO₂ emissions somewhat.

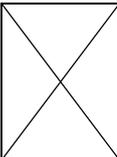
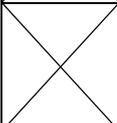
Changes to discounts and exemptions

6.5.5 None of the effects brought about by these changes are thought likely to be significant in the short term, although the widening of the 100% discount for electric vehicles to include plug-in hybrids could encourage the uptake of more of these vehicles which may have a long term significant benefit in reducing CO₂ emissions from transport.

6.5.6 It could also be expected that if conventional cars or those eligible for the AFD (which does not have specific CO₂ emissions criteria) are replaced by vehicles that qualify for the GVD, that this would also contribute to reducing the CO₂ emissions from transport.

Overall conclusions

6.5.7 The assessment against the relevant IIA Secondary Objectives are as follows:

	<p>To contribute to the reduction of GHG emissions arising from within the London area: no significant effects are expected as a result of the proposals, unless there is a very wide uptake of electric vehicles as a result of the greener vehicle discount</p>
	<p>To reduce GHG emissions arising from operations and service provision: no significant effects are expected as a result of the proposals</p>

6.6 Mitigation

6.6.1 No significantly adverse effects are predicted as a result of the Variation Order 2 changes and therefore no mitigation measures are proposed.

6.7 Monitoring

6.7.1 As stated in Section 3.7, proposals contained in Variation Order 2 will be monitored in accordance with Proposal 129 of the MTS.

Appendix 1 – Health Impact Assessment Screening

Introduction

A screening exercise to determine the need for a Health Impact Assessment of the Variation Order 2 proposals was undertaken. A screening checklist (presented below) was used to ensure that all necessary aspects of public health were tested for their potential to be influenced significantly by the proposals.

It has long been acknowledged that air quality pollutants can impact on people’s health. It is recognised the removal of the AFD may decrease the air quality benefits associated with the discount somewhat, however the legacy the discount is expected to leave and the introduction of the GVD – which also has a stringent air quality standard – mean that it is anticipated that there would be no air quality related health impacts

It was concluded therefore that the scale of possible effects did not justify undertaking a formal Health Impact Assessment.

Table A1-1: HIA Screening Checklist³¹

Which groups of the population are likely to be affected by this proposal? Other groups: <ul style="list-style-type: none"> • minority ethnic people (incl. gypsy/travellers, refugees & asylum seekers) • women and men • people in religious/faith groups • people with disabilities • older people, children and young people • lesbian, gay, bisexual and transgender people 	<ul style="list-style-type: none"> • people of low income • people with mental health problems • homeless people • people involved in criminal justice system • staff Other Groups:
	What positive and negative impacts may be expected? Where are there areas of uncertainty? Which groups will be affected by these impacts?
What impact will the proposal have on lifestyles? <ul style="list-style-type: none"> • Diet and nutrition • Exercise and physical activity • Substance use: tobacco, alcohol or drugs • Risk taking behaviour • Education and learning, or skills 	
What impact will the proposal have on the social environment? <ul style="list-style-type: none"> • Social status • Employment (paid or unpaid) • Social/family support • Stress • Income 	
What impact will the proposal have on equality? <ul style="list-style-type: none"> • Discrimination • Equality of opportunity • Relations between groups 	
What impact will the proposal have on the physical environment? <ul style="list-style-type: none"> • Living conditions • Working conditions • Pollution or climate change 	

³¹ Based on Margaret Douglas, PH&HP, Lothian NHS Board: screening guidance available on The HIA Gateway <http://www.apho.org.uk/resource/item.aspx?RID=47667>

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- Accidental injuries or public safety
 - Transmission of infectious disease

How will the proposal impact on access to and quality of services?

- Health care
 - Transport
 - Social services
 - Housing services
 - Education
 - Leisure
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