GREATER LONDON AUTHORITY ACT 1999
TRANSPORT ACT 2000

Greater London (Central Zone) Congestion Charging (Exceptional Variation) Order 2020

Made *9 June 2020*

Coming into force *In accordance with articles 1(2) and 2*

Whereas—

(1) the Greater London (Central Zone) Congestion Charging Order 2004 ("the Principal Order") imposes charges for the using and keeping of motor vehicles on specified roads in Greater London during specified hours and on specified days;

(2) Transport for London has made a number of orders varying the provisions of the Principal Order;

(3) on 14 May 2020, the Department for Transport agreed a funding arrangement under which Transport for London is urgently to bring forward proposals to widen the scope and levels of road user charging schemes in accordance with its legal powers and decision-making processes; and

(4) it appears to Transport for London expedient for the purposes of facilitating the achievement of policies and proposals in the Mayor of London's Transport Strategy published pursuant to section 142 of the Greater London Authority Act 1999(**a**) that it should make a further Order for the purpose of temporarily varying the Principal Order having regard to the transport challenges created by the COVID-19 pandemic:

Now, therefore, Transport for London, in exercise of the powers conferred on it by sections 295 and 420(1) of the Greater London Authority Act 1999, by Schedule 23 to that Act, and of all other powers enabling it in that behalf, hereby makes the following Order:—

Citation, commencement and interpretation

1.—(1) This Order may be cited as the Greater London (Central Zone) Congestion Charging (Exceptional Variation) Order 2020.

(2) This Order shall come into force on the day following the day on which the Mayor confirms it.

(3) In this Order "the Principal Scheme" means the Scheme contained in the Schedule to the Principal Order as varied and in force immediately before this Order comes into force.

Variation of the Principal Scheme

2. The Scheme set out in the Schedule to this Order, which varies the Principal Scheme, shall come into force on 22 June 2020.

Signed by authority of Transport for London

Dated 9 June 2020 Commissioner

(**a**) 1999 c.29; Schedule 23 was amended by the Transport Act 2000 (c. 38), Schedule 13

THE SCHEDULE

Article 2

SCHEME VARYING THE PRINCIPAL SCHEME

Preliminary

1.—(1) Article 1 of the Principal Scheme shall apply, so far as material, for the interpretation of this Scheme as it applies for the interpretation of the Principal Scheme.

(2) The Principal Order and the Principal Scheme shall be further varied in accordance with the provisions of this Schedule.

Arrangement of Instrument of the Principal Order

2. Under the heading "10. Vehicles used by firefighters for operational reasons" insert the following new heading—

"11. Vehicles used by certain care home employees".

Interpretation

3.—(1) Article 1(2) of the Principal Scheme is amended as follows.

(2) In sub-paragraph (d) for "6.00 pm" substitute "10.00 pm".

(3) In sub-paragraph (e) for "Windsor House, 42-50 Victoria Street, London SW1H 0TL" substitute "Palestra, 197 Blackfriars Rd, London SE1 8NJ".

(4) In sub-paragraph (za) after "as amended;" omit "and".

(5) In sub-paragraph (zb)(ii) after "25 October 2021" omit "." and insert "; and".

(6) After sub-paragraph (zb) insert the following new sub-paragraph—

"(zc) "working day" means a day other than—

(i) a Saturday or Sunday;

(ii) New Year's Day;

(iii) Good Friday;

(iv) Christmas Day;

(v) any other day which is a bank holiday,

and in this paragraph "bank holiday" means a day which is a bank holiday in England and Wales under the Banking and Financial Dealings Act 1971.".

Free days

4. For article 4(4) substitute—

"(4) Each of the following is a free day—

(a) Christmas Day.".

Payment of charges and period licences

5.—(1) In article 6 paragraphs (3)(b) to (d), (5)(c), (6)(b) and (ba), (6)(h)(ii) and (iii) and in article 10 paragraphs (1), (2)(a) and (b), (3)(c), (4)(a) and (b) and in Annex 3 paragraphs 3(2)(b)(i) and 3(3)(b)(i) and (ii)—

(a) for "5", wherever it appears (save as part of another number), substitute "7";

(b) for "20", wherever it appears, substitute "31"; and

(c) for 252, wherever it appears, substitute "365".

(2) In article 6 paragraphs (5)(b)(ii) and (c)(ii), article 9 paragraphs (2)(c) and (6)(a) and article 10 paragraphs (2)(a)(iv), (2)(b) and (6)(b), for "consecutive charging days" substitute "working days".

(3) In article 6 paragraphs (5)(b)(iii) and (6)(a)(iii) for "next" substitute "third".

(4) In article 6 paragraph (6)(a)(iii) after "consecutive charging day" insert "after the charging day concerned".

(5) For article 6(12)(a) substitute—

"(a) the amount of the charge per charging day for each licence shall be, in respect of a standard rate vehicle, £15;".

(6) In article 9 paragraphs (3)(d) and (3)(d)(ii), article 10 paragraphs (2)(a)(iii) for "charging day" substitute "working day".

(7) In article 10(6)(c) for "consecutive charging day" substitute "working day".

(8) In article 11 paragraphs (4)(b) and (5)(a)(i), (5)(b) and (6)(a) for "charging days" substitute "working days".

(9) In article 11 paragraphs (5)(b) and (6)(a) omit "or, if that date does not fall on a charging day, the first charging day falling after that date".

Amount of charge payable by the purchase of a licence

6.—(1) Article 7 is amended as follows.

(2) In paragraph (1)(a) for "£10.50;" substitute "£15.00." and for ";" substitute ".".

(3) Omit paragraphs (1)(b) and (c).

(4) In paragraph (2)(a) for "£11.50" substitute "£15.00" and for ";" substitute ".".

(5) Omit paragraphs (2)(b) and (c).

(6) In paragraph (3) for "next charging day" substitute "third consecutive charging day following the charging day concerned".

(7) In paragraph (3)(a) for "£14" substitute "£17.50" and after "charging day;" insert "and".

(8) In paragraph (3)(b)—

(a) omit "other than an emissions surcharge large passenger vehicle"; and

(b) for "£24 per charging day; and" substitute "£27.50 per charging day.".

(9) Omit paragraph (3)(c).

Vehicles used by certain NHS employees

7.—(1) Paragraph 8 of Annex 2 is amended as follows.

(2) In sub-paragraph (1)(b) omit "in addition to other travel expenses falling to be so reimbursed in relation to that occasion".

(3) In sub-paragraph (3)(b) omit "who was on call,".

Vehicles used for transporting certain NHS patients

8.—(1) Paragraph 9 of Annex 2 is amended as follows.

(2) In sub-paragraph (3) omit "a patient as respects whom both of the following conditions are satisfied".

(3) For sub-paragraph (3)(a) substitute—

"(a) a patient who—

(i) has a compromised immune system or requires regular therapy, assessment or recurrent surgical intervention; and

(ii) is clinically assessed as too ill, weak or disabled to travel to an appointment on public transport; or".

(4) For sub-paragraph (3)(b) substitute—

"(b) a patient who is clinically assessed, in accordance with the advice of the National Health Service for the time being applicable, as being at high or moderate risk from COVID-19.".

Vehicles used by certain care home employees

9. After paragraph 10 in Annex 2 insert—

"**Vehicles used by certain care home employees**

11.—(1) A relevant vehicle not falling within any of the preceding paragraphs of this Annex which was on any occasion on or after 18 May 2020 used by a relevant care home employee on designated roads during charging hours shall be treated as having been a non-chargeable vehicle on that occasion if—

(a) the charge imposed by article 4 of the Scheme in respect of the use of the vehicle on that occasion was duly paid;

(b) the charge was reimbursed to the relevant care home employee by their relevant care home employer in relation to that occasion;

(c) the condition referred to in sub-paragraph (3) was met; and

(d) the relevant care home employer subsequently issued a certificate to Transport for London that conditions (a), (b) and (c) were met.

(2) Where Transport for London, on receiving such a certificate, is satisfied that a vehicle falls to be treated as having been a non-chargeable vehicle in accordance with this paragraph, it shall refund the charge incurred to the relevant care home employer.

(3) The condition referred to in sub-paragraph (1)(c) is met on an occasion if the vehicle was used on that occasion on designated roads by a relevant care home employee for the purpose of providing services on behalf of a relevant care home during the COVID-19 pandemic.

(4) In this paragraph—

(a) "relevant care home employee" means an individual employed by or providing services on behalf of or seconded to a relevant care home employer;

(b) "relevant care home employer" means a registered service provider in respect of a relevant care home by which a relevant care home employee is employed or on behalf of which that employee is providing services or to which that employee has been seconded;

(c) "registered service provider" means a person or organisation registered with the Care Quality Commission in accordance with section 10 of the Health and Social Care Act 2008 to provide accommodation together with nursing or personal care at a relevant care home; and

(d) "relevant care home" means a care home within the meaning of section 3 of the Care Standards Act 2000 that is located within the central zone.".

Meaning of qualified resident

10.—(1) Paragraph 1 of Annex 3 is amended as follows.

(2) In sub-paragraph (1) omit "for the time being" and for "are met." substitute "—".

(3) After sub-paragraph (1) insert the following new sub-paragraphs—

"(a) were, on the basis of an application received by Transport for London on or before 31 July 2020, met on or before that date; and

(b) are for the time being met.".

Purchase of licences for residents' vehicles

11.—(1) Paragraph 3(3) of Annex 3 is amended as follows.

(2) In sub-paragraph (a)(i) for "£1.05" substitute "£1.50".

(3) In sub-paragraph (a)(ii) for "£2.05" substitute "£2.50".

(4) In sub-paragraph (b)(i) for "£5.75" substitute "£10.50" and for "£10.75" substitute "£17.50".

(5) In sub-paragraph (b)(ii) for "£23" substitute "£46.50" and for "£43" substitute "£77.50".

(6) In sub-paragraph (b)(iii) for "£1.15" substitute "£1.50" and for "£2.15" substitute "£2.50".

Certificates of residence

12. In paragraph 6(2)(a) of Annex 3 for "are" substitute "were, on the basis of an application received by Transport for London on or before 31 July 2020, met on or before that date, and are for the time being".

An Integrated Impact Assessment for proposed temporary changes to the Congestion Charge, to support the Streetspace for London plan

JUNE 2020

Contents

1. Introduction

In March 2020, the government announced that lockdown measures restricting non-essential activities would be introduced to control the threat and impact of the Covid-19 pandemic in the United Kingdom. Following the announcement, on 23 March, TfL suspended the operation of its road user charging schemes, namely, the Central London Congestion Charging Scheme, the Low Emission Zone Scheme and Ultra Low Emissions Zone Scheme. This decision was made to facilitate the movement of London's critical workers, particularly those providing services to the NHS, as well as freight and other vehicles supporting London's supply chain requirements whose journeys were essential to the early response to the national emergency caused by the Covid-19 pandemic.

On 10 May 2020, following falling rates of new infections of Covid-19, the Government announced that some lockdown restrictions would be gradually lifted. Following the sharp drop in traffic when lockdown started, traffic had already began increasing and, even before 10 May, weekday car traffic levels in central London areas were six per cent above pre-lockdown levels. On the 15 May 2020, after taking these factors into account and studying the expected travel implications of the easing of lockdown, Transport for London (TfL) took the decision to reinstate all its Road User Charging Schemes with effect from 18 May 2020.

As lockdown restrictions are eased, the priority for TfL is to get London moving again safely and sustainably. As people start to increase the number of journeys they make, it is important that action is taken now to avoid a car-based recovery which would impair the ability of TfL and boroughs to accommodate trips previously made by public transport on foot or by cycle instead. It would also make it harder to provide for safe social distancing for pedestrians, cyclists and those waiting to access public transport.

On the 15 May, the Mayor announced his Streetspace for London plan that shows how he will ensure that there is sufficient space on our streets to support people to avoid public transport in London. In the plan he sets out how he will work with TfL and the boroughs to rapidly transform London's streets to accommodate a possible ten-fold increase in cycling and five-fold increase in walking when lockdown restrictions are eased. This increase in walking and cycling will inevitably mean less road space is available for general traffic and, therefore, more must be done to deter trips by motorised vehicle in central London when these could be made by another mode. If no action is taken the road network will become overloaded and there will be gridlock. Not only will this delay essential trips, and in doing so harm the city's economic recovery, it will increase levels of noise and air pollution in areas where high concentrations of people are exposed, cause an increase in road danger by increasing interactions between traffic and vulnerable road users, impair our ability to accommodate social distancing and deter people from walking and cycling.

On 14 May, TfL concluded an extraordinary funding and financing arrangement with the Department for Transport (DfT). One aspect of the arrangement is that TfL is to reinstate and urgently bring forward proposals to widen the scope and levels of road user charging schemes in accordance with its legal powers and decision-making process. Consideration of the impacts of the proposals is an important element of this process.

As these are emergency, temporary proposals made in response to the extraordinary circumstances created by the Covid-19 pandemic, it has not been possible to formally consult the public though we

have been able to consider stakeholder and public input and have invited public comments and representations (see Section 5.3). Any proposal to make the changes permanent would be subject to public consultation and a separate decision.

This document sets out our appraisal of the impacts of the proposed temporary changes to the Congestion Charging Scheme in the form of a high-level Integrated Impact Assessment (IIA).

An IIA enables decision makers to consider both positive and negative potential impacts that these proposed changes may have. The primary aim of the IIA is to identify the likely significant impacts and secondly, where possible, to suggest amendments to the proposals or mitigations to minimise any negative impacts or enhance positive impacts, should they be implemented.

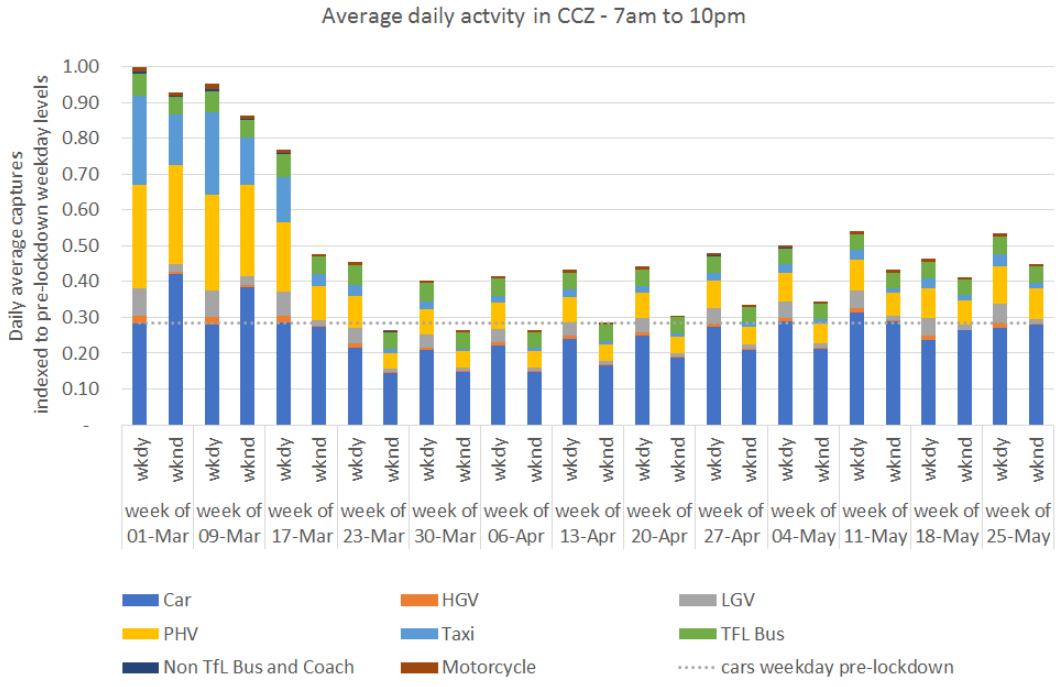
2. The Covid-19 pandemic and traffic in London

2.1 Changes in traffic patterns

The Covid-19 pandemic changed travel patterns across London. The start of the lockdown restrictions on 23 March 2020 saw traffic levels in London reduced significantly compared to levels for the same period in 2019. In the first two weeks of lockdown, traffic on the Transport for London Road Network (TLRN) was down 47- 49 per cent on weekdays and around 60 per cent on weekends compared to the same time last year. However, from the week commencing 30 March, traffic levels began to increase.

The chart below shows how traffic from all vehicle types in the Congestion Charge zone (CCZ) dropped initially and has now increased as Government advice has changed. Traffic dropped sharply after the announcement on 23 March and the week commencing 30 March saw the lowest overall levels (around a 60 per cent reduction compared to early March). Since then, however, vehicles in the CCZ have increased, both during the week and weekend. By 11 May, weekday car traffic levels in central London areas were six per cent above pre-lockdown levels. There was another drop during week commencing 18 May when the CC was reinstated, but in the following week, traffic started to increase again.

With congestion charging reintroduced, weekend and weekday activity[1] appears to be at similar levels to each other again, as was the case before lockdown began. Figure 1 and Figure 2 show the average daily vehicle observations in the CCZ between 07:00 and 22:00 for each week. Levels are indexed to weekday levels for the start of March before the effects of lockdown and Covid-19 were observed on the road network.



[1] 'activity' refers to camera captures in the zone which could act as a good proxy for total vehicle movements

Figure 1: Average daily activity in the CCZ from pre-lockdown to week ten of lockdown measures

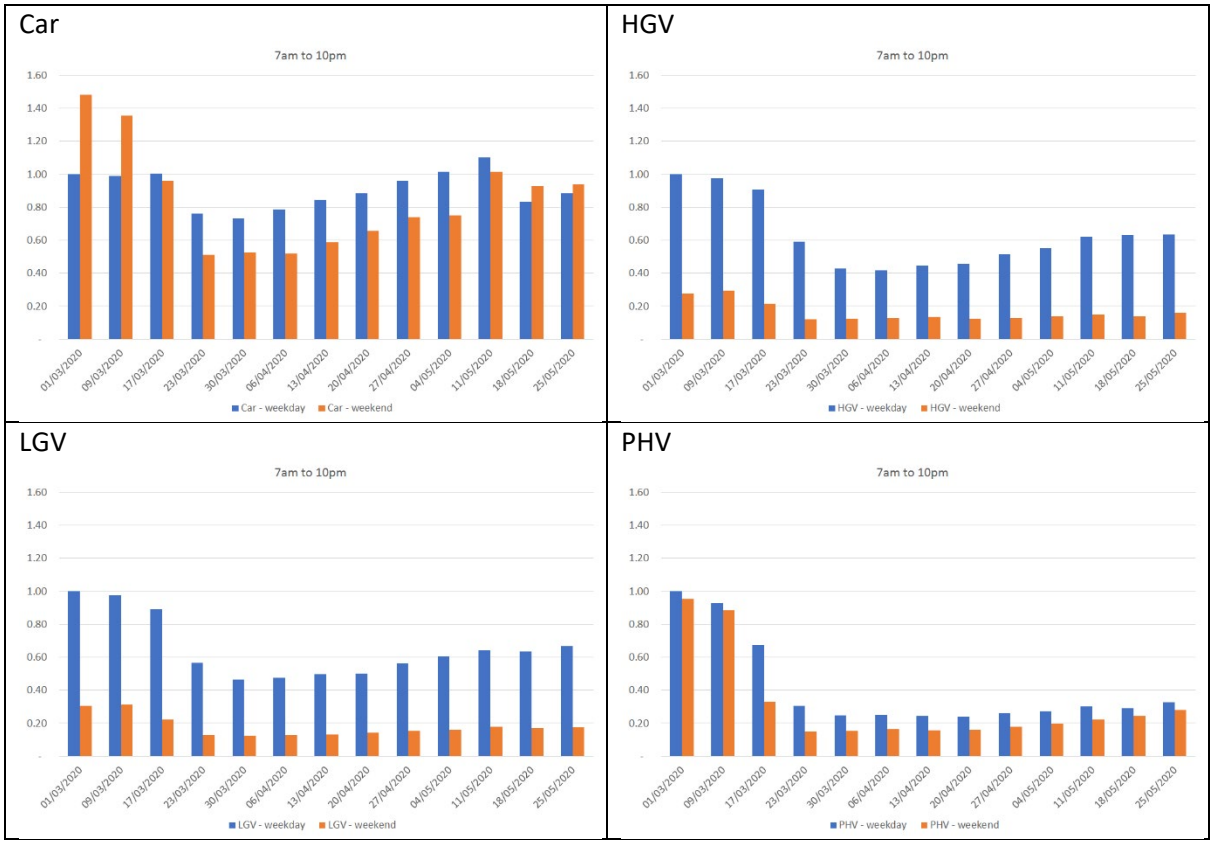


Figure 2: Comparison of traffic levels by mode from pre-lockdown to week eleven of lockdown

2.2 Future predicted traffic levels in London

As lockdown eases and people gradually get back to work and social/leisure activities, the number of trips being made in central London will increase. With severely constrained public transport capacity many people may turn to use of their car. Polling of Londoners was undertaken in April and May by YouGov on behalf of the Greater London Authority[2] to understand public attitudes and behaviours to Covid-19. The May poll reported that 50 per cent of Londoners plan to use public transport less than prior to the outbreak. As such, many people may turn to use of their car to ensure their ability to social distance and reduce pressure on public transport networks in line with national guidance.

On 18th May, the Congestion Charge was reinstated to help control congestion within the central London zone. In spite of this, there will be rapidly increasing pressure on the London road network. To support London's recovery, essential traffic such as public transport, emergency services, freight and servicing must be able to function efficiently. If measures to manage general traffic are not introduced, there is a real risk of gridlock in the CCZ, which will impede the ability of the city to recover and won't deliver the changes to the road network needed to support much higher numbers of people walking and cycling. Congestion already costs the London economy around £5 billion per year[3], with London drivers losing 227 hours per year to congestion[4].

[2] GLA polling undertaken by YouGov on behalf of the GLA
[3] Cited in London Stalling, GLA, 2017 https://www.london.gov.uk/sites/default/files/london_stalling_-_reducing_traffic_congestion_in_london.pdf

Trend based forecast

Since week three (week beginning 30 March) there has been a strong return in the number of cars entering central London from 07:00 to 22:00.

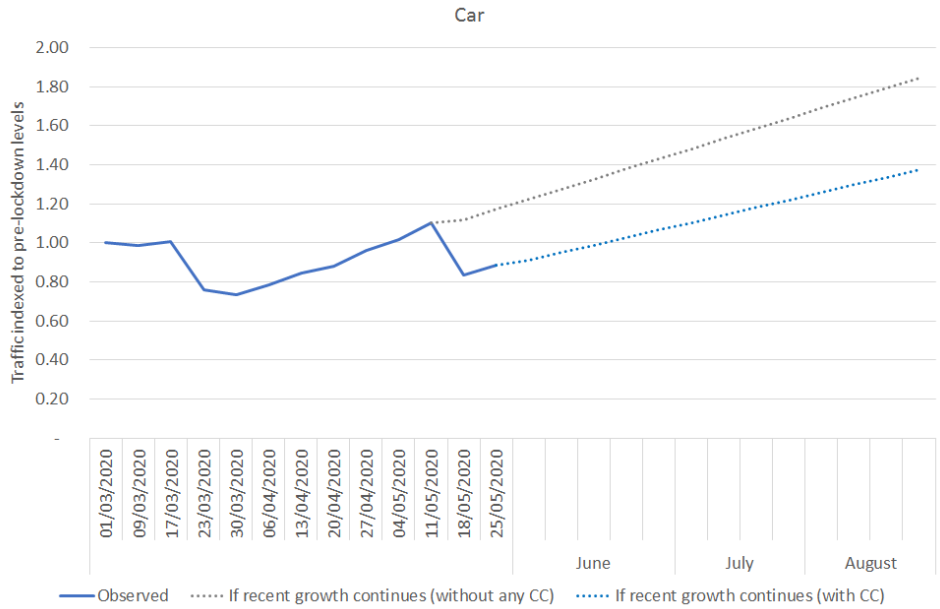


Figure 3: Observed car traffic with trend based forecast with and without the reinstatement of the Congestion Charge (without new proposals)

Figure 3 shows car activity if the recent trend had continued and the reduction that has been achieved by reinstating the Congestion Charge.

If the recent trend in car activity continues following the reinstatement of the Congestion Charge, traffic levels will be back to their pre-Covid-19 levels by mid-end June.

Applying the recent trend in goods vehicle activity, as shown in Figure 4, indicates that LGVs and HGVs could be back at pre-lockdown levels in August.

[4] Inrix, 2018 https://inrix.com/press-releases/scorecard-2018-uk/

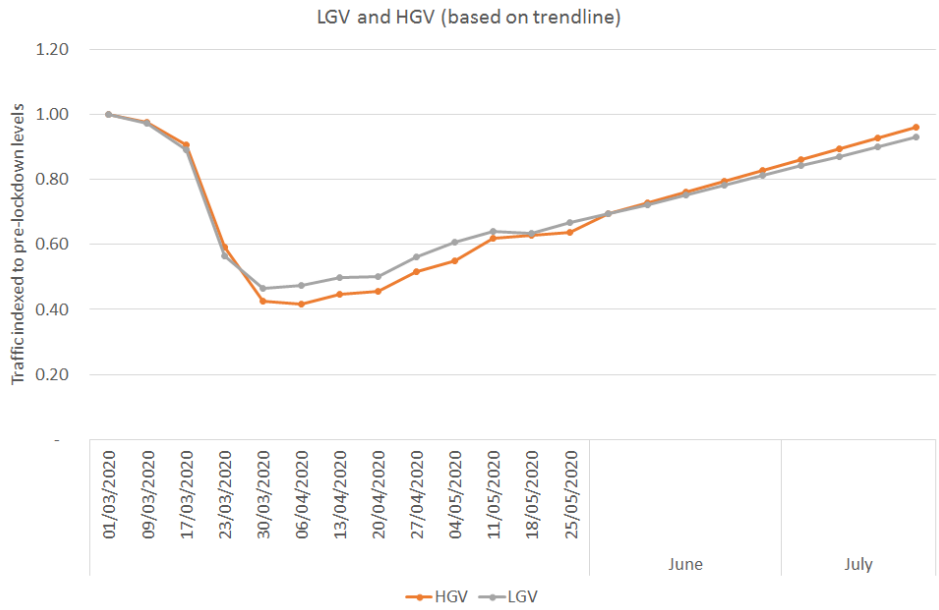


Figure 4: Observed LGV and HGV traffic with trend based forecast with the reinstatement of the Congestion Charge (without new proposals)

Implications of a traffic led recovery

There is still potential for further growth in car use despite the action taken to date to reinstate the Congestion Charge. The third stage of the Government's lockdown release, expected early July 2020, could bring around a third of 'usual' activity back into the CCZ. With social distancing requirements, the effective capacity of public transport is reduced to as little as 13 to 15 per cent.

If only 30 per cent of pre- Covid-19 activity returns to central London, and those who would have used public transport turn to private car use, a doubling of cars in central London even with the current Congestion Charge can be expected.

3. The options and proposals

3.1 Option selection

TfL has reviewed a number of possible temporary changes to the Congestion Charge to adapt it in response to the unique situation created by the Covid-19 pandemic. A range of options was considered based on the charge level, hours and days of operation, extent of the zone and discounts and exemptions. The option selection process was based on identifying options that would achieve the greatest traffic and congestion impact whilst being fair and feasible to implement in a short timescale and on a temporary basis.

Table 1 sets out the full range of options showing those that were selected for further assessment; and those that were not progressed, along with the justification.

Option	**Brief description**	**Accepted/ Rejected**	**Justification**
24-hour charging	Operating the scheme 24 hours a day	R	• Traffic flows and congestion are not currently (and have not historically been) issues overnight. • Need to provide a charge free window for e.g. night time deliveries. • Overnight traffic less likely to be in conflict with new walking and cycling trips and have a smaller impact on bus journey times.
Extending the charging hours in the morning	Starting charging hours at 06:00 instead of 07:00	R	• Historically traffic reaches higher levels at 07:00 so unlikely to have big impact as traffic returns.
Variable daily charging hours	Differing charging hours by day of the week to reflect different temporal pattern of traffic flows across the week	R	• Not operationally feasible to implement in the short-term as a temporary measure • Traffic levels are high across the charging week, differential charging could have unintended impact of creating induced demand on days with lower charges. • Peak traffic flows likely to vary as lockdown restrictions are eased and compared to pre-Covid-19 patterns. Would be difficult to target effectively in the short term.
Extending the hours in the evening	Ending charging hours at 22:00 instead of 18:00	A	• As lockdown restrictions are eased, TfL assumptions are that there will be an extension to peak hours as people stagger their working hours to maintain social distancing in workplaces and on

Option	Brief description	Accepted/ Rejected	Justification
			public transport. • As such, the charging hours need to change to align with expected new peak hours of travel in order to maintain the deterrent effect to general traffic • Pre-Covid-19, entries to the zone peaked at the end of charging hours. As traffic returns this could create congestion at peak times when there will be high numbers of vulnerable road users and bus passengers. • Changes to the road network to accommodate increased active travel will be in place throughout the day and night so reduced levels of traffic are required beyond the end of current charging hours.
Increase the number of charging days	Change from operating the scheme Monday to Friday (excluding public holidays) to operating the scheme at the weekends and on public holidays (except Christmas Day)	A	• TfL assumptions are that as lockdown restrictions ease, there will be an increase in vehicle traffic in the zone at weekends and on public holidays. • Pre-Covid-19, entries to the zone were higher on Saturdays and Sundays than during the week. As traffic returns, assuming similar patterns, this could create congestion at times when there will be high numbers of vulnerable road users and bus passengers. • Increasing the number of charging days will help to ensure there is sufficient space for pedestrians and cyclists to travel safely in the zone at all times by reducing general traffic levels. • Changes to the road network to accommodate increased active travel will be in place seven days a week so reduced levels of traffic are required on all days. • As shops begin to open it is essential that there is space for safe walking and cycling to access these establishments.
Expanding the size	Small-scale	R	• Not operationally feasible to

Option	Brief description	Accepted/ Rejected	Justification
of the zone	alterations to the boundary to encompass predicted congestion hotspots outside of the zone		implement in the short-term as a temporary measure due to additional camera infrastructure requirements, boundary issues and signage, the need to communicate a complex change and lack of identified boundary routes. • Current CCZ boundary is well understood and is designed to ensure that there is a suitable alternative, non-charged, route for drivers that do not wish to enter the charging zone. It would be very challenging to change the boundary on a temporary basis
Increasing the charge to £25	Increasing the daily charge from £11.50 to £25	R	• Whilst an increase to £25 would enhance the deterrent effect of the charge the economic impact for those who need to drive in the zone would be too severe at a time when many livelihoods may be impacted by Covid-19.
Increasing the charge to £15	Increasing the daily charge from £11.50 to £15	A	• The proposed increase would enhance the deterrent effect of the charge, and in doing so reduce the number of people driving in the zone, but with a smaller financial impact on those who have an essential need to drive in the zone. Historically, drivers in the zone have been fairly inelastic to small price increases. The increase of £3.50 balances economic impact with achieving a worthwhile traffic reduction impact.
Reducing the residents' discount to 50 per cent	Reducing the residents' discount from 90 per cent to 50 per cent	R	• Unlikely to significantly reduce car use amongst discount holders during this period whilst social distancing measures are in place on public transport and they are still able to access the zone at a substantially discounted rate.
Closing the residents' discount to new applicants	No new applicants would be accepted. Existing discount holders would be entitled to change	A	• To prevent the residents' discount providing an incentive to central London residents to switch to car journeys where they have not previously owned or used a

Option	Brief description	Accepted/ Rejected	Justification
	their registered vehicle and complete their annual renewal		private vehicle in the zone.
Remove the motorcycle exemption	Removing the exemption that motorcycles have to the charge	R	• Motorcycles contribute less to congestion than other types of vehicles.
Remove the Auto Pay and Fleet Auto Pay discounts	Remove the £1 daily discount for customers who pay via Auto Pay	A	• Removing the discount reinforces the principle that access to central London road space should not be discounted at this time for those who are liable to pay the full charge.
Amend pay next day charge	Increase pay next day charge to £17.50 and lengthen time available to make delayed payment	A	• Provides drivers with additional time to pay the charge, making it less likely to incur a Penalty Charge Notice. • Ensures that the level is set in line with the proposed charge increase.

Table 1: Options considered for temporary changes to the Congestion Charge

3.2 Proposals

Following the initial sift, the proposals which were accepted were taken forward for further development can be grouped into three themes:

- Level of charge;
- Changes to discounts and exemptions; and
- Changes to the hours and days of operation.

Table 2 sets out the details of each proposal. All are proposed as temporary measures to strengthen the deterrent effect of the scheme to support the safe restart of the transport network.

Area	Proposal	Description
Level of charge	Increase charge from £11.50 to £15 per day	The proposal is to increase the daily charge from £11.50 to £15 (£17.50 for those paying during the three days after the day of travel). Note that the charge level was last increased in 2014 when it went up from £10 to £11.50 making this the longest period without an increase. The proposed increase would enhance the deterrent effect of the charge and in doing so reduce the number of car trips in in the zone by c. 7 per cent.
	Amend pay next day charge	It is proposed that the pay next day charge, currently set at £14, is increased to £17.50, in line with the proposed charge increase.

Area	Proposal	Description
		It is further proposed that the time available to make a delayed payment will be increased from one day to three days to allow drivers additional time to pay the charge and reduce the likelihood of incurring a Penalty Charge Notice.
Changes to discounts and exemptions	Remove Auto Pay and Fleet Auto Pay daily discount	Auto Pay and Fleet Auto Pay were introduced in January 2011 with a £1 Auto Pay discount to incentivise people to adopt this form of payment. Removing the discount reinforces the principle that access to central London road space should not be discounted at this time for those who are liable to pay the full charge. Those using accounts still benefit from automatic payments and the ability to avoid incurring a Penalty Charge Notice.
	Close residents' discount to new applications	Residents of the zone receive a 90 per cent discount to the Congestion Charge in recognition of the fact they are unable to avoid the charge if they need to drive (unlike for ULEZ where the charge can be avoided by using a compliant vehicle). Recent Covid-19 related public surveys have revealed that 56 per cent of UK driving licence holders are considering purchasing a car if they don't already have one. In order that the residents' discount does not provide an incentive to central London residents to switch to car journeys, it is proposed to temporarily close the scheme to new applicants. Existing discount holders would continue to receive the discount for their currently registered vehicle and can replace their registered vehicle if desired. Note that closing the residents' discount to new applicants will also close the ULEZ sunset period to these applicants. Currently, those who receive the residents' discount are also eligible for a 100 per cent discount to the ULEZ until 25 October 2021 if their vehicle is non-compliant. Instead the resident is liable to pay the T-Charge at a discounted rate of 90 per cent if their vehicle does not meet the required emissions standards. Residents who are not currently registered for the ULEZ sunset period will, for the duration of the proposed change, need to comply with the ULEZ standards or pay the charge to drive within the zone.
Changes to the hours and days of operation	Extend charging hours to 07:00 to 22:00	The current charging hours run from 07:00 to 18:00 to reflect peak traffic hours when the scheme was last modified in 2007. In recent years we have seen that entries to the zone do not taper off at the end of charging hours, they increase. It is likely that similar traffic patterns could return as Covid-19 lockdown restrictions are eased. In addition, it is

Area	Proposal	Description
		predicted that there is likely to be an extension to peak hours as people stagger their working hours to maintain social distancing in workplaces and on public transport. As such, the charging hours need to change to match the likely new peak hours of travel in order to maintain the deterrent effect to general traffic. The new proposed hours are 07:00 to 22:00. This is expected to reduce car trips in the zone by c. 33 per cent and car kilometres by 16 per cent during the extended hours of 18:00 to 22:00 with a £15 charge. During current charging hours car trips in the zone could reduce by up to seven per cent and car kilometres by 3 per cent.
	Operate the scheme seven days a week and all year around except Christmas Day	The scheme currently operates Monday to Friday excluding bank holidays and the period between 25 December and 1 January. As Covid-19 lockdown restrictions are eased, it is predicted that there could be an increase in car use at the weekends and on public holidays due to the reduced capacity on public transport. The scheme is now proposed to operate every day of the year including weekends except for Christmas Day. This will help to ensure that there is sufficient space for pedestrians and cyclists to travel safely in the zone at all times. This approach aligns with the operation of ULEZ which also applies seven days a week which may be more intuitive to customers.

Table 2: Detail of proposed measures

3.3 Stakeholder and public input on the proposals

Although there is no express statutory requirement for a formal consultation and the Mayoral Guidance contemplates that consultation can be dispensed with in exceptional circumstances, the Mayor and TfL, nonetheless, considered it was appropriate to undertake a degree of engagement to gauge stakeholders' and the general public's views on the proposed changes. The changes have been widely publicised in the press and representations from stakeholders and the public have been forthcoming, either of their own accord or in response to calls for expressions of views made by TfL. The public were invited to share their views on the proposals by email to yoursay@tfl.gov.uk by 4 June. This invitation was published on TfL's website and in the Metro travel page on 29 May. More than 13,000 emails were received.

TfL has considered the themes raised in the public responses as well as those received by stakeholders. Examples of stakeholders who responded include:

- Freight and PHV representatives (e.g. FTA, RHA, London Private Hire Car Association, Brewery Logistics Group)
- Business representatives (e.g. Federation of Small Businesses, Smithfield Market Traders' Association)

- Charities (e.g. Samaritans, Age UK, London Food Alliance, Food for Homeless Londoners, St Mungos, The Passage, RNL, Salvation Army)
- Environmental interest groups (e.g. Mums for Lungs, Living Streets, Hackney Living Streets, Friends of the Earth, Client Earth)
- Religious organisations (e.g. Westminster Chapel, St George the Martyr Church, Bevis Marks Synagogue)
- Healthcare representatives (e.g. NHS Trusts)
- London boroughs (e.g. City of London, Westminster City Council)
- London Assembly members (e.g Leonie Cooper, Caroline Pidgeon)
- Emergency services

Emails received from the public and stakeholders contained a broad range of responses, both in support of and objecting to the proposals. A summary of the key themes raised by stakeholders and in emails received from the public, both via YourSay@tfl.gov.uk and further representations to the GLA, can be found below:

- Cost increase: Concerns about affordability, that it is a tax / for revenue raising, unfair on motorists, wrong time to increase charge, right time to increase charge, charge should be higher
- Hours: Impact on shift workers, impact on night time economy, impact on residents with people less able to visit, suggestions for alternative hours extensions, general support, impact on air quality and health, should be 24 hours a day
- Weekend: Not seen as justified, especially Sunday, concerns about access to religious services and places of worship, impact on weekend economy, impact on residents with people less able to visit, suggestions for alternative charging hours on weekends, suggestion for alternative charge level on weekends, support for wider charging
- Volunteers: Impact on charities working in zone (particularly in context of pandemic response), impact on foodbanks delivering in zone and families supporting relatives;
- Residents: Removal of discount will have a small impact on congestion, impact of visitors being deterred, not enough notice given for residents who have previously only driven outside charging hours and have not previously registered for residents' discount, allow two vehicles per resident, reduces attractiveness of living in central London
- Key workers: Extend reimbursement scheme to include more key workers, domiciliary care workers, workers providing emergency response to pandemic, increased risk for key workers, exempt commuting journeys for emergency services,
- Freight: Impact of cost, request exemption for freight, impact on economy (general, night time and weekend), impact on small business, impact on costs e.g. construction, delivery, servicing
- Equalities: impact on low-income households, BAME, children, older, younger, disabled, ability to worship, impact on school travel, particularly in light of change to Under 18 free travel on public transport, concern about older and BAME communities Covid-19 vulnerability
- Safety: Concerns about safety on street and public transport at night time, welcome cycle safety benefits, concerns about cycle safety, feel safer with less traffic
- Health: Increasing risk by forcing people to use PT, mental health impact from people not being able to travel / visit friends and family, welcome air quality impacts, welcome safety

impacts, increase exemptions for those who need to travel to hospital while shielding / at risk

- Environment: will not achieve environmental benefits, welcome environmental benefits, support action against climate change, need to tackle pollution, should target most polluting vehicles
- Other: Need to consider impact of re- routing, required proper consultation and impact assessment, not justified, justified even after lockdown restrictions eased, charge more for larger vehicles, should apply to all vehicles, benefits of lower traffic during lockdown, support for making changes permanent and rolling out more widely, changes should go further, changes need to be more widely communicated, be clear about when changes will be reviewed

4. Method of assessment

4.1 Purpose of this Integrated Impact Assessment

TfL has carried out an Integrated Impact Assessment (IIA) of the proposals, with input from an independent advisor. This IIA will inform decision makers about the likely significant positive and negative potential impacts that proposals may have. It looked at the impact the proposals could have on the environment, people (including health and equality) and the economy. Through this process, amendments to the proposals or mitigations have been identified that could help to minimise any negative impacts or maximise positive impacts.

Establishing the baseline

The baseline is an essential part of the IIA, setting out the existing situation, which then enables an assessment of the effects of the proposals should they be introduced. The effect of the proposals on traffic and knock on impacts can be compared against the current status of environmental, social and economic indicators in London.

In these unprecedented circumstances of a Covid-19 pandemic, there has not always been 'current' data available, so where necessary we have drawn on historical data and pre-Covid-19 travel patterns and complemented this with modelled impacts of what could happen without intervention.

4.2 Defining the assessment criteria

The assessment was split into three categories: London's environment, including air quality, carbon and noise; London's people, including health, equalities and safety; and London's economy, including economic and business impacts. Fundamental to many of these impacts is the effect the proposals will have on traffic in the CCZ, which is presented at the start of Section 6.

Within these categories, the assessment has been divided into analysis of a number of topics. These can be seen in Table 3, along with a justification for why each topic was included.

Topic assessed	**Justification**
Environment	
Nitrogen dioxide	Air pollution has a significant impact on public health and emerging evidence suggests that health conditions which are caused or worsened by air pollution make a person more vulnerable to complications if they contract Covid-19 and increase the risk of death
Particulates	Air pollution has a significant impact on public health and emerging evidence suggests that health conditions which are caused or worsened by air pollution make a person more vulnerable to complications if they contract Covid-19 and increase the risk of death
Carbon dioxide	Carbon dioxide is a major greenhouse gas and contributes to global warming and climate change
Noise	Noise is detrimental to human health
People	
Health	Traffic has a detrimental impact on human health including contributing to respiratory illness. There are also road danger reduction benefits of reducing interactions between people and vehicles

Topic assessed	Justification
Accessibility	Changes to the Congestion Charge may impact on transport accessibility as well as access to healthcare and social infrastructure
Protected characteristics and deprivation	Changes to the Congestion Charge may have a differential impact on those with protected characteristics and those in deprivation
Safety and crime	Changes to the Congestion Charge might impact on safety and crime in the CCZ
Economy	
Employment	Changes to the Congestion Charge might impact on employment in London
Businesses	Changes to the Congestion Charge might impact on business costs and operations
London's wider economy	Changes to the Congestion Charge might impact London's economy

Table 3: Framework for assessment

Within the 'people' category above, the following user groups were looked at each in turn:

- Pedestrians and cyclists
- Public transport users
- Drivers
- Other (e.g. car passengers)

As can be seen in table 3 above, the people category includes an assessment of 'protected characteristic' groups. This enabled the assessment team to understand how the proposals could impact all the protected characteristic groups (age, disability, sex, race, pregnancy or maternity, gender reassignment, religion or belief, and sexual orientation). It also demonstrates how TfL has met its legal responsibility under the Public Sector Equality Duty[5] (PSED) to have due regard to three outcomes when exercising its functions: (1) the need to eliminate unlawful discrimination, harassment and victimisation; (2) to advance equality of opportunity between those who share a protected characteristic and those who do not; and (3) to foster good relations between such people.

4.3 IIA assessment parameters

The potential impact on assessment groups was evaluated in two ways: scale and distribution, and sensitivity. These are explained below.

i) Breadth (scale and distribution): this looks at the extent to which an assessment group would be impacted, positively or negatively, by the proposals including the range, in terms of area, and number of affected individuals. It takes into account duration of impact where relevant (given the circumstances of these proposals, although they are temporary, there is uncertainty as to how long they will be in place).

[5] Section 149 of the Equality Act 2010

ii) Sensitivity: this looks at the severity of the impact, and how the assessment groups might respond, whether they are able to absorb or adapt to the proposed changes where negatively impacted. If the affected group has no alternatives and, as such, will be greatly impacted by the proposal then it is considered to have a high sensitivity.

All impacts are expected to be short-term unless otherwise stated due to the temporary nature of the proposals. Based on the outcome of the assessment, the impact of the proposals on each group was quantified using a seven-point scale. The seven-point scale is explained in Table 4 below.

Rating number	Rating	Description
+3	Major positive impact	Permanent positive impact across multiple groups
+2	Moderate positive impact	Positive impact experienced by a number of groups
+1	Minor positive impact	Positive impact experienced by some groups over the short-term
0	Neutral	No significant positive or negative impact
-1	Minor negative impact	Negative impact experienced by some groups over the short-term
-2	Moderate negative impact	Negative impact experienced by a number of groups
-3	Major negative impact	Permanent negative impact across multiple groups

Table 4: Seven-point scale for impact assessment

It should be understood that the assessment results by category and topic are not a reflection of the severity of the negative or positive impact on a specific person or group, it is an assessment of the severity across the entire population of people affected by the changes.

4.4 Assessment topics scoped out

This IIA only assesses the impact of the proposals on people living, working or travelling to, from or within the CCZ unless otherwise specified (e.g. the impact on the wider London economy).

The natural environment (i.e. landscape, flood risk, ecology etc) is commonly included as an assessment topic in an IIA under the environment category. However, for the purpose of this IIA, due to the likely negligible impact of the proposals on the natural environment, it was not assessed.

Both gender reassignment and sexual orientation have been scoped out of the review into the impacts of the proposals on those with protected characteristics. This is because, based on a desktop review, no particular impacts in relation to Section 149 of the Equality Act have been identified.

4.5 Identifying mitigation or enhancements

The final stage of the methodology is to identify any mitigation that may minimise the negative impact of the proposals if they are implemented, or any enhancements which could improve the positive impacts.

5. Baseline

The baseline sets out the current situation. It is split into key environmental, people related and economic data. Alongside the travel pattern changes set out in chapter two, it sets out TfL's understanding of the period during the Covid-19 lockdown which commenced on 23 March.

5.1 Environment

Environment summary

The Covid-19 lockdown has affected most air pollution sources in London, significantly reducing emissions from road transport, aviation, construction, commercial heating and commercial cooking.

London's air quality monitoring network includes a range of sites monitoring nitrogen dioxide (NO_2), PM_{10} and $PM_{2.5}$ (particulate matter of less than 10 and 2.5 micrometres respectively) on an hourly basis. Data for all monitoring sites within Central London have been collated and aggregated to determine current average levels of pollution in the area and compare these with levels before the Covid-19 lockdown.

Since the lockdown was implemented, a significant reduction in NO_2 has been observed, whilst $PM_{2.5}$ and PM_{10} have increased slightly. The $PM_{2.5}$ and PM_{10} episodes are typical for springtime and are associated with agriculture emissions which can travel long distances. Since early March, road traffic in London reduced by around 50 per cent London wide but during the latter weeks of lockdown traffic flows have started to increase and at the end of May were about 20 percent lower than usual, which will have a direct impact on emissions.

When looking at the change in NO_2 and PM concentrations, it is important to frame them in the context of the normal seasonal pattern of pollution episodes as well as the substantial improvements in London's air quality in recent years, in particular in central London where the ULEZ has already significantly reduced concentrations of pollutants since it was introduced in April 2019.

5.1.1 Nitrogen Dioxide (NO2)

All combustion processes produce oxides of nitrogen, for which NOx is the collective term. Oxides of nitrogen comprise nitric oxide (NO) and NO_2, the former readily converted to the latter by oxidation. NO_2 is a pollutant of concern due to its impact on health. Since NO easily converts to NO_2, it is necessary to reduce emissions of NOx in the management of NO_2.

Figure 5 shows the average diurnal profile of NO_2 concentration, derived from hourly observations at all monitoring sites in central London (within the CCZ boundary) for the following periods:

- 1 January – 22 March 2020 (before Lockdown), and
- 23 March - 17 May 2020 (since Lockdown)

Since the lockdown was implemented on 23 March 2020, a significant reduction in NO_2 has been observed, with levels oscillating between 20 - 35 µg/$m^3$for most of the day, and a much flatter

diurnal profile, with the AM peak of pollution about 10 µg/m^3 lower and levels about 20 µg/m^3 lower during the day compared to average levels observed before lockdown.

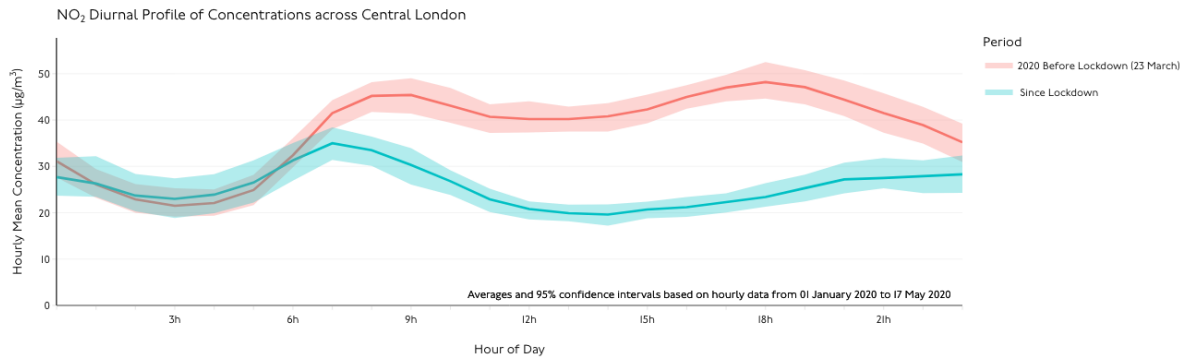


Figure 5: Change in NO_2 daily profile in central London - averaged concentrations across all monitoring sites

Figure 5 shows the average NO_2 concentrations over the same periods (before and after lockdown) at all individual air quality monitoring stations located in the CCZ or on the boundary roads, with the average percentage change compared with levels observed before lockdown.

The impact of the Covid-19 lockdown is significant, particularly at sites typically measuring high levels of air pollution such as the Strand, Marylebone Road or Oxford Street. For these, average concentrations have reduced by about half of the pre-lockdown level.

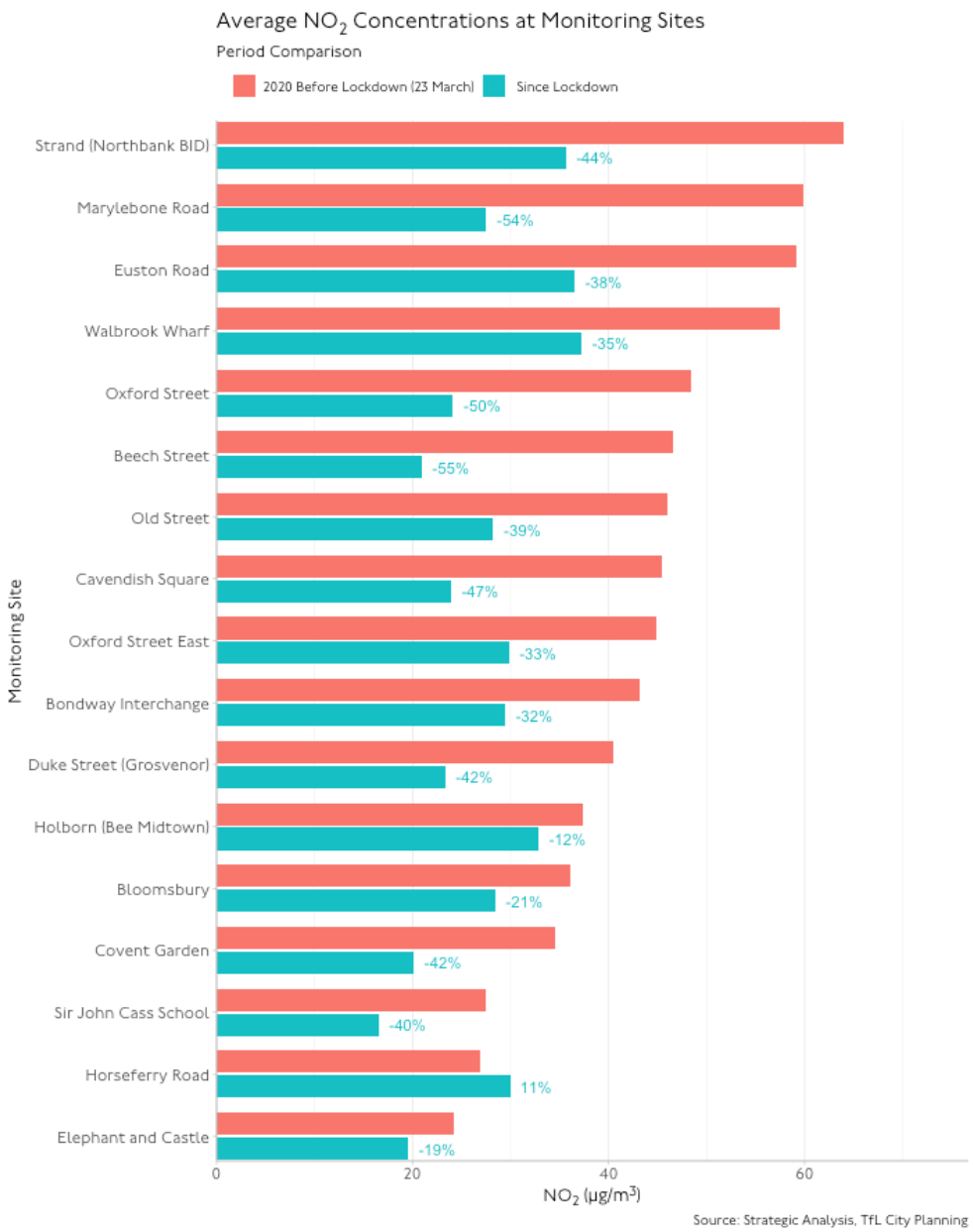


Figure 6: Change in average NO_2 concentration at monitoring sites within the CCZ and on boundary roads

5.1.2 Fine particulate matter (PM2.5)

Figure 7 shows the average diurnal profile of $PM_{2.5}$ concentration at all monitoring sites in central London for the same periods as described above for NO_2.

$PM_{2.5}$ has increased slightly during lockdown period. This is likely due to a number of moderate episodes of high PM which occurred in late March and April across London, as this increase has been observed all across the London air quality network since lockdown, including at regional background monitoring sites (i.e. sites further away from local sources of pollution such as road traffic). This is not unusual for this time of year, as springtime is often the worst time of the year for particulate pollution in London. These high pollution episodes are typically associated with agriculture emissions which can travel long distances.

From the pattern observed in Figure 7, it is evident that this is not related to road traffic, as $PM_{2.5}$ concentrations have been higher during the night, and levels during the day were quite similar to those observed in before lockdown.

The relative increase at sites in London are significantly less than for the regional background sites. This indicates there has been a reduction in the London local contribution to $PM_{2.5}$, and this is countering some of the regional increase. The reduction in local contribution is likely to be a result of a decrease in local emissions from transport, construction and (in central London) commercial cooking. However, King's College London have stated concentrations may have been influenced by an increase in domestic garden and wood burning within London during the lockdown period.

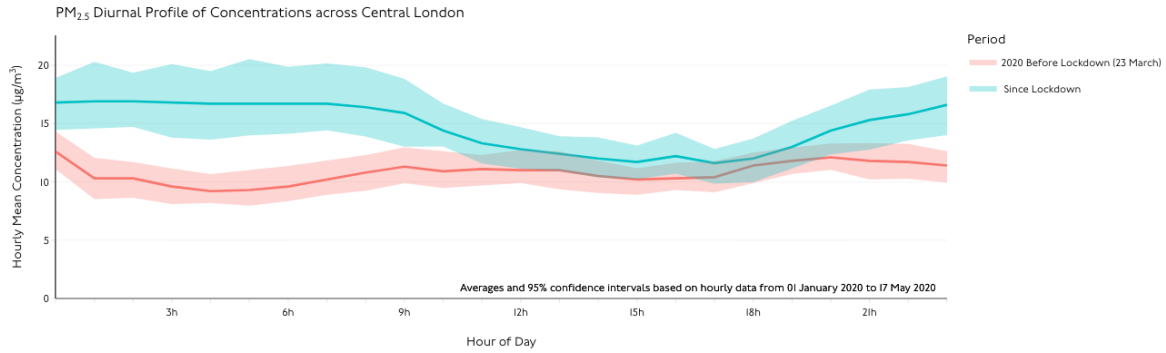


Figure 7: Change in $PM_{2.5}$ daily profile in central London - averaged concentrations across all monitoring sites

Figure 8 shows the average $PM_{2.5}$ concentrations and percentage change compared to pre-lockdown levels at all individual air quality monitoring stations located in the CCZ or on the boundary roads. All sites have shown an increase between 30 per cent and 50 per cent in concentrations since the 23 March. Average concentrations at all sites are very similar, ranging from 12 to 15 µg/m^3 since the Covid-19 lockdown.

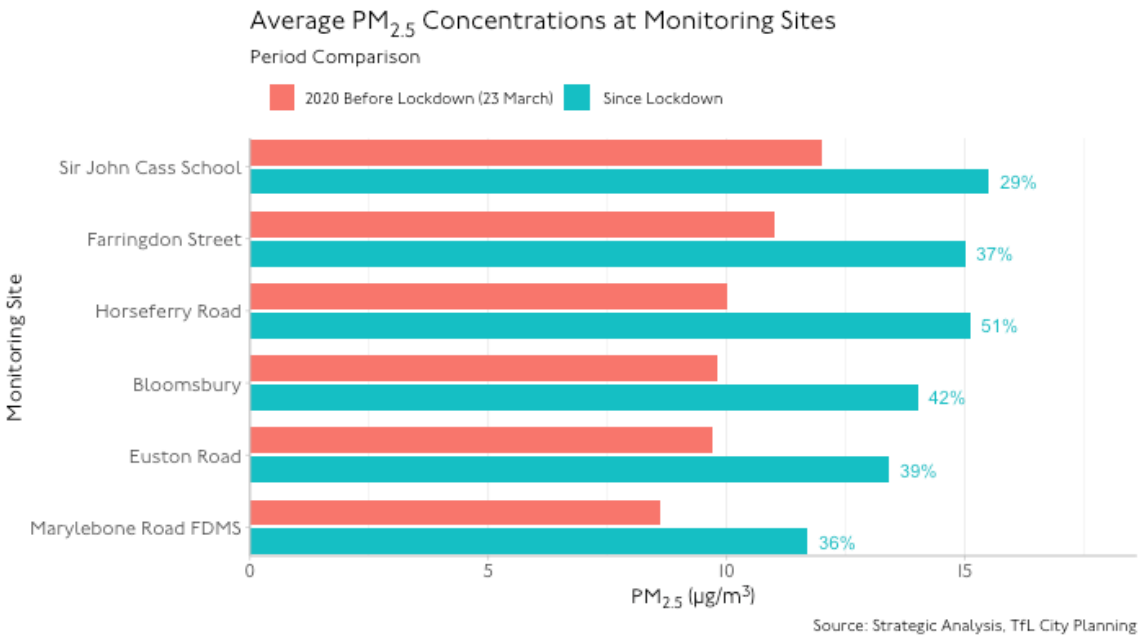


Figure 8: Change in average $PM_{2.5}$ concentration at monitoring sites within the CCZ and on boundary roads

5.1.3 Particulate matter (PM_{10})

Figure 9 shows the average diurnal profile of PM_{10} concentration at all monitoring sites in central London for the same periods.

Diurnal profiles are similar to those observed for the same periods for $PM_{2.5}$, with an increase since the Covid-10 lockdown. As for $PM_{2.5}$, the PM_{10} hourly averages were higher during the night during that period (23 March to 17 May 2020). Again, this is likely due to the high PM pollution episodes which occurred in late March / April, as most monitoring sites across London showed similar increases in PM_{10} concentrations.

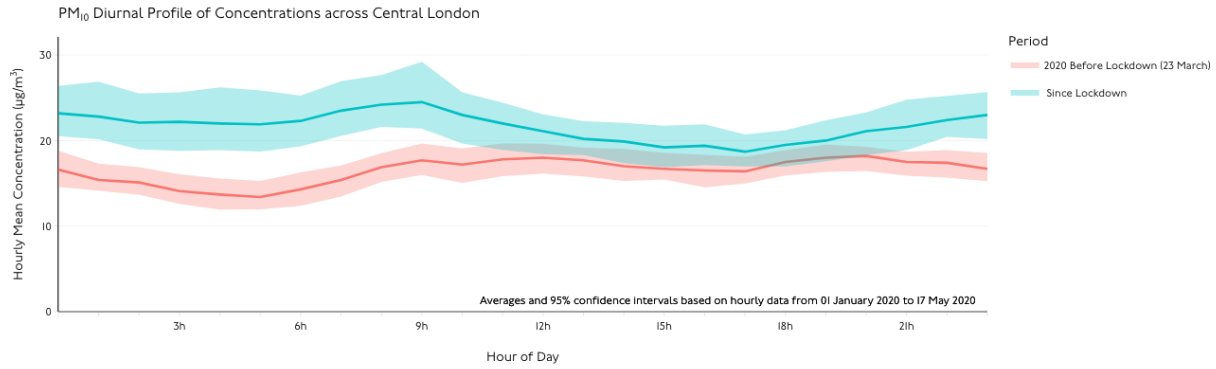


Figure 9: Change in PM_{10} daily profile in central London - averaged concentrations across all monitoring sites

Figure 10 shows the average PM_{10} concentrations and percentage change compared to pre-lockdown levels at all individual air quality monitoring stations located in the CCZ or on the boundary

roads. The Bondway Interchange site shows a significant reduction since lockdown, but this is more due to the average pre-lockdown being particularly high. All other sites show an increase in concentrations compared to the pre-lockdown period, with PM_{10} levels ranging from 20 to 25 µg/m^3.

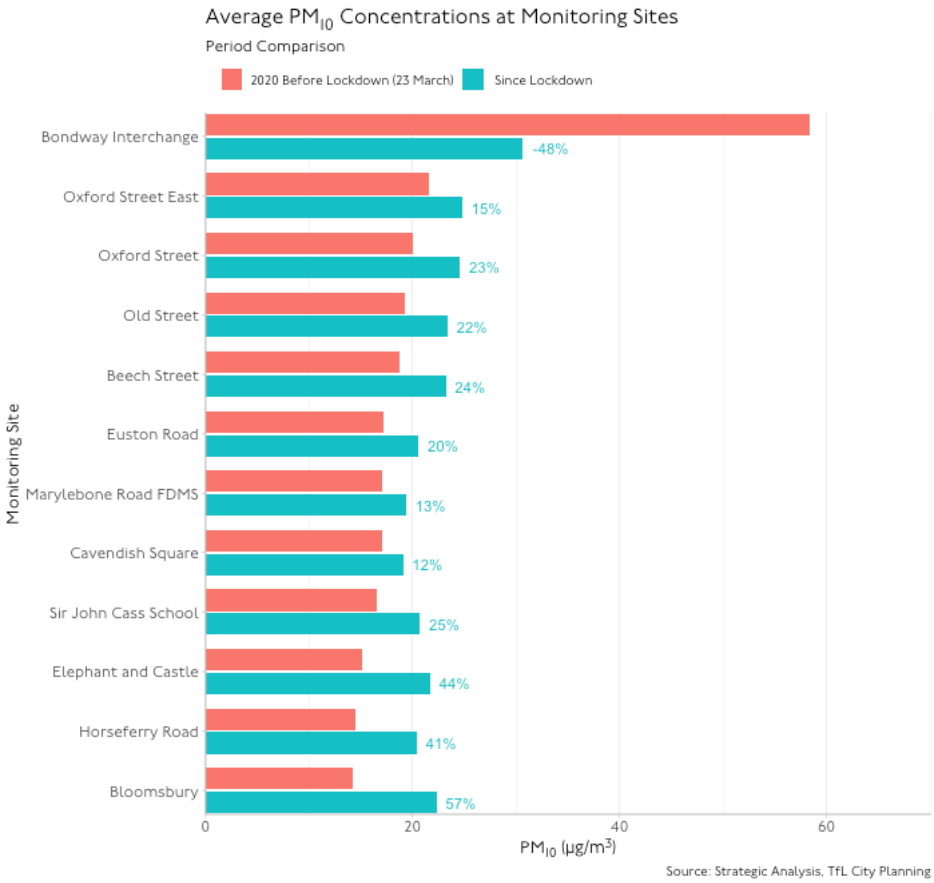


Figure 10: Change in average PM_{10} concentration at monitoring sites within the CCZ and on boundary roads

5.1.4 Carbon Dioxide (CO2)

Road transport is responsible for 24 per cent of London's greenhouse gas emissions (source: LEGGI 2017[6]) of which carbon emissions are of most relevance.

Since the beginning of March, road traffic in London has reduced by around 50 per cent London wide, but during the latter weeks of lockdown traffic flows have started to increase and at the end of May were about 20 per cent lower than usual, which will have a direct impact on carbon emissions. As discussed before, traffic volume on main roads across London has been steadily increasing over the past few weeks. History dictates that emissions reductions caused by economic downturns tend to be temporary, and so the emission benefits currently experienced are likely to be short lived without mitigating measures.

5.1.5 Noise

[6] London Energy and Greenhouse Gas Inventory 2017, available online at https://data.london.gov.uk/dataset/leggi

According to some World Health Organization (WHO) findings, noise is the second largest environmental cause of health problems[7].

The main source of ambient noise in London is roads. In urban areas, most vehicle noise comes from engines, because at low speed, engine noise dominates over the noise generated by tyres and road surfaces. In normal times, 41 per cent of Londoners are disturbed by road traffic noise[8]. The distribution of noise in the central London area can be seen using DEFRA's strategic noise tool (www.extrium.co.uk/noiseviewer.html), but this takes its data from traffic in 2017 so is not current.

In terms of the baseline of noise levels in London during the Covid-19 crisis, there is a lack of reliable data as there is no purpose-built network of monitors to record the impact of lockdown and road traffic on noise levels.

5.2 People

People summary

There is emerging evidence on the impact of air pollution and an individual's resilience to the impacts of Covid-19.

The NHS has specified two groups with respiratory conditions that are at risk of severe outcomes from Covid-19: first, those with lung conditions that are not severe; these groups are considered 'clinically vulnerable' and are at moderately higher risk than the general population. Second, groups with a severe lung condition are considered 'clinically extremely vulnerable' and have a higher risk of poor outcomes compared to the general population[9].

Older age is also risk factor for Covid-19 mortality. The rate of death due to Covid-19 increases significantly with age. Higher rates of Covid-19 and higher Covid-19 death rates have been observed in BAME groups in the UK. There is evidence that BAME populations are more likely to live in areas of high air pollution, increased exposure to air pollution will result in respiratory diseases that may increase the risk of Covid-19 mortality.

The ONS reported that those in the poorest and most densely populated areas are most at risk of Covid-19 mortality. The mortality rate of deaths involving Covid-19 in the most deprived areas of England was 55.1 deaths per 100,000 population compared to 25.3 in the least deprived areas. Low-income communities are more likely to live in areas with poorer outdoor and indoor environments, including the quality of air (for example, near to industry or busy roads). As a result, low-income communities are more likely to suffer from respiratory conditions which also make them vulnerable to severe COVID-19 outcomes.

[7] https://ecf.com/news-and-events/news/Covid-19-lockdown-mutes-traffic-noise-and-new-soundscapes-rise
[8] ULEZ IIA, October 2014. Jacobs
[9] NHS. Who's at higher risk from coronavirus. Accessed on May 28th 2020 at https://www.nhs.uk/conditions/coronavirus-Covid-19/people-at-higher-risk-from-coronavirus/whos-at-higher-risk-from-coronavirus/

Income is a strong predictor of car ownership in inner and outer London, with car ownership generally increasing as household income increases. There is a risk that drivers will become more reliant on their cars post-Covid-19 to reduce the risk of being infected when travelling via modes where social distancing is harder, and that the burden of the adverse impacts of car-ownership (lack of access to environments that support physical activity from walking and cycling, air pollution, noise, road danger, community severance) will particularly affect those in more deprived non-car owning communities.

5.2.1 Health

Air pollution

There is established evidence that air pollution, of which road transport is a significant contributor, is a factor in the causation of a number of diseases including coronary heart disease (CHD), stroke, asthma, and lung cancer. Low-income communities are more likely to suffer from respiratory conditions.

There have been a number of early studies based in the USA[10], Europe[11] and the UK[12] that have found a positive association between areas of poor air quality and higher Covid-19 mortality. These findings may be indicative of a direct causal link and the data for the studies are being continually updated. However, there have also been criticisms of these studies which highlight their limitations. A number of limitations have been identified across studies especially as information continues to be gathered and assessed.

Further data will be needed to establish direct links between air pollution and Covid-19 mortality. Nevertheless, it is well established in air quality scientific literature that those who are exposed to air pollution are more likely to develop health problems such as respiratory diseases such as lung cancer, chronic obstructive pulmonary disease, and asthma[13]. In addition to underlying conditions such as obesity, hypertension, diabetes, cardiovascular disease, and cancer, pre-existing respiratory disease is associated with an increased risk of death from Covid-19[14].

Physical activity

Physical inactivity is responsible for one in six UK deaths (equal to smoking) and is estimated to cost the UK £7.4 billion annually (including £0.9 billion to the NHS alone).

[10] Wu et al., 2020. Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study. Accessed on May 28th 2020 at https://www.medrxiv.org/content/10.1101/2020.04.05.20054502v2.full.pdf

11 Ogen, Y., 2020. Assessing nitrogen dioxide (NO2) levels as a contributing factor to coronavirus (COVID-19) fatality. Science of The Total Environment. Volume 726, 15 July 2020, 138605. Accessed on May 28th 2020 at https://www.sciencedirect.com/science/article/pii/S0048969720321215

12 Travaglio et al., 2020. Links between air pollution and COVID-19 in England. https://www.medrxiv.org/content/10.1101/2020.04.16.20067405v3

[13] PHE. Health matters: air pollution. Accessed on May 28th 2020 at https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution

[14] Guan W-jie, Liang W-hua, Zhao Y, et al., 2020. 'Comorbidity and its impact on 1590 patients with Covid-19 in China: A Nationwide Analysis'. Eur Respir J March 26th 2020.

In the 2018/19 financial year, only 39 per cent of adults in London reported achieving the 20 minutes of active travel per day that is recommended by the Chief Medical Officer as being required for good health. Active travel (walking or cycling) is one of the easiest forms of physical activity to engage with, particularly for demographics such as women, those of BAME ethnicity, older people and those on low-incomes who are less likely to engage in sport and fitness.

Severance

Severance is defined as the creation of a physical and/or psychological barrier that divides people from local services or social connections within the community. Busy roads can form physical or psychological barriers, cutting one part of a community off from another.

Severance particularly impacts certain groups. In communities subject to physical and psychological severance barriers, those who were unable to afford or physically access means of self-mitigation were particularly affected by severance. Parents/carers using buggies or prams may be more impacted than others when the built environment is physically inaccessible. Similarly, older people or those with restricted mobility also suffer the same impacts as buggy users. Finally, people without access to a car may be more impacted if the physical environment favours and supports car use. Children in particular are affected by the road safety aspects of community severance because of fears of crossing or cycling along busy roads and, therefore, may be barred from travelling unaccompanied.

5.2.2 Accessibility

The CCZ is home to a vast array of healthcare and social infrastructure, including essential services such as 11 NHS hospitals, numerous GP surgeries, dental surgeries and pharmacies. The CCZ also contains key government offices, business services, media and banking facilities. It is home to over 200,000 residents and many others who may depend on religious centres or community groups located within the CCZ for their physical or emotional well-being. Groups that particularly make use of community centres include children, older people and those with disabilities.

The Covid-19 pandemic has had a profound impact on the healthcare system. During the pandemic people have been advised not to go into their GP surgery in person but to contact their GP via phone or to access online services. People are only being asked to visit a GP surgery if absolutely necessary. In the four weeks to the 12 April, among patients who sought GP care in the UK, only 26 per cent of patients went into their surgery for an appointment while 71 per cent had their consultation over the phone. In the same period a year ago, this was reversed with 71 per cent face-to-face and 25 per cent over the phone[15]. All routine dental treatment has also been stopped. The total number of attendances to Accident and Emergency in April 2020 in England was 917,000, a decrease of 56.6 per

[15] https://www.rcgp.org.uk/about-us/news/2020/april/around-7-in-10-patients-now-receive-gp-care-remotely-in-bid-to-keep-patients-safe-during-pandemic.aspx

cent on the same month last year[16]. NHS England suggests that these figures are likely to be a result of the Covid-19 response.

The pandemic has also closed religious centres, community facilities, sports facilities and playgrounds.

5.2.3 Protected characteristics and deprivation

Protected characteristics statistics

The characteristics defined as protected by law are; age, disability, sex, race, pregnancy and maternity, gender reassignment, religion or belief and sexual orientation. Table 5 outlines the proportion of people in London that fall into each group where data exists.

Protected characteristic	**Key statistics[17]**
Age	12 per cent of London's population is aged 65 and over. 32 per cent is aged under 25
Disability	19 per cent of London's population identify themselves as being disabled and 11 per cent of economically active Londoners have a disability
Sex	50 per cent of Londoners are women and 46 per cent of economically active Londoners are women
Race	43 per cent of Londoners and 36 per cent of economically active Londoners are black, Asian and minority ethnic
Pregnancy and maternity	No data exists
Gender reassignment	No data exists
Religion or belief	Christianity is the largest religion followed in London at 48 per cent. This is followed by Islam at 12 per cent, Hindu (five per cent), Jewish (two per cent), Sikh (two per cent) and Buddhist (one per cent)
Sexual orientation	2.8 per cent of London's population identify themselves as being lesbian, gay or bisexual[18]

Table 5: Key statistics on the number of individuals in each protected characteristic group

The relationship between protected characteristics and Covid-19

Figure 11 shows the rate of death due to Covid-19 increases significantly with age. In April, over one in five deaths due to Covid-19 occurred in those aged 90 years and over. The age group that made up the highest proportion of Covid-19 deaths in males was those aged 80 to 84 years, with this age group accounting for 19.6 per cent of deaths in England. For females, the age group that made up

[16] https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2020/05/Statistical-commentary-April-2020-jf8hj.pdf

[17] Based on Annual Population Survey 2017, Office for National Statistics and Greater London Authority 2019 round of trend-based population projections (central variant)

[18] ONS (2018)

the highest proportion of deaths due to Covid-19 was those aged 90 years and over with 27.8 per cent of Covid-19 deaths in England.

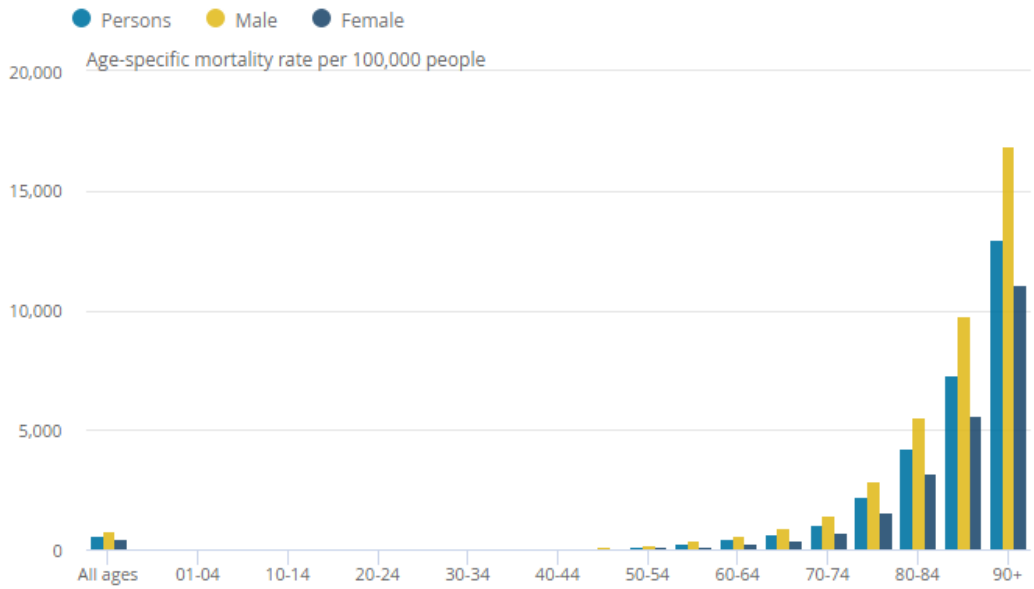


Figure 11: Deaths involving Covid-19 by age in England (ONS, April 2020)

Figure 12 reveals that men are much more likely to die from Covid-19 than women, with 113 deaths per thousand male deaths involving Covid-19 compared with 54 per thousand female deaths. This is reinforced by European data. In Italy, 71 per cent of Covid-19 deaths have been male, and in Spain twice as many men as women have died.

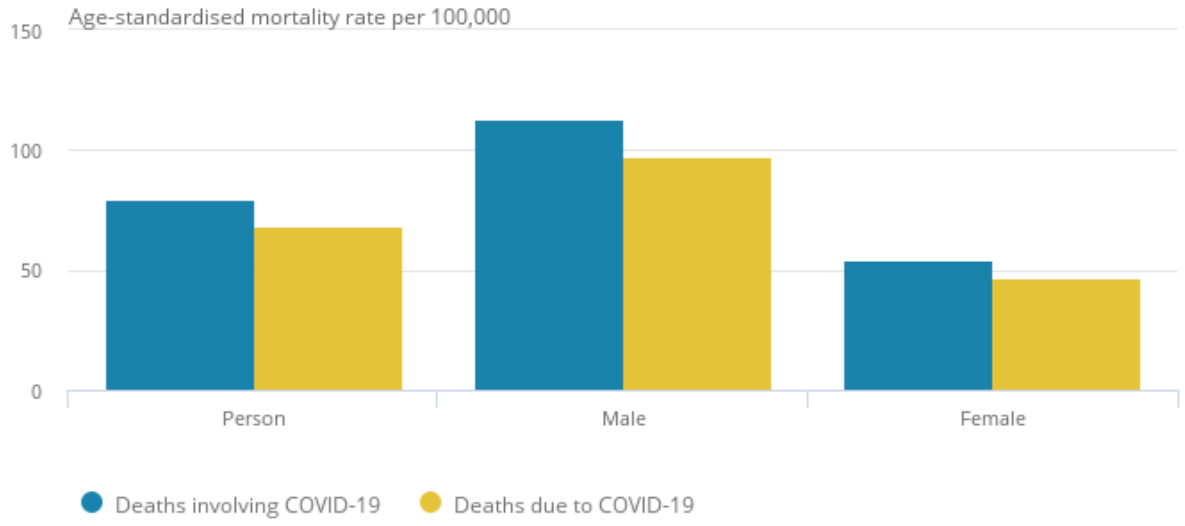


Figure 12: Male and female mortality rates for deaths involving and due to Covid-19 per 100,000 population in England and Wales (ONS, March 2020)

The number of individuals who have died from Covid-19 shows that more men have died from the virus across all age groups with the exception of individuals aged 85 or over. Figure 13 shows data from week one (ending 3 January 2020) to week twenty (ending 15 May 2020).

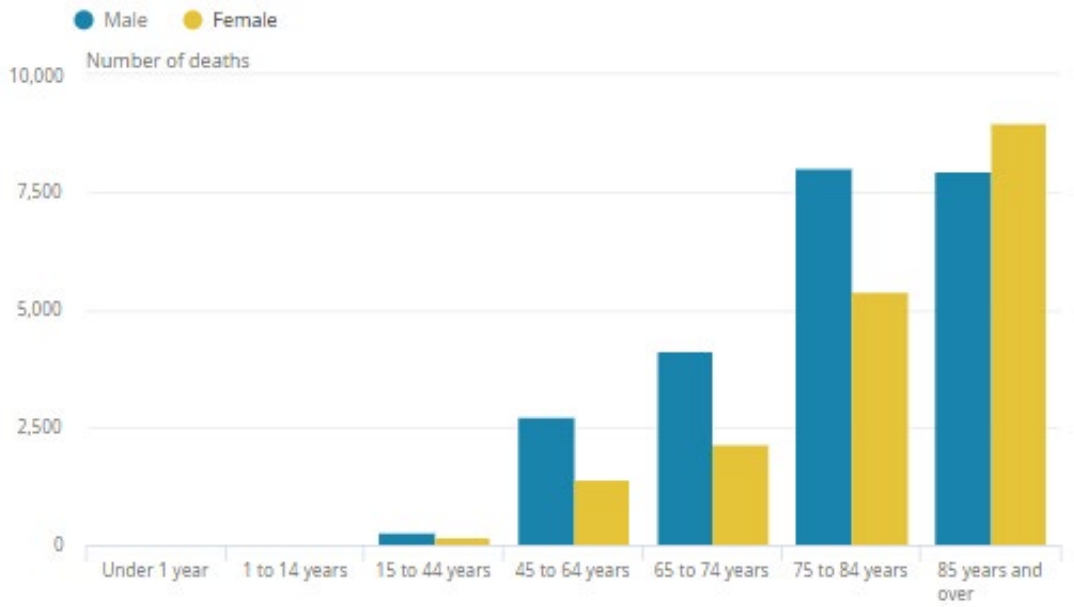


Figure 13: Deaths involving Covid-19 registered between week one and week 20 of 2020 by sex and age group, England and Wales (ONS, May 2020)

Higher rates of Covid-19 have been found in BAME groups in the UK[19]. The Office for National Statistics have found that black men are nearly twice as likely to die from Covid-19 than white men. Bangladeshi and Pakistani males were 1.8 times more likely to die from Covid-19 than white males, and females from those ethnic groups were 1.6 times more likely to die from the virus than their white counterparts. There is evidence that BAME communities are more exposed to air pollution, although it is unclear if this is due to a higher likelihood of living in areas of deprivation; nevertheless, increased exposure to air pollution will result in respiratory diseases that increase the risk of Covid-19 mortality.

Travel trends by protected characteristic

Table 6 shows the proportion of Londoners, pre-lockdown, using modes of transport at least once a week based on London Travel Demand Survey data.

[19] https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronavirusrelateddeathsbyethnicgroupenglandandwales/2march2020to10april2020

%	All	Men	Women	White	BAME	Aged 24 and under	65+	All less than £20,000	Dis-abled	Non-dis-abled
Base	**(17,560)**	**(8,450)**	**(9,110)**	**(11,173)**	**(6,099)**	**(4,437)**	**(2,691)**	**(4,966)**	**(1,729)**	**(15,831)**
Walking	95	95	95	95	96	97	87	93	81	96
Bus	59	56	63	56	65	66	65	69	58	60
Car as passenger	44	37	51	43	46	62	41	38	42	45
Car as driver	38	42	33	41	32	7	43	23	24	39
Tube	41	43	38	43	37	32	28	32	21	43
National Rail	17	18	15	19	13	12	12	11	9	17
Overground	12	13	11	12	12	10	6	11	7	12
Other taxi/minicab (PHV)	10	10	10	11	8	9	6	9	10	10
London taxi/ black cab	3	3	2	3	1	1	2	2	3	2
DLR	5	6	4	5	7	5	2	5	3	5
Tram	2	2	2	2	2	3	2	2	2	2
Motorcycle	1	2	0	1	0	0	-	1	0	1
Bicycle	8	11	5	10	4	12	2	5	3	9

LTDS data in this report excludes children aged under five.

Table 6: Proportion of Londoners using modes of transport at least once a week (2016/17)

Car use is London is normally highest amongst women, white people, older people and those without disabilities. Men, white people and older people are more likely to travel as drivers and women, BAME people and younger people as car passengers. Pre-lockdown, in terms of BAME people, 39 per cent of Asian Londoners would have driven a car at least once a week compared with 28 per cent of Black Londoners.

Table 7shows the demographic split of car trips in the CCZ pre-lockdown, in its current operational hours (weekday 7am – 6pm) and the proposed extension period (weekday 18:00-22:00 and weekend 07:00-22:00). Figures show the percentage breakdown for each identified group

	Gender		Age					Income		
	Male	Female	Under 16	16-24	25-34	35-59	60+	less than £20,000	£20,000 - £49,999	more than £50,000
Existing hours	75%	25%	5%	3%	9%	65%	18%	25%	24%	50%
Weekday 18:00 -22:00 and weekend 07:00-22:00	56%	44%	8%	9%	14%	54%	16%	16%	35%	49%

	Ethnicity				Disabled	
	White	Mixed, Other and Arab	Asian	Black	Yes	No
Existing hours	54%	7%	30%	9%	6%	94%
Weekday 18:00 -22:00 and weekend 07:00-22:00	63%	4%	22%	11%	5%	95%

Table 7: LTDS five year average from 2014/15 to 2018/19 - Demographics of Londoners making a car trip (as driver or passenger) with a destination in the CCZ during current charging hours and the proposed extensions periods

Women are more likely than men to be travelling with buggies and this can affect transport choices[20]. Pregnant women and mothers are more reliant on their private vehicles to travel, especially for school runs.

In a GLA survey, of the Londoners who said they would use public transport less than before the lockdown, older Londoners (over 65) are more likely to drive instead of using public transport[21]. Older Londoners also reported that they would walk instead of using public transport (53 per cent). Those aged 50-64 are most likely to walk (61 per cent).

Of the women who said they would use public transport less than before the lockdown, 55 per cent said they would walk instead (compared to 45 per cent of men) and 8 per cent said they would jog to commute (compared to 7 per cent of men). Women were less likely to cycle (13 per cent of women, compared to 21 per cent of men) and slightly less likely to use a car (40 per cent of women compared to 42 per cent of men)[22].

Surveying[23] through TfL's 'My London Journey' (MLJ) panel, which is made up of Londoners with a range of accessibility needs, identified that many disabled travellers have stopped travelling for a variety of reasons following Government advice, including due to crowds and social distancing not being respected. Of those who are travelling, they are overwhelmingly choosing to use their normal transport method, which in the majority of cases is walking but closely followed by using a bus.

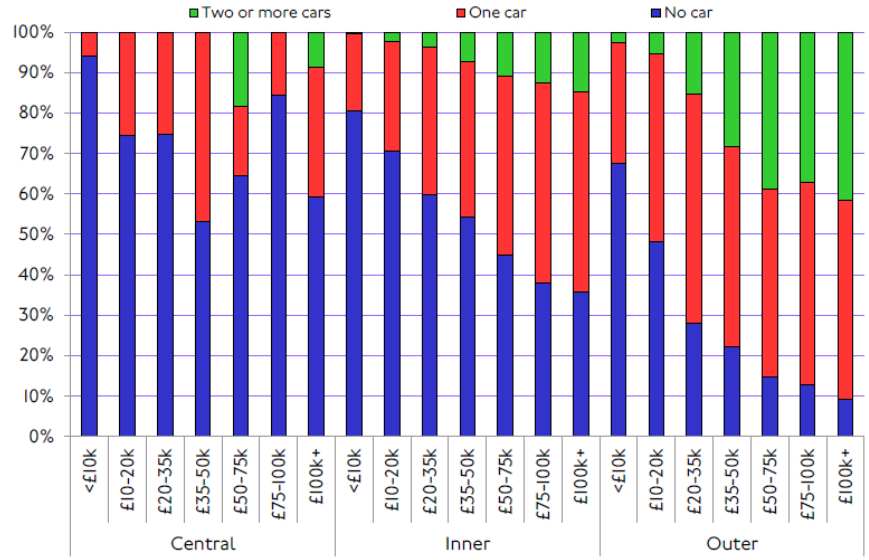
Deprivation

Low-income Londoners who live in a household earning less than £20,000 per year are less likely to travel by car as a driver or passenger at least once a week. 23 per cent of low-income Londoners drive once a week compared to 38 per cent of all Londoners. Instead, low-income Londoners are more likely to use the bus (69 per cent compared to 59 per cent of all Londoners). They are less likely to use the Tube or National Rail and less likely to cycle.

Figure 14 shows that income is a strong predictor of car ownership in inner and outer London, with car ownership generally increasing as household income increases. Households with higher incomes are also more likely to own two cars. The correlation between household income and car ownership is less strong in central London, where for example, more than half of households in the highest income bracket (more than £100,000 per year) do not have access to a car.

[20] The equality, diversity and inclusion evidence base for London, May 2018. GLA Intelligence
[21] YouGov polling undertaken on behalf of the GLA
[22] YouGov polling undertaken on behalf of the GLA
[23] Fieldwork ran from 27 April to 3 May and included 143 travellers from the MLJ panel completing a survey

Figure 4.14 Proportion of households with access to a car, by annual household income and location, LTDS 2016/17.



Source: Strategic Analysis, TfL City Planning.

Figure 14: Proportion of households with access to a car, by annual household income and location. LTDS 2016/17 (taken from Travel in London 12)

There are socio-economic inequalities in the impact of air pollution in London. In areas of poor air quality where the annual mean NO_2 limit value is exceeded, 32 per cent of residents are from the most economically deprived groups, whereas only seven per cent are from the least deprived. In 2013, in the most deprived areas the concentration levels of NO_2 pollution were on average 24 per cent higher than the least deprived areas.

The Office for National Statistics (ONS) reported that those in the poorest and most densely populated areas are most at risk of Covid-19. The mortality rate of deaths involving Covid-19 in the most deprived areas of England was 55.1 deaths per 100,000 population compared to 25.3 in the least deprived areas[24]. Further ONS research[25] shows those at greatest risk based on their occupation. Up to and including 20 April 2020, there had been a total of 2,494 deaths involving Covid-19 in the working age population (those aged 20 to 64 years) in England and Wales.

Nearly two thirds of these deaths were among men. Compared with the rate among people of the same sex and age, men working in the lowest skilled occupations had the highest rate of death involving Covid-19 with 21.4 deaths per 100,000 males. Among men, there were a number of occupations with raised deaths rates including security guards (45.7 deaths per 100,000 males),

[24] https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvingcovid19bylocalareasanddeprivation/deathsoccurringbetween1marchand17april

[25] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/Covid-19Covid-19relateddeathsbyoccupationenglandandwales/deathsregistereduptoandincluding20april2020

chefs (35.9 deaths per 100,000), taxi drivers and chauffeurs (36.4 deaths per 100,000), bus and coach drivers (26.4 deaths per 100,000) and sales and retail assistants (19.8 deaths per 100,000). In some recent analysis by Public Health England (PHE) [26] found that for three occupations the relative increase in deaths in 2020 was significantly higher than the average. These occupations were caring personal services, elementary security occupations and taxi/cab/chauffeur drivers.

Among women, there is only one major occupational group that had a statistically significantly higher mortality rate for deaths involving Covid-19 than the death rate involving Covid-19 among women of the same age in the general population. This was for caring, leisure and other service occupations who had a death rate of 7.5 deaths per 100,000 females. These higher risk occupations tend to be lower income and the types of job that do not allow working from home.

The highest rates of death involving Covid-19 until mid-April were in London[27]. The local authorities with the highest mortality rates were all London boroughs, Newham was the highest, followed by Brent then Hackney. Both Newham and Hackney are within the top 32 most deprived local authorities in England[28].

Higher social grades who reported that they would use public transport less are more likely to walk, cycle or jog for commuting purposes than lower social grades. They are almost three times more likely than lower social grades to cycle and four times more likely to run. They are also significantly more likely to walk instead of using public transport. Car use as an alternative to transport users was not particularly different between social groups, 40 per cent of higher social groups would use a car compared to 42 per cent of lower social groups.

Safety and crime

TfL has a duty under Section 17(1) of the Crime and Disorder Act 1998 to take steps to prevent the following matters in its area: crime and disorder; drug, alcohol and substance abuse; and reoffending. The area for TfL is Greater London.

Crime and antisocial behaviour and fear of crime

Tackling transport crime and disorder is one of TfL's main priorities because crime, antisocial behaviour and the fear or crime can have a major effect on people's willingness to use public transport, walk or cycle.

In 2017/18, on average 30 per cent of Londoners reported feeling very or quite worried about their personal security when using public transport. Disabled Londoners (37 per cent), young Londoners

[26] Covid-19 Review of disparity in risks and outcomes, section 5.4 Mortality by occupation, PHE 2020, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890258/disparities_review.pdf

[27] https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvingcovid19bylocalareasanddeprivation/deathsoccurringbetween1marchand17april

[28] https://www.londoncouncils.gov.uk/members-area/member-briefings/local-government-finance/indices-deprivation-2019

aged 16 to 24 years old (35 per cent), women (34 per cent) and BAME Londoners (33 per cent) are the most likely equality groups to be very or quite worried.[29]

A TfL survey in 2019 with Londoners found that 28 per cent were deterred from walking more in London due to worries about personal safety and a fear of crime. This was higher for women than men and for younger people aged 16-34[30]. Another TfL survey in 2019 found that 18 per cent of non-cyclists were deterred from cycling because of the fear of having their bike stolen[31]

Road danger reduction

Due to the significant reductions in traffic volumes experienced during the Covid-19 pandemic, there has been an increase in average speeds in some areas of London of over 50 per cent. There have been significantly lower levels of people killed or seriously injured (KSI) during lockdown, but nevertheless there have been more fatalities involving car occupants, motorcycles, and cyclists compared to the same period in 2019. This is thought to be due to emptier roads leading to increased speeds as more than a quarter of deaths were due to speed related factors.

People are more at risk when walking, cycling or using a motorcycle in London. Travelling by car has now in general become much safer, partially reflecting improvements in vehicle safety features. Today, there is a higher risk when travelling by foot, by bicycle and by motorcycle. People killed or seriously injured when travelling by these modes now account for 80 per cent of all deaths and serious injuries on London's roads. In 2018, 31 per cent of all trips were made on foot or by bicycle, but in the same year, people walking and cycling made up 53 per cent of those killed and seriously injured on our roads[32].

As such, with a significant increase in people walking and cycling in the CCZ expected it is vital to reduce the road danger they face. This will particularly benefit certain groups because there are inequalities in road danger in London.

BAME Londoners are less likely than white Londoners to feel safe with regard to being involved in a collision when walking throughout the city (17 per cent feeling not very or not at all safe compared to 12 per cent of white people)[33]. We know that BAME road users across all types of road transport, except buses, are more at risk of being killed or seriously injured than non-BAME road users. BAME children are, on average 1.5 times more likely to be killed or seriously injured on the roads than non-BAME children.

Analysis of collision data also suggests that people from more deprived areas, disabled people, children and older people experience the worst impacts of road danger. People walking in London's most deprived communities are more than twice as likely to be injured as those in the least deprived. Main roads pass through some of the most deprived communities, creating environments that are not inclusive to all, with roads that are intimidating and difficult to cross.

[29] TfL (2019) Understanding Diverse Communities
[30] TfL survey (2019) Attitudes to Walking. Not published
[31] TfL survey (2019) Customer Pulse Cycling P7 2019/20. Not published
[32] http://content.tfl.gov.uk/casualties-in-greater-london-2018.pdf
[33] Transport for London (2018) Streets Management CSS report

Decreased road traffic may reduce road danger in the zone by reducing the number of conflicts between road users. This trend was experienced when the Congestion Charge was introduced. Analysis of collision trends in the zone for the first year after charging, and in relation to those elsewhere in London at the time, confirmed significant additional reductions compared to the background trend. This equated to between 40 and 70 additional fewer collisions per year[34].

Car drivers

There is a risk that drivers will become more reliant on their cars post-Covid-19 to reduce the risk of being infected when travelling via modes where social distancing is harder. 30 per cent of respondents to an RAC poll indicated that their car is now more important than ever following the outbreak[35]. This is reinforced by a YouGov poll undertaken on behalf of the GLA, of the 38 per cent of respondents who said they would use public transport less, 41 per cent said they would drive instead[36].

Freight operators

Data from the Freight and Servicing Action Plan[37] indicated that in 2017, three per cent of vehicle kilometres in London were made by HGVs and 16 per cent made by LGVs.

Figure 15 shows LGV and HGV use in the CCZ from before lockdown to the end of May.

[34] http://content.tfl.gov.uk/central-london-congestion-charging-impacts-monitoring-third-annual-report.pdf
[35] https://www.rac.co.uk/drive/news/motoring-news/third-of-drivers-say-having-access-to-a-car-is-more-important/
[36] YouGov polling undertaken on behalf of the GLA
[37] http://content.tfl.gov.uk/freight-servicing-action-plan.pdf

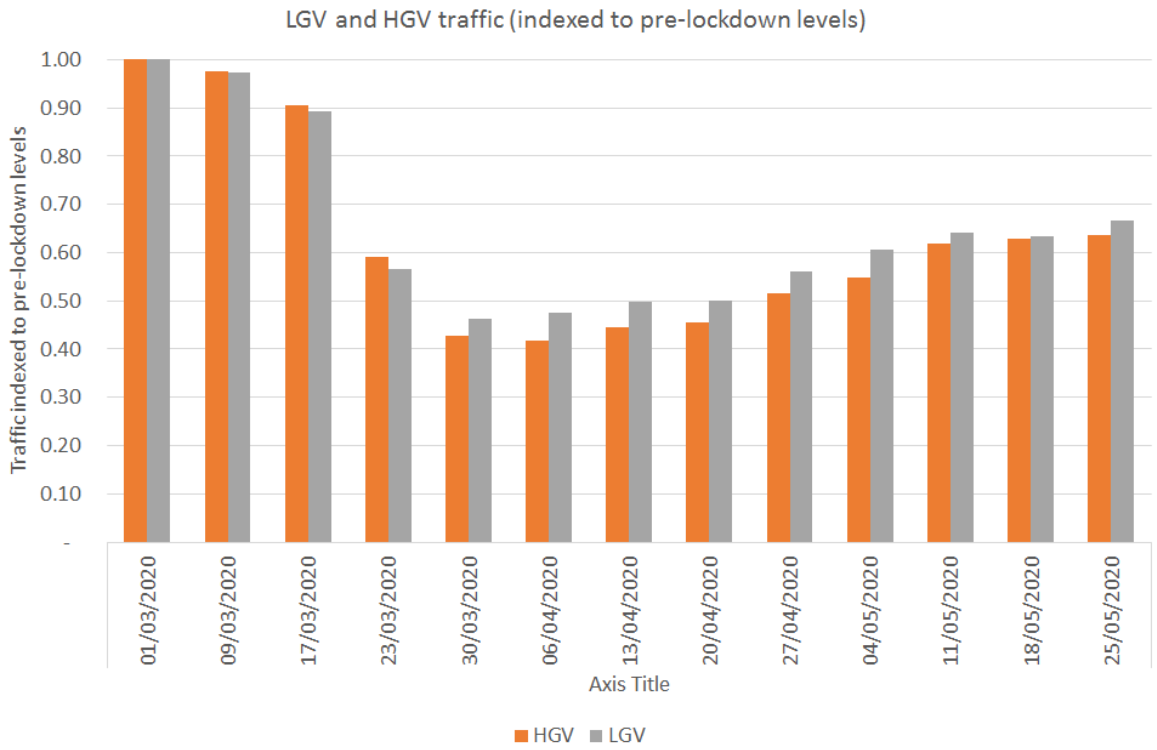


Figure 15: LGV and HGV traffic in the CCZ

Taxis and PHVs

It remains to be seen how taxi and PHV use is impacted by the Covid-19 recovery but of the 38 per cent respondents to the GLA's YouGov poll who said they would use public transport less, 7 per cent said they would switch to using PHVs and 5 per cent to taxis[38].

5.3 Economic

Economic summary

There are no recent figures published by the Greater London Authority on employment and unemployment rates in the capital since the outbreak of the Covid-19 pandemic. However, a GLA YouGov survey provides an early indication of the impact of Covid-19 on employment. This suggests that as of April 2020, it was more common to face worsening employment conditions than to lose employment. Employees in some industry sectors are more likely to be furloughed than others. With restaurants, pubs/bars, hotels and entertainment venues closed down, it is the accommodation and food (80 per cent of employees) and arts, entertainment and recreation (68 per cent of employees) sectors that have had by far the greatest need to furlough staff.

The opportunity to find employment has decreased. The Greater London Authority report that Adzuna, a job search engine, found that postings from 15 March to 12 April fell by 44 per cent in London.

[38] YouGov polling undertaken on behalf of the GLA

The Institute of Fiscal Studies (IFS) report[39] covers some of the key economic issues to consider when thinking about how individuals return to physical places of work. It reported that London has the highest proportion of workers that are in occupations amenable to home working at 58 per cent. The report also noted that it is the lowest paid workers who are less likely to work from home.

The Centre for Economics and Business Research (CEBR) has estimated a monthly fall of £14.2 billion in UK disposable incomes at the worst point of the crisis. CEBR estimate this will mean a reduction in money available for essential spending of 17 per cent per household per month during lockdown[40].

Another indicator of household income is claims for Universal Credit. Over the period from 1 March to 12 April there were over 1.5 million claims across Greater Britain, the typical figure for this period would be 425,000. In early March there were around 10,000 claims a day but by the end of the month, this was over 100,000 claims a day.

The Office for Budget Responsibility (OBR) estimated the impact on individual sectors (UK wide) using estimates on their share of key workers, numbers able to work from home, childcare responsibilities and absences. The education sector is particularly hard hit with the closure of schools and universities. Other sectors such as accommodation and food services, and construction have also seen their output reduce significantly.

5.3.1 Employment

There are no recent figures published by the Greater London Authority on employment and unemployment rates in the capital since the outbreak of the Covid-19 pandemic. However, data is available from February 2020, which provides an indication of London's position prior to lockdown.

In February 2020, there were 229,000 unemployed in London with an unemployment rate of 4.5 per cent. This is higher than the UK's unemployment rate, which stands at four per cent. The data from February 2020 showed that the unemployment rate was higher for men than women and that there was a higher unemployment rate for ethnic minorities of 8.6 per cent. The unemployment rate for those with a disability was also higher than the average across the population at 8.8 per cent[41].

There is limited data available from a YouGov survey undertaken on behalf of the Greater London Authority, which may provide an early indication of the impact of Covid-19 on employment[42] This suggests that as of April 2020, it was more common to face worsening employment conditions than to lose employment. Figure 16 demonstrates that the majority of Londoners remain in employment; either as normal, furloughed or with their pay/hours reduced.

The is broadly in line with the ONS 'Business Impact of Covid-19' survey[43] which found that 21 per cent of the workforce across the UK had been furloughed between 23 March and 5 April.

[39] https://www.ifs.org.uk/uploads/Final-BN286-Getting-people-back-into-work.pdf
[40] https://cebr.com/reports/uk-households-will-see-a-43-billion-fall-in-cash-available-for-essential-spending-in-q2/
[41] GLA employment data from the GLA datastore
[42] Reported in 'London's economy today' Greater London Authority
[43] https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/businessimpactofcovid19surveybics

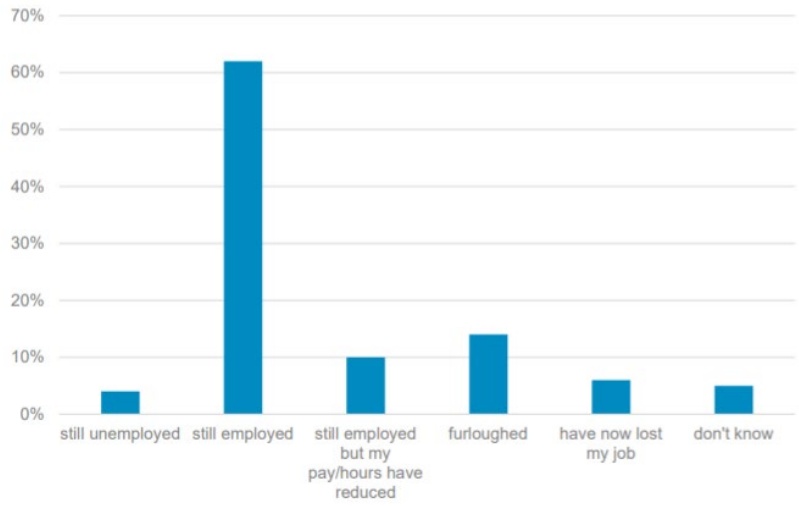


Figure 16: Labour market status of Londoners (YouGov survey on behalf of GLA)

A report produced by the Institute of Fiscal Studies (IFS) [44], shows that employees in some industry sectors are more likely to be furloughed than others. Not surprisingly with restaurants, pubs/bars, hotels and entertainment venues closed down, it is the accommodation and food (80 per cent of employees) and arts, entertainment and recreation (68 per cent of employees) sectors that have had by far the greatest need to furlough staff. This is followed by construction. Young people and women who are most likely to have been affected by this due to the high proportion working in these sectors.

The Government's furlough scheme is due to end on the 31 October, although its terms are being changed from the 1 August when employees will be able to work part-time for their employer with their remaining wages covered by the Government up to the furlough cap. When the furlough scheme ends there may be a significant increase in unemployment as companies find they can no longer pay staff wages due to the economic downturn caused by Covid-19. This may particularly affect those sectors that have furloughed the greatest proportion of staff as they find people continue to stay at home more and the economic downturn creates less demand for construction workers.

There is also Government support in place for individuals who are self-employed or members of partnership, who have been adversely affected by Covid-19. The scheme allows recipients to claim a taxable round of 80 per cent of monthly trading profits, paid out in a single instalment covering three months. This is capped at £7,500. Individuals can make a claim for Universal Credit while they wait for the grant. The Government is also providing help by deferral of self-assessment income tax and VAT payments, grants to businesses that pay little or no business rates, the Business Interruption Loan Scheme and Bounce Back Loan.

For those not currently in work, the opportunity to find employment has been impacted by the pandemic. Adzuna, a job search engine, found that postings from 15 March to 12 April fell by 44 per

[44] https://www.ifs.org.uk/uploads/Final-BN286-Getting-people-back-into-work.pdf

cent in London and 42 per cent across the UK[45]. This is supported by Indeed, who have reported that postings across the UK were down by 44 per cent compared to last year[46].

Place of work

The Institute of Fiscal Studies (IFS) report covers some of the key economic issues to consider when thinking about how individuals return to physical places of work. It reported that London has the highest proportion of workers that are in occupations amenable to home working at 58 per cent. This is supported by a recent YouGov poll, which indicated that 30 per cent of Londoners used to work from home and continue to do this and 36 per cent of Londoners never used to work from home but now do. This is in comparison to 27 per cent and 31 per cent respectively across the rest of the UK.

It should be noted, however, that the IFS report highlights that it is the lowest paid workers who are less likely to work from home. Lower earners, in the bottom half of the earnings distribution, are two times more likely to be key workers and 2.4 times more likely to work in shutdown sectors compared to working in jobs that can work from home. Lowest paid workers are also more likely to be women who accounted for 60 per cent of the 4.7 million low paid employees in 2018.

The IFS report shows that occupations such as sales (including retail), the hospitality trade, postal and delivery workers, health, protective services, agriculture, construction and machine operation occupations are low paid and also have low ability to work from home. This is in comparison to occupations such as teaching, science/engineering, professional and corporate managers that are high paid and can work from home. This is supported by a recent report from the Resolution Foundation[47] who found that workers in the retail and hospitality sectors are among the lowest paid across the workforce. These individuals typically earn half the weekly pay of those who are able to work from home. They are also more likely to be young people as nearly two in five 16-24 year olds are employed in these sectors.

Occupations in London that are more likely to need to travel into the CCZ may include construction, healthcare, hospitality, retail, delivery, emergency services and transport operators.

Income

The Centre for Economics and Business Research (CEBR) has estimated a monthly fall of £14.2 billion in UK disposable incomes at the worst point of the crisis. CEBR estimate this will mean a reduction in money available for essential spending of 17 per cent per household per month during lockdown[48]. The CEBR suggest there are several impacts that feed into this figure, firstly many people are becoming unemployed with the number of universal credit applications from 16 March to 31 March nearly ten times more than in a typical two week period. Job losses could reach up to 2.1 million in the second quarter of 2020 and CEBR have assumed that the largest part of the increase in unemployment will be observed at lower incomes. Other impacts including furloughing of staff and

[45] https://www.hrreview.co.uk/hr-news/recruitment/lockdown-has-led-to-vacancies-almost-dropping-by-half/125319
[46] https://www.hiringlab.org/uk/blog/2020/04/14/coronavirus-and-uk-job-postings/
[47] https://www.resolutionfoundation.org/app/uploads/2019/10/Risky-business.pdf
[48] https://cebr.com/reports/uk-households-will-see-a-43-billion-fall-in-cash-available-for-essential-spending-in-q2/

reducing hours and pay for others. The impact of furloughing depends on the agreement between employers and employees, however, most will see at least a 20 per cent fall in their earnings.

Another indicator of household income is claims for Universal Credit. Over the period from 1 March to 12 April there were over 1.5 million claims across Greater Britain, the typical figure for this period would be 425,000. In early March there were around 10,000 claims a day but by the end of the month, this was over 100,000 claims a day[49].

Businesses

Sector impacts

The OBR[50] also estimated the impact on individual sectors (UK wide) using estimates on their share of key workers, numbers able to work from home, childcare responsibilities and absences. Table 8 provides figures for different industries and highlights those most impacted by the Covid-19 pandemic. The education sector is particularly hard hit with the closure of schools and universities. Other sectors such as accommodation and food services, and construction have also seen their output reduce significantly.

Sector	**Impact on different sectors (change in output relative to baseline)**
Education	-90 per cent
Accommodation and food services	-85 per cent
Construction	-70 per cent
Other services	-60 per cent
Manufacturing	-55 per cent
Wholesale, retail and motor trades	-50 per cent
Information and communication	-45 per cent
Administrative and support activities	-40 per cent
Professional, scientific and technical activities	-40 per cent
Transport and storage	-35 per cent
Mining, energy and water supply	-20 per cent
Real estate	-20 per cent
Financial and real estate services	-5 per cent
Agriculture	0 per cent
Human health and social activities	50 per cent
UK economy	-35 per cent
London economy	-34 per cent

Table 6: Output losses by sector in the second quarter of 2020[51]

London's wider economy

Economic forecasts

[49] London's economy today report, Greater London Authority. April 2020
[50] https://cdn.obr.uk/Coronavirus_reference_scenario_commentary.pdf
[51] https://cdn.obr.uk/Coronavirus_reference_scenario_commentary.pdf

The Office for Budget Responsibility (OBR) estimates that in quarter two of 2020 real gross domestic product (GDP) could reduce by 35 per cent and by 12.8 per cent across the whole year based on their Covid-19 reference scenario[52]. The Resolution Foundation in a report[53] into the economic response to Covid-19 suggest that the economy could contract by between -4 to -12 per cent in 2020, with one of the major drivers of difference being different assumptions around the period in which social distancing restrictions stay in place. It is assumed that the longer the period of lockdown the more detrimental to the economy.

The Greater London Authority following the OBR methodology has predicted that the equivalent loss in output for London in the second quarter of 2020 would be almost the same as that predicted for the rest of the UK at 34 per cent.

Night time economy

In 2018, the GLA published its 'London at night' report[54], which reported on research undertaken into the night time economy (from 18:00 to 06:00). Despite the report's publication being prior to the Covid-19 pandemic, it provides an indication of the scale of the night time economy. Prior to the pandemic there were 1.6 million night time workers which accounts for 31 per cent of the 5.3 million workers in London. The equivalent figure for the rest of the UK is 29 per cent. The highest number of night time workers work in health (191,000) and professional services (178,000). However, this only represents 34 per cent of all health workers and 26 per cent of all professional services workers. In comparison, 57 per cent of workers in the accommodation and food service workers are night time workers and 54 per cent of workers in transportation and storage are night time workers.

The characteristics of night time workers differ to the wider working population. It is more common for male workers to be night time workers, 37 per cent of male workers and 27 per cent of female workers are night workers compared to 31 per cent of all workers. There are also more male night time workers than female night time worker, the split is 62 per cent male and 38 per cent female.

It is also more common for BAME workers to be night time workers (34 per cent compared to 31 per cent of all workers). Between 2011 and 2017, the number of BAME night time workers increased by 33 per cent, an increase from 385,000 to 550,000. This is compared to 25 per cent increase for all night time workers. The number of female BAME night time workers increased by 73 per cent, compared to 34 per cent for all female night time workers.

It is most common for 65-69 year olds to be night time workers (36 per cent) although they are not the largest group of workers by five year age band, which is 35-39 year olds.

[52] https://obr.uk/coronavirus-analysis/
[53] https://www.resolutionfoundation.org/app/uploads/2020/04/Doing-more-of-what-it-takes.pdf
[54] https://www.london.gov.uk/sites/default/files/london_at_night_-_executive_report_-_final.pdf

6. Impacts of the proposals

This chapter presents the appraisal by 'category' of assessment; environment, people and economy. Each section sets out the impacts based on topics or assessment groups who may be impacted by the proposals.

The impacts were evaluated using the criteria set out in chapter four, which gives an impact rating taking into account the scale and distribution and the sensitivity of the impact. The impact rating is based on the rating from a number of assessors independently assessing the impacts and then agreeing on a final rating.

The assessors were informed by the research outlined in this report, which encompasses a range of quantitative and qualitative information.

6.1 Traffic impacts

The impact of the proposed increase in the charge and change to the hours and days of operation on traffic within the CCZ was assessed[55]. The impact of the proposals on traffic volumes was estimated using in-house tools and the forecasts of lockdown recovery generated using the recent historical trend and TfL's forecasting judgement.

The results below are expressed as changes in vehicle kilometres. The impact on individual trips however is likely to be higher. For example, the proposals are estimated to reduce car trips in the zone by c. 33 per cent and car kilometres by 16 per cent during the new hours. During current charging hours car trips could reduce by up to a seven per cent and car kilometres by three per cent. This is because shorter trips are more likely to be deterred than longer trips.

Both the increase in charge and change to the hours and days of operation will reduce traffic but the impact will be greatest for the proposed changes to the hours and days of operation. The impact on cars and PHVs is expected to be greater than the impact on HGVs and LGVs as shown in Table 9. The impact on PHV traffic in the zone depends on how operators respond to the charge. The figures below assume that the charge is passed onto customers, however, should operators either absorb the charge or focus their operations more in the zone, the reductions in vehicle kilometres could be lower.

Key proposed changes expected to impact on traffic flows	**Expected percentage change in vehicle kilometres during the stated hours**			
	Cars	**LGV**	**HGV**	**PHV**
Increase charge to £15 07:00 to 18:00 weekdays (current operation)	-3%	-1%	-1%	0%

[55] Some of the proposals (the removal of the residents' discount to new applicants and the removal of Auto Pay discounts) were not modelled due to the anticipated small volumes they would have in terms of traffic flows and the time frame of assessment (the effect of changing the residents' discount to new applicants would only translate into traffic volumes over a longer period of time). These changes are intended to ensure that there are no incentives to using a chargeable vehicle to travel in the zone.

Increase charge to £15 Operate scheme additional days and hours (18:00 to 20:00 weekdays and 07:00 to 22:00 weekends)	-16%	-3%	-4%	-13%

Table 7: Expected percentage change in vehicle kilometres by vehicle type

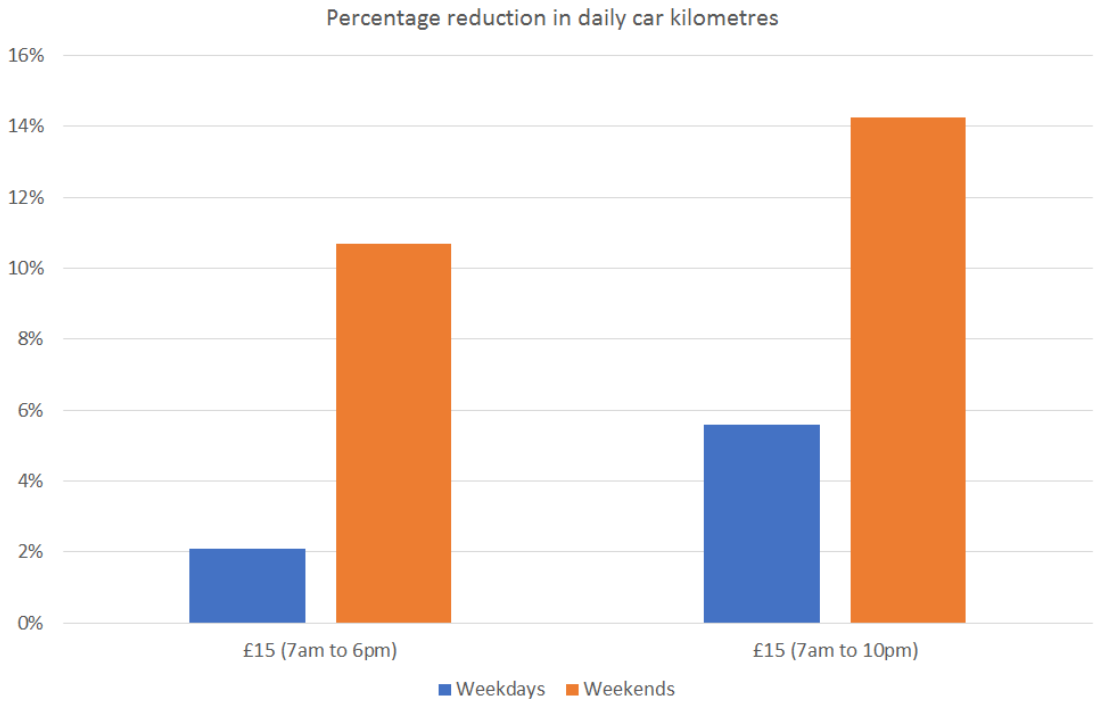


Figure 17: Total percentage reduction in daily car kilometres

The reduction in vehicle kilometres from the proposals (as shown in Figure 17), alongside reallocation of road space in central London to support active travel and bus use, will improve the journey times of buses using the CCZ.

6.2 Environment impacts

6.2.1 Vehicle emissions

Emissions from vehicles affected by the proposals (cars, PHVs, Light Goods Vehicles (LGVs) and Heavy Goods Vehicles (HGVs)) are expected to reduce in line with projected reduction in vehicle kilometres. The combined reductions are expected to reduce road transport emissions of air pollutants in the CCZ by 4 to 5 per cent.

Within newly charged hours (in the weekdays evenings and at weekends) we see a 10 to 12 per cent reduction in emissions as a result of the proposals. Overall, the reductions are expected to be higher during weekends as greater reductions in vehicle kilometres (and therefore emissions) are expected as these days have previously not been charged. Smaller reductions are estimated during existing

charging hours as a result of the increased charge level because the charge already exists during these times (3 to 4 per cent reduction in emissions during weekdays).

Table 10 shows the total emissions in central London from affected vehicles without the affects of the lockdown and without the proposals. Table 11 shows how the combined proposals affect weekly emissions by vehicle type as a result of the proposed changes to the congestion charge – including increased charge level and extended hours. The corresponding reductions in annual tonnes of emissions from each vehicle type are shown in Table 12 and Figure 18 shows how the different elements of the proposals impact on car emissions.

The change in annual or weekly emissions depends on the mode split between vehicle types in the zone. As has been described earlier in this report, different vehicle types have been affected differently by lockdown and are returning to the road at different rates, and are expected to be affected differently by the proposals.

Total annual emissions (tonnes/year)	**Cars**	**LGV**	**HGV**	**PHV**
NOx	82	89	51	24
PM10 (all)	13	9	6	4
PM10 (exhaust)	1	1	0	0
PM2.5 (all)	7	5	3	2
PM2.5 (exhaust)	1	1	0	0
CO2	57926	25525	24570	3578

Table 8: Total annual emissions by vehicle type without proposals

	Cars	**LGV**	**HGV**	**PHV**
Changes in annual emissions with proposals	8%	1%	1%	5%

Table 9: Percentage change in annual emissions with proposals

Emissions saved (tonnes per year)	**Cars**	**LGV**	**HGV**	**PHV**
NOx	6.55	1.12	0.61	1.23
PM10 ALL	1.06	0.11	0.08	0.20
PM10 (Exhaust)	0.11	0.02	0.004	0.02
PM2.5 All	0.53	0.06	0.04	0.10
PM2.5 (Exhaust)	0.10	0.02	0.004	0.02
CO2	4,618	321	292	185

Table 10: Emissions reduction in tonnes per year by vehicle type as a result of the proposals

Figure 18 shows how the relative car related emissions savings occur through different components of the package.

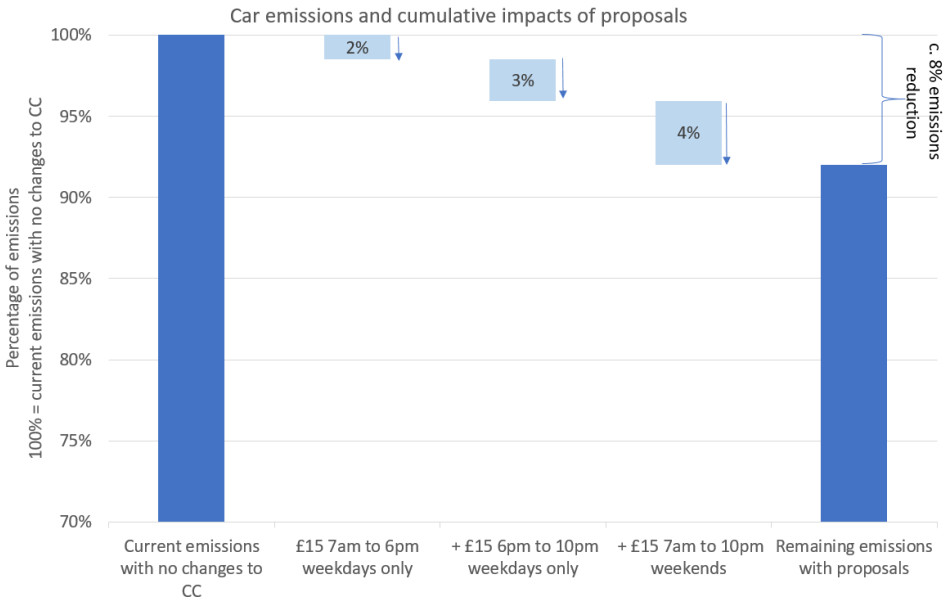


Figure 18: Expected emissions impact on cars from proposals[56]

The proposals are expected to deter more trips made by cars and PHVs than by LGVs and HGVs. As a result, the relative reductions reported in Table 11 are highest for cars and PHVs. Depending on the mode split of vehicles in the CCZ, cars and PHVs are estimated to contribute around 80 to 90 per cent of the total emissions saved by the proposals for all pollutants[57]. If the Covid-19 recovery were to result in a large increase in car traffic, the emissions savings from the new proposals would be even greater.

Table 13 shows the estimated emissions reductions for pollutants in total and across the different charging periods (annualised) if this package of measures was applied to a pre-Covid-19 traffic context in the CCZ. This shows that, for all pollutants, more than 80 percent of the emissions reductions are from the extended charging hours and days. The table shows that extending the charging hours on weekdays more than doubles the emissions savings, whilst also including weekends means they are 4.5 to nearly 5 times bigger. Overall annual emissions would reduce by 4 to 5 per cent.

Table 14 shows the estimated percent reduction in emissions from the proposed measures for a recovery scenario where private car use increases in the CCZ. This scenario assumes that as lockdown eases there is a 50 per cent increase in the vehicle kilometres travelled by cars in the zone compared to pre-lockdown levels. In this scenario the expected emissions reductions delivered by the new proposals increase to 5 to 6 per cent.

[56] Note the emissions reductions do not quite total 9% due to rounding.
[57] There is potential for increased taxi usage due to the exemption that black cabs have to the Congestion Charge, in particular in the evenings and weekends, however this has not been modelled at this stage.

Emissions (tonnes/year)	NOx	PM10 ALL	PM10 (Exhaust)	PM2.5 All	PM2.5 (Exhaust)	CO2
£15 Annual weekday (existing hours of operation)	-1.7	-0.25	-0.02	-0.12	-0.02	-1,054
£15 Annual weekday (additional hours of operation)	-3.0	-0.47	-0.05	-0.23	-0.04	-1,708
£15 Annual weekend (07:00-22:00)	-4.8	-0.73	-0.07	-0.36	-0.07	-2,653
TOTAL tonnes/ year	-9.5	-1.44	-0.14	-0.72	-0.14	-5,414
Total Annual Emissions Reduction (% reduction)	**-4%**	**-4%**	**-4%**	**-4%**	**-4%**	**-5%**
Savings multiplier if weekdays extended	2.8	2.9	2.9	2.9	2.9	2.6
Savings multiplier if weekends extended and weekends included	4.6	4.9	4.9	4.9	4.9	4.1

Table 11: Summary of emission reductions from the proposals if applied on pre-Covid-19 traffic conditions

Emissions (tonnes/year)	NOx	PM10 ALL	PM10 (Exhaust)	PM2.5 All	PM2.5 (Exhaust)	CO2
Total Annual Emissions Reduction	-5%	-5%	-5%	-5%	-5%	-6%

Table 12: Summary of emission reductions if cars increase their prominence in the zone as lockdown eases

6.2.2 Noise

There is no purpose-built noise monitoring recording noise levels in central London. However, as we know of the link between noise levels and traffic, we can assume that initially following lockdown, there was a drop in noise levels, followed by a gradual rise, mirroring the rise in traffic levels in the CCZ.

The impact of traffic noise continues to have a particular impact across socio-economic groups. Busy roads are worst impacted and would have seen the least reduction in traffic noise as they continued to be used by emergency vehicles, buses, HGVs and general traffic throughout lockdown.

Table 13: Environmental impacts on the proposed changes

Proposals	Description of the impacts on the environment by topic	Breadth (scale and distribution) of impact	Extent and sensitivity of impact	Agreed Impact rating
		(low, med, high)	(low, med, high)	(+3 to -3)
• Level of charge • Changes to discounts and exemptions • Changes to the hours and days of operation	Overall: The proposed changes would have significant impact on emissions, with some elements having more impact than others. Extending the hours and days would result in more than four times the savings of car NOx, particulates and CO_2 than just charge level increase.	**Medium**	**Low**	**+2**
	NO_2: • NOx emissions from road transport vehicles affected by the proposals will be reduced. On average, the reduction resulting from these proposals is estimated to be about 4 to 5 per cent if measured annually. With an increased charge, for the weekday charging hours, the reduction is approximately 3 per cent, with savings during weekend charging hours estimated to be about 10 to 11 per cent. • The highest reductions are for car emissions which reflects the greater impact on vehicle kilometres for these vehicles. Approximately 70 per cent of the annual emissions savings for NOx are from cars. • Many groups, including vulnerable people and children, will experience reduce emissions of pollutants, particularly during busy times when exposure to emissions is at its highest (e.g. rush hour).	Medium	Medium	+2
	CO_2: • CO_2 emissions from road transport vehicles affected by the proposals will be reduced. On average, reduction is estimated to be about 5 to 6 per cent annually. Considering weekday charging hours, the reduction is approximately 4 per cent, and about 12 per cent for weekend charging hours. • The highest reductions are car emissions reflecting the greater impact on vehicle kilometres for these vehicles. Approximately 85 per cent of the CO_2 emissions savings are from cars.	Low	Low	+1
	PM: • Particulate emissions from road transport vehicles affected by the proposals will be reduced. On average, the reduction is estimated to be about 4 to 5 per cent annually. Considering weekday charging hours, the reduction is approximately 3 to 4 per cent, with savings during weekend charging hours estimated to be about 10 to 11 per cent. The highest reductions are for car and PHV emissions which reflects the greater impact on vehicle kilometres for these vehicles. Approximately 73 per cent of the annual emissions savings for particulates are from cars. • Particulates emissions reductions are estimated for both exhaust emissions and non-exhaust emissions such a brake and tyre wear. 90 per cent of the reductions for PM10 emissions are associated with non-exhaust particulates, whilst for the smaller size fraction of particles, PM2.5, about 80 per cent of these savings are non-exhaust.	Low	Medium	+2
	Noise: • Noise levels are linked closely to traffic levels. As traffic levels rise noise will also rise. With 'normal' levels of traffic, 41 per cent of Londoners are disturbed by road traffic noise. It can affect more disadvantaged Londoners the most, who often live along busy roads (which would still have had buses, emergency vehicles etc, even when overall traffic levels were lower).	High	Low	+1

6.3 People impacts

The impacts on people encompass a wide range of areas, which, as described in section 4.3 above, are organised by topic. The key impacts by topic have been set out below.

6.3.1 Health

Air pollution is the biggest environmental risk to human health. Around half of NO_2 emissions come from road transport. Reduced emissions from lower traffic will help improve the health of all Londoners. Exposure to air pollution contributes to cardiovascular disease, respiratory diseases, and lung cancer. It also affects lung function, exacerbates asthma, increases hospital admissions and contributes to mortality. Furthermore, reduced emissions may reduce the risk and severity of health conditions that emerging evidence suggest make a person more vulnerable to complications if they contract Covid-19 and increase the risk of death.

An increase in active travel, which is an expected impact of people switching trips from public transport and reduced traffic in the zone, will help to meet recommendations for physical activity. Physical activity helps to prevent and manage over 20 chronic conditions and diseases, including some cancers, heart disease, type 2 diabetes and depression. Similarly, by preventing these underlying conditions, vulnerability to severe Covid-19 infection can be reduced.

Decreased road transport will lead to decreased noise which reduces the risk of cardiovascular disease, cognitive impairment in children, disturbed sleep, tinnitus and psychological effects from annoyance.

Decreased traffic volume is likely to have a positive impact on reducing severance, thereby increasing opportunities for community cohesion and mental wellbeing.

For drivers, the increased cost of driving could result in an increase in stress due to the increased financial burden and may negatively impact on individual's health and well-being if the economic impact means that they are less able to afford other items or behaviours which would support their health, such as healthy eating, or time with family. However, it is important to note that low income Londoners are less likely to be car owners than those on higher incomes.

If drivers are deterred from using cars due to changes to the Congestion Charge, there may be an increase in individuals taking up alternative modes of transport. Individuals may feel more stressed if they are unable to drive if they feel that other modes increase their risk of Covid-19 exposure. This risk may be mitigated by providing opportunities to travel while maintaining social distancing, as is being done currently through the Streetspace for London plan.

The impact on car drivers is also minimised by the low frequency by which most vehicles access the CCZ. TfL's records over the six months from July to December 2019 (monitored continuously) show that 94 per cent of people making journeys into the CCZ did so less than three times a week with over 50 per cent entering only once in the entire period and around 28 per cent entering less than once a month.

6.3.2 Accessibility

Reduced traffic will provide more safe space for walking and cycling and enable social distancing whilst waiting on-street to use public transport. It is, therefore, an essential part of protecting vulnerable Londoners while they look to access services or work. However, car trips may be displaced onto public transport making it harder for people to access these modes. Although, those using the bus will benefit from improved journey times. Many car drivers will be able to switch to an alternative mode such as walking or cycling, which are more financially accessible than driving. Accessibility for those that can't may be reduced unless they can make use of a discount, exemption or reimbursement scheme. Accessibility may also be reduced for those that use community transport services, and those require a vehicle to carry out voluntary or charity work in the zone (e.g. those transporting vulnerable people).

6.3.3 Protected characteristics and deprivation

More detail on the impact of the proposals on protected characteristic groups and deprivation is provided in the table below. Of the protected characteristic groups, the following impacts have been particularly identified:

- Although pre-Covid-19 disabled people made a very small proportion of the car trips in the CCZ they may find it harder to use alternative modes compared to non-disabled people. The impact for some will be mitigated by the disabled tax class vehicle exemption, Blue Badge discount, Dial-a-Ride service or Taxicard subsidy but not all disabled people will be able to make use of these arrangements. Taxis are wheelchair accessible (and are not subject to the Congestion Charge so will not be affected by the proposals) which will provide another option. Those who can walk, cycle and use public transport, will all benefit from increased road space and improved bus journey times.
- During the pandemic, overall trips by older people will continue to be lower as they are advised to stay at home more than the rest of the population due to their increased vulnerability. However, although they have lower car use in the zone than other age groups and lower car ownership overall they may have a greater desire to use a car for essential journeys due to the greater need to shield themselves from others. The impact for some will be mitigated by the disabled tax class vehicle exemption, Blue Badge discount, Dial-a-Ride service or Taxicard subsidy but not all older people will be able to make use of these provisions. Those who can walk, cycle and use public transport will all benefit from increased road space and improved bus journey times. Older people are at particular risk from exposure to poor air quality so will particularly benefit from air quality improvements.
- It is expected that young people will have the greatest capacity to walk and cycle within the zone, particularly with increased provision for active travel and will, therefore, have less need to make trips by car. Increased space for social distancing due to reduced traffic volumes will be of particular benefit for families with young children. Children are at particular risk of adverse impacts from exposure to poor air quality so will particularly benefit from air quality improvements.
- A higher proportion of women work part-time, as such, they are more likely be on low incomes and less able to afford the increased costs of the charge. They may also be particularly affected by proposals to change the hours and days of operation as they are

more likely to work outside of typical office hours. Women are more likely to have roles as informal carers and the reduced traffic in the zone will make it easier for them to walk as part of a family group when carrying out caring responsibilities. Women are particularly likely to fear being the victim of crime when using public transport and, as such, may be negatively impacted if they use these modes instead of driving. Female part-time worker who must pay the congestion charge (e.g. female PHV drivers) may experience a greater effect, as they have lower income to offset the charge

- BAME persons are known to have been disproportionately affected by Covid-19, and so measures that help reduce traffic and, therefore, provide additional street space for social distancing will be of particular benefit to this group. There is not expected to be a disparate negative impact on BAME people from the proposed changes, which affect drivers of all chargeable vehicles that enter the zone. It is possible to identify certain sub-groups of those affected of whom BAME drivers form a high proportion: for example, a high proportion of PHV drivers are BAME. Negative impacts experienced by drivers of non-wheelchair accessible PHVs, therefore, affect a predominantly BAME sub-group, though only those who enter the zone during charging hours are affected (and overall trip demand in the zone appears to be supressed during the pandemic) and various mitigations exist.
- Those who rely on a car to access religious services in the CCZ during charging hours may find it more difficult to do so due to the extra costs incurred if no alternative is available. TfL data from July to December 2019, showed that people making journeys once or twice a week into the CCZ only accounted for three per cent of unique vehicle entries to the CCZ. Overall, 94 per cent of people making journeys into the CCZ did so less than three times a week. Suggesting that even with pre-Covid-19 travel patterns the impact is likely to be low.
- Household car access rises as income increases. Those in low income households particularly suffer the disbenefits of high car use: severance, slower bus journeys, poor air quality, poor health from inactivity.
- Disabled, BAME and older people are more likely to live in low income households than other Londoners; the most common type of transport used by Londoners on lower incomes is walking, followed by bus. These groups would be likely to benefit from reduced traffic levels and faster bus journey times. However, those that have a greater need to drive within the zone may find it particularly hard to absorb the increased costs resulting from the proposed changes to the scheme. This may particularly impact part-time workers who are likely to have lower incomes.

6.3.4 Safety and crime

Decreased road traffic may reduce road danger in the zone by reducing the number of conflicts between road users. However, this needs to be balanced against a potential increase in vehicle speeds as traffic volumes reduce which will increase the chance of collisions occurring and severity of the injury to those involved. However, as lockdown eases traffic levels, even with the proposed changes to the Congestion Charge, will increase to an extent that excessive speeding will become more difficult. As part of Streetspace for London plan, road space that is freed up by reduced traffic volumes will be able to be reallocated to walking and cycling, therefore, overall it is expected the proposed changes will have a road safety benefit.

This is important because people are more at risk when walking, cycling or using a motorcycle in London. As such, with a significant increase in people walking and cycling in the CCZ expected it is vital to reduce the road danger they face. This will particularly benefit certain groups because there are inequalities in road danger in London. This includes BAME people, older people, children, disabled people and those living in deprived areas.

The proposals will increase the number of people walking, cycling and using public transport in the CCZ. This will create more opportunities for street and public transport based crime including robbery, theft and harassment. The proposals may also cause safety concerns for some who switch to alternative modes. This is particularly likely to be the case for the extension of the hours later into the evening when fear of crime is higher especially for women. For those switching to using public transport, it is disabled people, young people, women and BAME people who are likely to most have concerns about their personal safety. For those switching to walking it is likely to be women and young people. It is important to note that many of those groups who are more vulnerable to crime are also less likely to be car owners.

It should be noted that crime can also be an issue for those who use their own vehicles both in terms of theft but also in terms of owners travelling to and from their vehicles.

The risk to all road users is mitigated to a large extent by the good design and management of streets and public transport, crime prevention activity and policing. People walking or cycling in greater numbers may help to mitigate this impact.

Table 14: Impacts of the proposed changes on people

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
• Level of charge • Changes to discounts and exemptions • Changes to the hours and days of operation	Overall	• Reduced emissions from lower traffic will help improve the health of all Londoners (including drivers) and particularly those with health conditions exacerbated by poor air quality. • Many car drivers will be able to switch to an alternative mode. Those who cannot may have reduced accessibility unless they can make use of a discount, exemption or reimbursement scheme. Pedestrians and cyclists will benefit from increased accessibility • PHV drivers, who are 94 per cent BAME, may experience a loss of earnings or a need to work longer hours. Depending on the operator these drivers work for they may be able to recoup some of the costs of the Congestion Charge from customers • Those with a low income are less likely to use a car but those that do may struggle more with paying the charge. This may affect their access to employment opportunities. They also have a higher level of bus use so will benefit more from improved journey times • Younger people are most likely to be able to walk or cycle and, therefore, will benefit most from the proposals • By reducing the number of vehicles in the CCZ the proposals are likely to have a positive impact on road safety by reducing the potential for collisions between pedestrians and cyclists, and motorised vehicles	**Medium**	**Medium**	**+1**
	Health	Overall: • Reduced emissions from lower traffic will help improve the health of all Londoners (including drivers) and particularly those with health conditions exacerbated by poor air quality, who are more likely to be vulnerable to the most severe impacts of Covid-19, as well as those who are young or elderly who are also more susceptible to impacts of poor air quality • More space for walking and cycling will potentially have multiple health benefits for people using these modes • Providing sufficient space on the road network to enable socially distanced walking and cycling will help to avoid a second wave of Covid-19, protecting public health and the NHS. • Potential negative health impacts from displacing some car trips onto public transport and increasing crowding on these modes. However, health benefits from there being more space to wait on-street to access public transport • Potential negative health and well-being impacts related to stress for drivers who may struggle to pay the charge	**High**	**Medium**	**+2**
		Pedestrians and cyclists: • Reduced traffic will create more space for pedestrians and cyclists and a more pleasant travel environment for this group. This will increase Londoners' propensity to walk and cycle and in doing so improve their health. It will make it easier for them to socially distance whilst travelling and, as such, reduce the likelihood of them contracting Covid-19. It will also reduce their stress levels when travelling • The proposals could have a positive impact on road safety by reducing the number of vehicles in the zone and, therefore, the potential for collisions between pedestrians and cyclists, and motorised vehicles	High	Medium	+2
		Public transport users: • The proposed changes may result in drivers who need to access the CCZ switching to public transport where they are unable or unwilling to walk or cycle instead of driving. This will increase demand for public transport and may make social distancing harder especially at peak times. • There is a higher health risk for those who are most vulnerable to the impacts of Covid-19 that switch to public transport. However, whilst the pandemic is on-going there will be less overall demand to travel amongst these people due to the Government advice to shield at home. Some may also be able to make use of the disabled tax class vehicle exemption, Blue Badge discount or, for healthcare appointments, the NHS patient reimbursement scheme. • The impact on public transport users in general should be reduced by social distancing measures put into place on public transport and the measures proposed through the Streetspace for London plan to help people to walk and cycle.	Low	Medium	-1

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		• Reduced traffic will create more space for those waiting on-street to use public transport meaning they will be more able to maintain social distancing and, as such, less likely to contract Covid-19. It will also create a more pleasant waiting environment. Both of these benefits will reduce their stress when travelling.			
		Drivers: • For those who drive in the zone, the reduced emissions in the air they breathe will be beneficial for their health. • For some, the cost increase may cause an increase in stress and could negatively impact on individual's health and well-being • This is mitigated to a certain extent by the lower number of individuals who need to drive into the zone during the pandemic and alternative travel options available • Professional drivers' health and wellbeing may also be negatively impacted if their income falls due to increased cost of entering the CCZ or if they need to work different hours to maintain their income. For some, it may not be possible to work different hours. For example, 26 per cent of PHV drivers work 50+ hours a week (although wheelchair-accessible PHVs remain exempt).[58] • This is mitigated to a certain extent by exemptions in the scheme (eg the Cleaner Vehicle Discount) and the particular arrangements in place for paying the charge, for example some individuals may have the cost covered by their operator or pass it on to their customers, some drivers may be able to avoid entering the CCZ, and some passengers will have exemptions the driver can take advantage of (for example, Blue Badge holders can nominate two vehicles per day for a 100 per cent discount).	Low	Low	-1
		Others – occupants of buildings within the zone: • Reduced traffic will reduce noise and air pollution experienced by occupants of buildings within the zone including residents, workers and school children • Shielding residents who have been supported by charities, local volunteers or services provided on behalf of a local authority may be vulnerable as those who have been supporting them find it more difficult to continue given increased costs. This could be mitigated by a temporary reimbursement for activities supporting the health of shielding residents during the pandemic.	High	Low	+1
	Accessibility	Overall: • Reduced traffic will make it easier for pedestrians and cyclists to access places • Displaced car trips onto public transport may increase crowding and make it harder for some to access places • Many car drivers will be able to switch to an alternative mode. Accessibility for those that can't may be reduced unless they can make use of a discount, exemption or reimbursement scheme • Accessibility may be reduced for those that use PHVs and community transport services, and those that require a vehicle to carry out voluntary or charity work	**Low**	**Medium**	**-1**
		Pedestrians and cyclists: • Reduced traffic will create more space for pedestrians and cyclists making it easier, safer and quicker for them to access places. It will particularly help those who most struggle with crowded conditions and congestion when using London's streets such as wheelchair users, those with visual impairments, those with autism and anxiety, those travelling with pushchairs or heavy luggage and those using adapted cycles.	High	Medium	+2

[58] TfL survey (2019/20) Taxi and Private Hire Licensee – Customer Satisfaction Survey. Unpublished

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		Public transport users: • The proposed changes may result in drivers switching to public transport use where they are unable or unwilling to walk or cycle instead. This will increase demand for public transport and may make social distancing harder especially at peak times. This may make it harder for people to access places particularly those who are most vulnerable to the impacts of Covid-19 and those who struggle most with crowded conditions. • The impact on public transport users in general should be reduced by social distancing measures put into place on public transport and the measures proposed through the Streetspace for London plan to help people to walk and cycle. • The reduction in vehicle kilometres from the proposals, alongside reallocation of road space in central London to support active travel and buses, will improve the journey times of buses using the congestion charging zone	Low	Low	-1
		Drivers: • Many drivers will be able to make use of alternative modes of transport for their journeys, especially in light of pre-Covid-19 initiatives to improve the accessibility of public transport and the new Streetspace plan to increase the provision walking and cycling during the pandemic. • However, for some drivers, their opportunities to travel using a different mode may be limited because of factors like the length of the journey, lack of public transport provision or health impairment. This may mean these drivers can no longer make as many journeys in the zone. • The impact of this is mitigated to some extent by the fact that whilst the pandemic is on-going there is less need in general to travel so the proposed changes will have less of an impact. • Challenges may remain for those making essential journeys, for example, those travelling for healthcare treatment or travelling to work in occupations unable to work from home. For some of those employed by the NHS or care homes there is mitigation in place in the form of a reimbursement scheme. For those who need to travel to NHS appointments by car for health reasons (such as being immunocompromised) there exists a patient reimbursement scheme that will benefit some patients59 • Those who are considered to be highly vulnerable or moderately vulnerable to Covid-19, but who do not qualify for the NHS patient reimbursement scheme, may find it harder to access key services such as healthcare. This could be mitigated be temporary changes to the NHS patient reimbursement scheme. • Those who are unable to walk or cycle may be able to use taxis or PHVs instead with both taxis and wheelchair accessible PHVs exempt from the Congestion Charge. In addition, Blue Badge holders are able to nominate up to two vehicles per day to receive a 100 per cent discount. Furthermore, residents of the zone with an existing residents' discount can continue to make use of it and the Cleaner Vehicle Discount continues to offer a 100 per cent discount to those with the cleanest vehicle. • For drivers who lack alternative options and therefore pay the Congestion Charge, their access to places will be improved with easier and quicker journeys due to the reduced levels of traffic in the zone.	Low	Medium	-1

[59] The NHS organisation where a patient has an appointment will assess whether they are eligible to use the scheme based on the following criteria; they have a compromised immune system, require regular therapy or assessment or require recurrent surgical intervention and be clinically assessed as too ill, weak or disabled to travel to an appointment on public transport. It is the owner of the vehicle transporting the patient that is reimbursed so this can include friends, family, volunteer drivers or PHV drivers

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		Others – PHV passengers and those who use community transport services: • If the proposals result in a shortage of PHVs to serve trips to/from the zone (and potentially the wider area) or an increase in costs for passengers, some people's access to places may be reduced. This may particularly affect young people, including those who have special educational needs, making journeys to school, elderly or disabled people including those using PHVs through the Taxicard scheme, and those travelling late at night when public transport provision is reduced. However, it should be noted that taxis and wheelchair accessible PHVs remain exempt from the charge • The disabled tax class vehicle exemption, Blue Badge discount and NHS patient reimbursement schemes remain in place • There may be a negative impact on community transport providers using smaller vehicles who provide transport for community groups like the elderly, disabled and young. However, those transporting a Blue Badge holder can be nominated as one of their two vehicles to receive a 100 per cent discount and those that are classed as disabled passenger vehicles for taxation purposes are exempt. Those using larger vehicles with nine or more seats are eligible for a 100 per cent discount to the charge	Low	Low	-1
		Others – charities and volunteers: • Those charities and volunteers that rely on their own vehicles to carry out their services in the zone may be less able to access those that they support if they cannot afford to make as many trips in the zone. This may particularly impact on vulnerable people such as the elderly and disabled who may be dependent on the support of volunteers and charities, particularly during the pandemic • Some charity and volunteering trips will be able to be switched to alternative modes but others, particularly those involving transporting goods (e.g. food deliveries) or made by people who are themselves vulnerable won't be as easily switched • This could be mitigated by a temporary targeted reimbursement scheme for those providing these services	Low	High	-2
	Protected characteristics and deprivation	**Protected Characteristics** Overall • As with the population in general, for those with protected characteristics who walk or cycle, the proposed changes to the scheme will be beneficial by improving conditions for walking, cycling and wheelchair users, including increased space for social distancing, resulting in health and wellbeing benefits such as increased physical activity and reduced air pollution. They will also benefit from improvements to bus journey times • As with the population in general, for those with protected characteristic that use public transport, the proposed changes may have a negative impact on them by increasing the number of people using public transport and, therefore, the ability to maintain social distancing on these modes. This may have a greater impact on some disabled people who struggle to use crowded transport and older and BAME people who have a higher risk of dying from Covid-19 so a greater need to socially distance. However, not everyone in these groups will have a need to travel in peak hours when public transport is most congested • As with the population in general, for those with protected characteristics that drive in the CCZ, they may find it harder to make journeys due to the increased cost either of using their own vehicle or being a passenger in another. This may particularly impact those with low-incomes (for example, part-time workers) although they are also less likely to own a car. • Some people whose main means of transport is driving (for example, those with certain disabilities) may be able to make use of an existing discount or exemption such as the Blue Badge discount or Cleaner Vehicle Discount. Some will also be able to make use of the NHS patient reimbursement scheme although this doesn't cover all of those who are classed as highly or moderately vulnerable to Covid-19. In addition, there is an option to travel by taxi (or wheelchair-accessible PHV) as they are exempt from the Congestion Charge, and taxi fares will be unaffected by changes to the charge. • In terms of a particular impact on those with protected characteristics: ○ Older people are likely to have less need to travel in the zone and have lower car ownership in general but are likely to	**Medium**	**Medium**	**0**

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		have a greater desire travel by car due to the higher risk of dying from Covid-19. They have a higher level of bus use so will benefit more from improved journey times ○ Younger people are most likely to be able to walk or cycle and, therefore, will benefit most from the proposals. They have a higher level of bus use so will benefit more from improved journey times ○ Disabled people that are car dependent but do not have a Blue Badge may find it more difficult to travel in the zone ○ Pregnant women travelling in the zone may have a greater need to use a car due to the Government advice to shield and if they are struggling to walk due to a pregnancy related physical impairment, however government advice is that exercise such as walking is recommended in pregnancy, and increased space for social distancing while walking will be beneficial ○ In general, there is not expected to be any particular negative impact on BAME persons. PHV drivers, who are 94 per cent BAME, may experience a loss of earnings, less profit or a need to work longer hours to maintain existing income, but may also be able to avoid or recoup additional costs ○ Those accessing religious services by car may struggle to do so if they cannot use an alternative mode ○ Those with low incomes are less likely to use a car, but for those who do, paying the charge will be a greater burden. This may affect their access to employment opportunities. Low income earners have a higher level of bus use so will benefit from improved journey times			
		Age – older people: • People aged 65+ form 12 per cent of the population of London • Pre-Covid-19, a large proportion of those aged 65+ walked or used a bus at least once a week, with use of other public transport modes lower. A large proportion also used a car, but car ownership declines significantly with age. This may partially be because older people tend to have lower incomes with 24 per cent of those on low income also being aged 65+. Pre-Covid-19, less than a fifth of car trips made to destinations in the CCZ during current and proposed new charging hours and days were made by those aged 60+ • During the pandemic, overall trips will continue to be supressed as people stay at home more, particularly older people who have increased vulnerability to Covid-19 and are advised to following shielding advice. However, the desire to use a car for essential trips amongst older people is likely to increase compared to pre-pandemic due to this group having a greater need for social distancing. This is reflected by the GLA polling data that shows that older Londoners are more likely to drive instead of using public transport since lockdown began and they are the age group that are most likely to switch to car use. • Some older people with disabilities will continue to be able to make use of the Taxicard scheme, which reduces the costs of using a taxi or PHV, or Dial-a-Ride service that both give people an alternative to using their own vehicle. Taxis and wheelchair accessible PHVs do not pay the Congestion Charge. Some older people travelling to NHS appointments will be able to make use of the NHS patient reimbursement scheme, although this doesn't cover all of those who are classed as highly or moderately vulnerable to Covid-19. This could be mitigated be temporary changes to the NHS patient reimbursement scheme. • For older self-employed professional drivers (such as non-wheelchair accessible PHV drivers), there could be negative impacts as they may have to work longer or accept a reduction in their income (but mitigations may be available). This impact could also be balanced by the ability to complete more trips in the same time due to lower levels of traffic and congestion. There could be a particular impact on older people as they are more likely to suffer poor health that would make working longer harder and they are more at risk from the impacts of Covid-19. Although the vast majority of self-employed professional drivers will be under the age of 65 (97.7per cent of PHV drivers are). This impact is mitigated by the fact that the proposed changes are temporary in nature and due to the pandemic customer demand to enter the zone is likely to be lower (e.g. as social venues are either closed or people are more reluctant to visit them) • Older people are more at risk of being injured in road collisions and, as such, will benefit more from the expected positive impacts on road safety • Older people are at greater risk of adverse impacts from poor air quality so will particularly benefit from improved air quality	Low	Low	0

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		Age – younger people: • People aged under 25 form 32 per cent of the population • Pre-Covid-19, a large proportion of those aged under 25, walked or used a bus at least once a week, with use of other public transport modes lower. A large proportion also used a car as a passenger and have access to a car but, pre-Covid-19, less than a tenth of car trips made to destinations in the CCZ during the current charging hours and less than a fifth made during the new proposed charging hours and days were made by those aged 24 or under. The higher proportion of trips in the proposed new charging hours and days perhaps reflects the higher likelihood of taking part in evening and weekend leisure or working opportunities compared to weekday work for this age group. • During the pandemic, overall trips will continue to be supressed as people stay at home. However, the number of trips made by young people is likely to rise more quickly as they are more resilient to the impacts of the virus, will have a growing need to return to educational establishments and may be more likely to be employed in professions that can't be done at home. • It is expected that young people will have the greatest capacity to walk and cycle within the zone so should have less need to make trips by car especially with the increased provision for walking and cycling. In the GLA polling data, those aged 18-24 are the least likely to have switched to car use from public transport since lockdown began. • Children are more at risk of being injured in road collisions and, as such, will benefit more from the expected positive impacts on road safety • Children are more likely to be adversely impacted by exposure to poor air quality so will particularly benefit from improved air quality • Young people are particularly likely to fear being the victim of crime when using public transport or walking and, as such, may be negatively impacted if they use these modes instead of driving, however they are also less likely to be car owners, and may therefore benefit from increased number of pedestrians due to 'safety in numbers'	Medium	Low	+2
		Disabled people: • 19 per cent of Londoners have a disability • Pre-Covid-19, a large proportion of those with disabilities walked or used a bus at least once a week, with use of other public transport modes lower. A large proportion also used a car as a driver or passenger. The overall proportion of disabled people using these modes is lower than for all Londoners as, on average, disabled people make fewer trips than those without disabilities. Within the CCZ, pre-Covid-19, only six per cent of car trips made to destinations in the zone during current charging hours were made by those with disabilities and five per cent during the new proposed charging hours and days. • During the pandemic, overall trips will continue to be supressed as people in general stay at home more and there is an on-going need for disabled people with conditions that make them more susceptible to the impacts of the virus to shield themselves. This is reflected through a survey conducted with TfL's My London Journeys panel who have a range of accessibility needs. Just under 50 per cent said they are not travelling at all at the moment. However, the desire for disabled people to use a car for essential trips is likely to increase compared to before the pandemic amongst those who are more at risk from the virus and, therefore, have a greater need to socially distance. • Some disabled people will continue to be able to make use of the Taxicard scheme, which reduces the costs of using a taxi or PHV, or Dial-a-Ride service that both give people an alternative to using their own vehicle. Taxis and wheelchair accessible PHVs do not pay the Congestion Charge. Some disabled people travelling to NHS appointments will be able to make use of the NHS patient reimbursement scheme, although this doesn't cover all of those who are classed as highly or moderately vulnerable to Covid-19. This could be mitigated be temporary changes to the NHS patient reimbursement scheme. • Disabled people are more at risk of being injured in road collisions and, as such, will benefit more from the expected positive impacts on road safety • Disabled people are particularly likely to fear being the victim of crime when using public transport and, as such, may be negatively impacted if they use these modes instead of driving • Those with mobility and visual impairments will benefit from additional pedestrian space due to traffic reduction	Low	Medium	0

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		Sex: • Pre-Covid-19, a similar proportion of men and women walked and used public transport in London, although bus use is higher amongst women. Men were more likely to cycle than women. Within the CCZ, pre-Covid-19, men make a much larger proportion of car trips to destinations within the zone both during current charging hours and in the new proposed charging hours and day. However, it is not known whether they did so as sole occupants or with female passengers. • During the pandemic, overall trips will continue to be supressed as people stay at home more. Men are at a higher risk of dying from Covid-19 and, as such, have a greater need to socially distance. This may increase their desire to travel by car. • As men make a greater proportion of trips as car drivers and have a higher risk of dying from Covid-19, they are more likely to be more impacted by the proposed changes. However, a higher proportion of women work part-time. As such, they are more likely to be on low (or lower) incomes and less able to afford the increased costs of the charge, particularly if they are required to enter the zone for their work. They may also be affected to a greater extent by proposals to change the hours and days of operation, as they may be more likely to work outside of typical office hours. Female part-time workers who must pay the congestion charge (eg female PHV drivers) may experience a greater effect, as they have lower income to offset the charge. • Women are more likely to have roles as informal carers, both for children and older relatives, increased Streetspace will make it easier to travel by walking as part of a family group when carrying out caring responsibilities • Women are particularly likely to fear being the victim of crime when using public transport and, as such, may be negatively impacted if they use these modes instead of driving	High	Low	0
		Race: • BAME people form 43 per cent of the population of London • Pre-Covid-19, BAME people walked and cycled less than Londoners as a whole and used the bus more. They used the car a similar amount but made lower use of PHVs and taxis. They accounted for a similar proportion of car trips being made to destinations in the CCZ both in existing charging hours and within the new proposed hours. • During the pandemic, overall trips will continue to be supressed as people stay at home more. BAME people are more at risk of dying from Covid-19 so may have a greater need to stay at home where possible and greater desire to use their car to socially distance more easily • Data provided by TfL on the ethnicity of PHV drivers highlights that c.94 per cent of PHV drivers[60] are from a BAME background. Given that BAME drivers make up a high proportion of PHV drivers, it can be expected that a greater number of BAME non-wheelchair accessible PHV drivers are impacted by any increases in their professional costs if they need to drive into the CCZ during charging hours (wheelchair-accessible PHVs are exempt). This will particularly be an issue for those with a low income (survey data suggests that 36 per cent of PHV drivers have a household income of less than £20k[61]). However, it is up to the operator and drivers to decide how to absorb or pass on the charge and whether to enable non-wheelchair accessible PHV drivers to avoid the zone altogether – many operators already have processes in place to pass the charge onto passengers or to enable drivers to decide whether they wish to accept trips into the zone. An extension to the hours and weekends may result in these processes changing and could result in a higher cost to PHV drivers or loss of income, if charges are passed onto customers and journey demand reduces as a result. However, the demand for PHVs may increase if car owners become more reluctant to use their own vehicles as a result of the proposed changes and if vulnerable and other	Low	Medium	-1

[60] Of those who were willing to declare their ethnicity
[61] TfL survey (2019/20) Taxi and Private Hire Licensee – Customer Satisfaction Survey. Unpublished

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed impact rating (+3 to -3)
		individuals switch from public transport to car trips to attempt to avoid exposure to Covid-19. In addition, the impact of these changes is mitigated by their temporary nature and likely lower demand from customers to enter the zone during the pandemic at peak PHV journey times (particularly Thursday, Friday and Saturday evening) as many of the trip attractors (e.g. bars, restaurants) will be closed or less busy. • There is increased exposure to air pollution in areas that have a higher percentage of non-white ethnic groups, with a particularly skewed distribution for the Black/African/Caribbean/Black British population. A greater proportion of mixed, black and other ethnic groups are exposed to levels of pollution that exceed the NO2 limit value than their proportion of the total population. As such, they will most benefit from the air quality benefits of the reduced traffic in the zone • BAME people are more at risk of being injured in road collisions and, as such, will benefit more from the expected positive impacts on road safety • BAME people are particularly likely to fear being the victim of crime when using public transport and, as such, may be negatively impacted if they switch to these modes instead of driving			
		Pregnancy and maternity: • There are two maternity hospitals in the CCZ at University College London Hospital and St Thomas's Hospital. UCLH sits on the boundary of the CCZ and the patient vehicle access is outside the zone. To access St Thomas's Hospital by car it is necessary to drive within the zone • There is no clear evidence that pregnant women are more likely to get seriously ill from Covid-19 but they have been included in the Government list of people at moderate risk (clinically vulnerably) from the virus as a precaution. As such, they may be more reluctant to use public transport and less able to walk or cycle depending on the level of physical impairment they are experiencing during pregnancy, although it important to remember that exercise such as walking and cycling is recommended for good health in pregnancy. This could be mitigated with a change to the NHS patient reimbursement scheme to allow those on the NHS highly or moderately vulnerable list to be eligible for reimbursement for hospital appointments.	Low	Low	0
		Religion or belief: • During lockdown, all religious services held at religious worship centres have been suspended. Places of worship are expected to reopen no earlier than 4 July[62]. Even after services have resumed there will be a suppression in trips as venues will have to limit attendees to ensure social distancing and some people will continue to stay at home more. This will mitigate the impact of the proposed scheme changes. • Those who rely on a car to access the services may find it more difficult to do so due to the extra costs incurred. For many this will be a new cost because religious services often happen in the evenings (particularly on a Friday) or during the weekend	Low	Low	0
		Deprivation: • Londoners living in the most deprived areas are exposed to concentrations of NO_2 which are 25 per cent higher than those living in the least deprived areas. As such, they will benefit most from the air quality benefits of reduced traffic in the zone • People living in areas of high deprivation are more at risk of being injured in road collisions and, as such, will benefit more from the expected positive impacts on road safety • People on a low income (earning less than £20k) form 28 per cent of the population • Pre-Covid-19, people in low income householders (earning less than £20k) walked a similar amount to Londoners as a whole, had higher bus usage and lower usage of other forms of public transport. They used a car much less in terms of being a driver and slightly less in terms of being a passenger or PHV user. In terms of car ownership, for central London residents it is those on the lowest household income (less than £10k) and highest incomes that are least likely to own a car. For inner and outer London it is those with lower incomes that are least likely to own a car.	Medium	Medium	+1

[62] https://www.gov.uk/government/news/new-taskforce-developing-plan-to-reopen-places-of-worship

Proposals	Topic	Description of the impacts by topic (and user group)	Breadth (scale and distribution of impact	Extent and sensitivity of impact	Agreed impact rating
			(low, med, high)	(low, med, high)	(+3 to -3)
		• Those who are on lower incomes are more likely to work in jobs that cannot be done from home so will have more need to travel during the pandemic. They are also more likely to do shift work and work in the evenings and weekends which means they may have previously been able to avoid paying the charge. • Those who are dependent on a car or PHV to make journeys may find it more difficult and expensive to travel in the zone. This may make it hard for them to access work opportunities, particularly in the evenings and at weekends when there would previously have been no charge. Some low-income residents will be able to make use of existing scheme discounts, exemptions and reimbursements particularly the residents' discount (for existing holders only), Blue Badge discount and reimbursement scheme for NHS staff and care home workers			
	Safety and crime	Pedestrians and cyclists: • The proposals are expected to have a positive impact on road safety by reducing the number of vehicles in the zone and, therefore, the potential for collisions between pedestrians and cyclists, and motorised vehicles • A reduction in the number of vehicles in the zone will also help to facilitate the prioritisation of those travelling by active modes with sufficient space to maintain social distancing • Any positive impact on road safety will be enhanced by the reallocation of road space for people walking and cycling through the Streetspace plan • The proposals may have a negative impact on those who switch to walking and cycling but have concerns over the personal security whilst using those modes. However, the option of paying the charge or using a PHV or taxi remains at times when people are particularly concerned about their safety (e.g. after dark). The risk is also mitigated by the crime prevention and enforcement activity carried out by TfL and the Police along with good street design and management. Public transport users: • The impact of Covid-19 and the requirement for social distancing means that public transport users may be required to wait outside of stations and will require more space to do. Reducing the number of vehicles in close proximity to transport interchanges in partnership with the Streetspace plan could have a positive impact on public transport users by improving road safety through a potential reduction in collisions • The proposals may have a negative impact on those who switch to using public transport but have concerns over the personal security whilst using those modes. However, the option of paying the charge or using a PHV or taxi remains at times when people are particularly concerned about their safety (e.g. after dark). The risk is also mitigated by the crime prevention and enforcement activity carried out by TfL and the Police along with good transport design and management. Drivers: • The proposals are expected to have a positive impact on road safety by reducing the number of vehicles in the zone and therefore the potential for collisions.	**Low**	**Low**	**+1**

6.4 Economy impacts

6.4.1 London's wider economy

Covid-19 and the associated lockdown have had severe adverse effects on the economy in London, the UK and internationally. Whilst many of London's businesses have continued to operate by moving to home working wherever possible, businesses in some sectors, such as retail and hospitality, have been temporarily closed. This has led to a significant reduction in the UK's economic output. The Office of Budget Responsibility (OBR) estimates that the UK's real Gross Domestic Product will fall by 35 per cent in the second quarter of 2020/21. Initial analysis by the GLA suggests that the impact in London will be of a similar magnitude. There has been a significant increase in unemployment across London, with the Government's furlough scheme mitigating the impact of much larger increases to date.

London's businesses are now starting to reopen, but their ability to operate will depend on ensuring customers, staff and suppliers can access their businesses in a transport network which has to operate in a very different way to maintain social distancing. The capacity of London's public transport network will have to be significantly reduced, which means much more demand for travel on London's streets, for private vehicles, active travel and freight. With a much higher level of demand expected for private vehicle trips, it is highly likely that levels of congestion will also increase without mitigation.

Whilst the effect of the changes will be to increase the costs to people driving in the zone (including people who have not been subject to the charge before), the changes are expected to result in positive economic impacts for four key reasons:

1. They will mitigate the effect of increased costs to businesses from an increase demand for car trips and additional congestion
2. They will enable many more of London's residents and its labour force to access its businesses through walking and cycling, which is key to economic recovery
3. They will improve reliability for essential freight and servicing traffic
4. They will support the efficient operation of the bus network, which provides an alternative for longer distance trips that cannot be made by active travel

Mitigating the impact of increased costs to business from congestion

There is a significant economic cost to individuals, businesses and the London and UK economy from congestion. Estimates of this cost vary, but TfL estimated the cost of traffic delay in London to be £5.5bn in 2014/15[63]. At an individual level, London drivers lose an average of 227 hours per year to congestion[64]. High and unpredictable congestion means that deliveries run late and increased journey times in turn increase costs for businesses in the Capital. This diminishes London's appeal as a home for global headquarters and as a place to do business. With London's public transport network unable to provide the capacity required to serve its businesses, the demand for car travel is

[63] Cited in London Stalling, GLA, 2017 https://www.london.gov.uk/sites/default/files/london_stalling_-_reducing_traffic_congestion_in_london.pdf

[64] Inrix, 2018 https://inrix.com/press-releases/scorecard-2018-uk/

likely to increase. This would lead to further costs and worsening reliability at a time when businesses can least afford it.

Ensuring London's resident's and labour force can still access businesses through active travel

As set out in the Mayor's Streetspace for London plan, providing increased space for walking and cycling, and enabling Low Traffic Neighbourhoods so that their residents and workers can use active travel to get to work is critical to restart London's economy. Trips made by walking and cycling take up significantly less road space than those made by car, which means more people can access businesses to restart London's economy. While this approach applies London wide, it is especially important in the business centre of London and directly supports and enables the proposals from the City of London for a car-free zone in central London.

The CCZ has the highest density of employment anywhere in the UK and provides 9 per cent of the UK's total Gross Domestic Product. The level of employment density means it is necessary to reallocate road space in the zone to ensure social distancing can be maintained. This can only be safely achieved by reducing the number of car trips.

Maintaining reliability for essential freight and servicing traffic

As set out in the MTS, London needs to ensure that roadspace is available for essential trips which often can only be made by vehicle. This includes vital freight, for example food supplies delivered by lorry, or servicing trips to offices made by vans. Further congestion resulting from a switch to private car trips would increase supply chain costs for London's business without mitigation. The proposed changes will help to reduce congestion and maintain access for essential vehicles.

Ensuring businesses have access to their customers and labour force through a reliable bus network

Whilst London's buses are now able to carry fewer people, they still form a critical part of the city's transport network and will remain the main choice for residents who are unable to make journeys by active travel or for longer journeys. Businesses rely on customers and their labour force using buses to access them. The effect of higher levels of congestion on the bus network is likely to result in slower, less reliable journeys with corresponding impacts on the businesses they serve. The proposed changes will help to mitigate that effect.

Finally, it is important to note that the majority of London's residents and businesses will not be directly affected by the changes. TfL's records show that in the six months from July to December 2019, only 0.5 per cent of unique entries into the CCZ came between 5 – 7 times per week, recorded over a 24/7 period. Just over half of unique entries over the entire six month period came in only once. The combined number of trips by bus and active travel, as well as those still able to travel on the rail and Underground network, is still far higher than the number of trips travelled by vehicle and charged.

6.4.2 Employment

As the lockdown eases, it is expected that people will gradually return to physical places of work in greater numbers, and the CCZ, which includes the City of London, is London's biggest employment centre. However, it is also the case that in the longer term many people will experience more

prolonged changes to employment, such as job losses and reduced hours. It is also likely that many firms will retain homeworking as the approach of choice for some staff, at least some of the time. Therefore, a proportion of people currently travelling in the CCZ for work will not be travelling there at all, or to the same extent, during the recovery period.

Travel patterns related to the work commute and business trips vary by sector, regardless of the pandemic impacts. With regard to the CCZ as a place of work, the changes could adversely impact trades where a vehicle is used to carry goods, or equipment necessary for work, and it is, therefore, difficult to switch modes. People who travel mainly in normal business hours will already be accustomed to paying the Congestion Charge and will experience an increase to its cost. Weekend and night-time work will have a new cost from the extended hours. The specific impact on some NHS and care home workers will be mitigated by the extended reimbursement schemes available for these groups.

The majority of commuting trips to central London pre-Covid-19 were made by public transport and not by car. In Westminster, for example, only two per cent of the commuting trips made by Londoners into the borough were in a car or van, while for non-Londoners commuting to this borough, the figure was four per cent[65]. While there may be an initial rise in the proportion of car commutes as a result of the current circumstances, other factors besides the Congestion Charge act as a deterrent to driving into the CCZ, perhaps most importantly the scarcity and high cost of parking where it is not provided by an employer directly.

With regard to taxi and private hire services, the amount of work in the CCZ is likely to have been significantly reduced by the closure of businesses, workplaces and services. Therefore, the need to enter the zone is likely to have reduced. Taxis (and wheelchair accessible PHVs) are exempt from the Congestion Charge and, therefore, will be directly unaffected by the proposals. It is possible they may see more trade in the evenings and weekends, especially if the concerns about using public transport continue for a longer period.

While the CCZ is normally a significant leisure and cultural destination, most of these attractions are currently closed, but will re-open over the coming months, most likely with restrictions on visitor numbers. Trips made by car to will be subject to increased cost, and new evening and weekend costs as a result of the changes.

6.4.3 Businesses

Beyond the commute, commercial trips to transport goods or services are more likely to involve vans and lorries. This type of trip is much more difficult to undertake by alternative modes, especially where there are significant loads to carry. Therefore, there will be additional costs for these businesses to manage as a result of the changes. However, as set out in 6.4.1 above, these changes will also bring benefits to business in terms of improvements to journey time and journey time reliability due to fewer discretionary and private vehicle trips being made as a result of the proposed changes to the scheme. This will reduce operating costs to business and will make it easier for their employees and customers to reach them.

[65] LTDS 3 year average 2014/15-2016/17; Census 2011

Additionally, commercial operators making trips into and within the zone can, and have already been, able take advantage of the Cleaner Vehicle Discount by using eligible vehicles (e.g. electric vans), which will continue. There has also been an increase in the use of cargo bikes for home deliveries – a market which has grown in recent months. However, it is acknowledged that a significant proportion of trips are not suitable for these modes.

Small and Medium Size Enterprises (SMEs) are likely to be less able to absorb the increased costs and so may experience adverse impacts. Some businesses have continued to operate a delivery service (by post or courier) rather than rely on customer visits during the pandemic which may mitigate this to some extent.

For freight businesses, there could be an adverse impact from increased costs from the proposals. The impact will depend on how well the increases can be absorbed by individual businesses, which will depend upon factors such as whether they are affected by the increased hours (normal business hours are already subject to the charge and will have been factored into costs). These businesses will, however, benefit from improved journey times and journey time reliability in the zone, which will cut their costs.

In the table below possible economic impacts are split by topic area.

Table 15: Economic impacts of proposed changes

Proposal	Topic	Description of the impacts by topic and user group	Scale and distribution of impact	Sensitivity of impact	Agreed impact rating
			(low, med, high)	(low, med, high)	(+3 to -3)
• Level of charge • Changes to discounts and exemptions • Changes to the hours and days of operation	Overall	• The majority of Londoners are able to work from home during the current pandemic which will result in lower need for commuting trips into the CCZ. The Streetspace plan will enable more walking and cycling as more people return to physical places of work in the CCZ • The majority businesses will have already been paying the Congestion Charge and have the cost of this built into their operating models. There may be some that operate vehicles outside of current charging hours, and these will be more impacted by the extension of the charge. The proposals will also bring strong benefits by managing congestion as traffic levels rise which will positively impact on journey times and reliability, reducing business costs • Freight businesses could be adversely impacted by the proposals to changes the Congestion Charge due to the increased cost of motorised travel within the zone, although this will be mitigated to some extent by the temporary nature of the proposed changes, in particular freight operators will benefit from any positive impact on journey reliability • There are benefits to the economy as a whole by mitigating the effect of increased costs to businesses from additional congestion.	**High**	**Medium**	**+1**
	Employment	Overall: • The majority of Londoners are able to work from home during the current pandemic with estimates ranging from 58 per cent[66] to 66 per cent[67]. Londoners working from home will have less need to travel into the CCZ for work purposes. For individuals who do need to access the CCZ for employment, the vast majority of commuting trips to central London are not usually made by car but by public transport and this will continue for some with improved journey times for buses expected. Recognising the severely limited capacity of public transport services in order to facilitate social distancing, the Mayor and TfL have introduced a Streetspace for London plan to make walking and cycling easier and safer. The reduced traffic in the zone will contribute to this by providing more space for walking and cycling	**High**	**Low**	**0**
		Employees driving in the CCZ: • For those that do use a car to access work in the zone, there could be an adverse impact on them and their households as the proposals may increase their costs. This could particularly affect people who use their vehicles for work such as tradespeople, delivery drivers and non-wheelchair accessible PHV drivers. • However, they will also benefit from improved journey times as other vehicle trips are deterred by the proposed scheme changes • Whilst those with low incomes are less likely to own a car, those that do use a car to travel to work may be particularly affected by the proposed changes as they are less likely to be able to work from home and absorb the additional costs of the charge. This is particularly the case for those who work in the evening and at weekends who previously would have paid no charge and for part-time workers who are more likely to have lower incomes • As a mitigation to this, NHS and care home workers who are at the frontline of the pandemic response may be eligible to have their charges reimbursed for work related journeys including commuting • Individuals who have been made unemployed as result of the pandemic may also be adversely impacted by increased costs to enter the zone to access employment opportunities. This may impact particularly on ethnic minorities or those with a disability who prior to the pandemic had a higher unemployment rate than the general population[68]. However, this is mitigated by the move towards remote recruitment and working[69]. • For those who need to access the zone using motorised transport, there are still a range of discounts and exemptions available including the Cleaner Vehicle Discount and the residents' discount (for individuals already registered). For those with accessibility needs, the disabled tax class vehicle exemption and Blue Badge discount remains in place • The temporary nature of these changes alongside the ongoing for those who can work from home to continue to do so acts as a	Low	Medium	-1

[66] https://www.ifs.org.uk/uploads/Final-BN286-Getting-people-back-into-work.pdf
[67] London's Economy Today (April 2020) report by the Greater London Authority
[68] GLA employment data from the GLA datastore
[69] https://www.cipd.co.uk/news-views/coronavirus/faqs/business-continuity

Proposal	Topic	Description of the impacts by topic and user group	Scale and distribution of impact	Sensitivity of impact	Agreed impact rating
			(low, med, high)	**(low, med, high)**	**(+3 to -3)**
		mitigation to these impacts.			
		PHV operators and drivers: • The changes could have a particularly adverse impact on individuals who use motorised transport to earn a living, such non-wheelchair accessible private hire drivers (PHV), who will now be subject to a higher charge and for extended hours. In normal circumstances (prior to the pandemic), most PHV entries into the zone were made during evenings and weekends, and so were not subject to the charge. This group will now have a new cost to pay, and cannot avoid it by evening or weekend working. While, as a consequence of the pandemic, there have been fewer people undertaking leisure and work trips into the zone in both weekdays and weekends (itself an adverse impact for this group), trips are slowly likely to increase as lockdown eases. The overall demand for PHVs may also increase if car drivers become more reluctant to use their own vehicles and switch to using a PHV instead. • PHV operators and drivers may be able to pass some or all of the increased costs from the proposed changes onto customers and in doing so reduce some of the impact to themselves, although this may result in reduced customer demand. The ability to pass the charge on will to some extent be determined by the type of business model in which individuals are working. • It should be noted that PHVs are already subject to the charge during existing charging hours with 83 per cent of PHV drivers in London work weekday daytimes at least once a week[70]. Those who mainly drive in the zone in existing hours and as such, already pay a charge, will experience a lower impact than those who mainly drive in the evening and weekends. The impact changes will depend on the hours the driver operates and the extent to which the cost can be recouped by operating different hours or by avoiding the zone altogether. For example, given that the charge is a one-off cost per day, some operators/drivers may be able to reconfigure their working hours to better offset this cost, and some PHV operators have enabled drivers to avoid trips to destinations in the zone. • The temporary nature of these changes will mitigate the impact on the PHV trade as will the fact that some PHV drivers will be able to register for the Cleaner Vehicle Discount if they have an eligible vehicle. • The PHV trade will also benefit from improved journey times as other vehicle trips are deterred by the proposed scheme changes. This means they may be able to complete more trips in the day, which will help to mitigate their cost increase	High	Medium	-2

[70] TfL survey (2019/20) Taxi and Private Hire Licensee – Customer Satisfaction Survey. Unpublished

Proposal	Topic	Description of the impacts by topic and user group	Scale and distribution of impact	Sensitivity of impact	Agreed impact rating
			(low, med, high)	**(low, med, high)**	**(+3 to -3)**
	Businesses	Overall: • The majority of businesses will have already been paying the Congestion Charge and have the cost of this built into their operating models. There may be adversely impacted by the increased charge and additional days and hours, but this will be mitigated to a certain extent as they are outside of typical business hours of operation. There may be some businesses, however, that usually operate vehicles outside of current charging hours, and these will be more significantly impacted by the extension of the charge as they have not previously had to build this into their costs of operation • However, the proposals will also bring strong benefits. Managing congestion as traffic levels rise will positively impact on journey times and reliability, which will reduce business costs. This in turn will have a positive impact on businesses reliant on goods delivery, mitigating the impact of negative effects. • The proposed changes to the scheme will benefit the economy as a whole by mitigating the effect of increased costs to businesses from additional congestion.	**High**	**Medium**	**+1**
		SMEs • Small and medium sized businesses may be adversely impacted by the proposals to change the Congestion Charge and the associated increased costs that could be incurred as a result. • It may be harder for small and medium sized businesses to absorb the cost compared to larger businesses, particularly as they may have been impacted to a greater extent by the pandemic[71] • This may particularly affect niche or specialist shops and services located in the CCZ which experience increased costs associated with bringing in stock as well as potential impacts on staff and customers. • However, there may be some offset to this from the benefits of better journey times and reliability for deliveries and servicing trips (see Freight below), which will reduce their costs. There will also be benefits from their staff being able to travel to work more easily and customers being able to visit them more easily, which may increase their custom • Many small businesses in the zone already operate vehicles which are eligible for the Cleaner Vehicle Discount, and this will continue to be an option for businesses, meaning that the changes will not affect them adversely via increased costs. • The extent that small and medium sized businesses have been impacted by the pandemic is mitigated to a certain extent by the Government support packages that are in place to support them during this period[72]	Medium	Medium	0

[71] https://www.mckinsey.com/industries/social-sector/our-insights/Covid-19s-effect-on-jobs-at-small-businesses-in-the-united-states
[72] https://www.gov.uk/guidance/apply-for-the-coronavirus-business-interruption-loan-scheme

Proposal	Topic	Description of the impacts by topic and user group	Scale and distribution of impact	Sensitivity of impact	Agreed impact rating
			(low, med, high)	**(low, med, high)**	**(+3 to -3)**
		Freight businesses • Freight businesses could be adversely impacted by the proposals to changes the Congestion Charge due to the increased cost of motorised travel within the zone. This impact could be experienced as particularly adverse where the business has already incurred losses to business as a consequence of the lockdown; at the same time reduced overall activity during this time has meant fewer trips into the CCZ. • Many freight businesses have already paid the Congestion Charge for many years, with the cost built into their operating models. But they may be adversely impacted by the increase in the daily charge and the extension of charging hours and days. The impact of the extension of charging hours and days will be mitigated to a certain extent as they are outside of typical business hours of operation, although the charge increase will adversely affect this group. There may be some businesses, however, that usually operate vehicles outside of current charging hours, and these will be more significantly impacted by the extension of the charge as they have not previously had to build this into their costs of operation • However, the proposals will also bring strong benefits. Managing congestion as traffic levels rise will positively impact on journey times and reliability, which will reduce freight business costs. This in turn will have a positive impact on businesses reliant on goods delivery, mitigating the impact of negative effects. • Freight businesses have also benefitted from the suspension of the Congestion Charge from 23 March to 18 May 2020, which will have provided cost savings during the height of the pandemic. Wider margins compared to small and medium sized businesses may also help larger businesses absorb the proposed charge increase.	High	Medium	+1
	London's wider economy	Overall: • Spring 2020 has been an exceptional time for the UK economy owing to the impacts of the pandemic and lockdown. The OBR has estimated that in quarter two of 2020 GDP could reduce by 35 per cent across the UK[73] with the equivalent figure for London (as calculated by the GLA) standing at 34 per cent[74]. • The proposed changes to the scheme will benefit the economy as a whole by mitigating the effect of increased costs to businesses from additional congestion, enabling many more of Londoners to access businesses through walking and cycling, which is key to economic recovery, improving reliability for essential freight and servicing traffic and supporting the efficient operation of the bus network, which provides an alternative for longer distance trips that cannot be made by active travel • Any negative impact on the economy is mitigated to a certain extent by the temporary nature of the proposed changes. Although businesses in central London are a unique and critical part of London's and the UK's economy, one of the features of the lockdown has been a shift in activity to local town centres, bringing benefits to different parts of London, such as local shops. Changes brought about by the Streetspace for London plan in central London should benefit the shopping and leisure economy and changes to the scheme will complement this in terms of reduced vehicle km from cars and the associated negative impacts in terms of emissions for example. Additionally, the effects of the Streetspace for London plan in enabling Londoners to safely go back to work will have benefits to the economy.	High	Medium	+1

[73] Reference scenario published 14 April 2020 https://obr.uk/coronavirus-analysis/

[74] London's Economy Today (April 2020) report by the Greater London Authority

Proposal	Topic	Description of the impacts by topic and user group	Scale and distribution of impact	Sensitivity of impact	Agreed impact rating
			(low, med, high)	(low, med, high)	(+3 to -3)
		Impact on specific sectors – education, accommodation and food services, and the construction sector • Research by the OBR[75] highlighted that the economic impact of the Covid-19 pandemic would be highest for the education, accommodation and food services, and the construction sectors. • The impact on these particular sectors will vary based on the pandemic and their associated operating structures at present. Within this group, for example, the extended operating hours of the Congestion Charge are more likely to have an impact on the food and accommodation sectors, as these extend beyond normal business hours • Vehicles associated with the operation of the accommodation and food services sector will have a more limited need to travel into the zone while current restrictions relating to the Covid-19 pandemic are in place. However, where there is a need for travel into the zone to keep services that are still operational trading then the increased cost of travel due to the proposals to change the Congestion Charge will increase business costs. For staff, there are alternative means of transport available. The expected reduction in traffic as a result of the proposals would have a positive impact on the essential deliveries and servicing activities that are required to keep the accommodation and food services sectors operating. • Considering education from a business/economic perspective (impacts on groups such as children are considered in the People section above), schools and universities are still for the most part closed to the majority of students, although there are now plans to reopen to limited numbers of students[76]. Even considering the possible reopening of education premises, the number of individuals travelling to work there will be reduced compared to normal operation. The number of vehicles required to travel to premises in order to keep them operational such as other service providers will also be reduced especially considering the impending summer holidays. Therefore, the financial impact on the education sector of the proposed changes to the Congestion Charge is reduced during the current period. • Many construction sites were closed during the early weeks of the pandemic, although some of those that could operate safely did remain active. More sites are now starting to operate again but the Government has advised that consideration should be given to who needs to be on site and planning for a minimum number of people to operate safely and effectively[77]. As for other sectors, employees travelling to sites have alternative options to driving and paying the charge. However, many of the operators transporting construction materials have little choice but to travel by road (see Freight section above). For this reason, the proposed changes	Low	Medium	0

[75] https://cdn.obr.uk/Coronavirus_reference_scenario_commentary.pdf
[76] https://www.gov.uk/government/publications/closure-of-educational-settings-information-for-parents-and-carers/reopening-schools-and-other-educational-settings-from-1-june
[77] https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19/construction-and-other-outdoor-work

Proposal	Topic	Description of the impacts by topic and user group	Scale and distribution of impact	Sensitivity of impact	Agreed impact rating
			(low, med, high)	**(low, med, high)**	**(+3 to -3)**
		could adversely impact construction companies and the sector as a whole by increasing their operating costs. However, this is mitigated to a large extent by the reduction in vehicle kms in the zone and consequent improvement to journey times that may be seen as a result of the changes.			

The impact assessment is summarised in the table below.

Table 16: Summary of impacts identified by category and topic

Categories and topics	Breadth (scale and distribution) of impact (low, med, high)	Extent and sensitivity of impact (low, med, high)	Agreed overall Impact rating (+3 to -3)
Environment impacts	**Medium**	**Low**	**+2**
Nitrogen dioxide	Medium	Medium	+2
Particulates	Low	Medium	+2
Carbon dioxide	Low	Low	+1
Noise	High	Low	+1
People impacts	**Medium**	**Medium**	**+1**
Health	High	Medium	+2
Accessibility	Low	Medium	-1
Protected characteristics and deprivation	Medium	Medium	0
Safety and crime	Low	Low	+1
Economic impacts	**High**	**Medium**	**+1**
Employment	High	Low	0
Business	High	Medium	+1
London's wider economy	High	Medium	+1

7. Mitigation

Potential mitigations have been developed in response to the adverse impacts that particularly affect certain groups as identified through the IIA process and from consideration of the issues raised in representations made to TfL by stakeholders and the public (see Section 3.3).

In summary, these impacts are:

- Reduced accessibility for older and disabled car users who may find it harder to use an alternative mode of travel, particularly those that are at a higher risk from the impacts of Covid-19
- Reduced accessibility for low-income car users who are less able to absorb the increased costs resulting from the changes to the scheme
- Reduced accessibility for voluntary and charity services supporting vulnerable people within the zone including those that are required to shield
- Reduced accessibility for people accessing religious services in the CCZ
- Higher Congestion Charge costs for those that use a vehicle for their job (such as PHV drivers and delivery drivers)
- Higher Congestion Charge costs for key workers, who may have no choice but to drive to work where the use of public transport is being discouraged
- Higher Congestion Charge costs for businesses, particularly SMEs who are less able to absorb the increased costs

The mitigations to be taken forward for further development are summarised below:

- Expand the NHS patient reimbursement scheme to include those in the 'extremely vulnerable' and 'vulnerable' groups for Covid-19. This will support public health and ensure the clinically vulnerable are not disadvantaged by being unable to attend important health appointments
- A new reimbursement scheme/s which could be applied to a wider number of trips made as part of the pandemic response. This could include:
    - Trips made by or on behalf of services on behalf of local authorities in the zone.
        - We propose to work with the local authorities in the zone to develop a reimbursement scheme to ensure that those who are providing services on behalf of local authorities as part of the pandemic response are not deterred from providing these important services by the changes to the Congestion Charge
        - This could include, but would not necessarily be limited to domiciliary care workers and volunteers supporting shielding residents with e.g. deliveries of food and medication
    - Trips made by charity workers provided as part of the pandemic response for purposes such as deliveries of food and medication

- Permitting residents to apply for the residents' discount between the 15 May (when the change was announced) and the 31 July instead of closing the scheme to new applicants from the 15 May

Below Table 17 sets out these impacts, existing mitigation and proposed further mitigations in more detail

Table 17: Summary of impact mitigation measures

Impact	Existing mitigation	Further mitigation
Older and disabled car users	• Disabled tax class vehicle exemption • Blue Badge discount (100%) • Residents' 90% discount • Cleaner Vehicle (90%) discount (100%) • NHS patient reimbursement scheme • Taxicard subsidy/Dial-a-Ride services • Taxi or PHVs – *taxi and wheelchair accessible PHVs are exempt from the charge*	• Permitting residents to apply for the residents' discount between the 15 May (when the change was announced) and the 31 July. This will allow those that didn't previously apply for the discount because they only travelled by car outside charging hours to apply as well as new residents who moved into the zone with the understanding the discount was available. Extending the date for a short period minimises the potential for it to undermine the benefit of the change, whilst allowing additional time for residents to respond to the change. • Temporary extension to the NHS patient reimbursement scheme to include those classed by the Government as medically 'moderate' or 'high' risk in terms of Covid-19. Evidenced though production of a shielding letter or confirmation from a clinician that they are in the moderate or high risk group. This will support public health and ensure the clinically vulnerable are not disadvantaged by being unable to attend important health appointments. In a further change to the existing reimbursement scheme, people within eligible groups do not also have to be considered 'too ill, weak or disabled to travel to an appointment by public transport'.
Low-income car users	• Discounts, exemptions and reimbursement schemes as outlined above • Taxicard subsidy/Dial-a-Ride services • Taxi or PHVs – *taxi and wheelchair accessible PHVs*	• Proposed change to the residents' discount proposal and NHS patient reimbursement scheme as outlined above • New reimbursement scheme for those providing services on behalf of a local authority in response to the pandemic

	are exempt from the charge • NHS staff and care home workers reimbursement schemes (temporary changes)	e.g. domiciliary care workers
Voluntary and charity services (and those who rely on them)	• Discounts, exemptions and reimbursements as outlined above • Disabled passenger vehicle tax class exemption • 9+ seater vehicle discount	• Proposed change to the residents' discount proposal and NHS patient reimbursement scheme as outlined above • New reimbursement scheme for charity volunteers providing support for vulnerable people in response to the pandemic. This will support shielding residents who may otherwise lose access to critical support services
People accessing religious services in the zone	• Discounts, exemptions and reimbursements as outlined above • Taxicard subsidy/Dial-a-Ride services • Taxi or PHVs – *taxi and wheelchair accessible PHVs are exempt from the charge*	• Proposed change to the residents' discount proposal as outlined above • No further mitigation proposed as there will be an overall suppression in demand to travel to religious services in the zone due to lockdown restrictions and the majority of people will be able to use alternative modes of transport or existing discounts and exemptions.
People who use their vehicle for their jobs	• PHV drivers/operators: • Cleaner Vehicle Discount • Wheelchair accessible PHV exemption • Blue Badge discount for those transporting badge holders • Residents' discount for those who live in the zone • Option to pass cost onto customers or reduce trips in the CCZ • Accredited breakdown/recovery vehicles – already receive a 100% discount	• No further mitigation proposed as there should be an overall reduction in need to enter the CCZ due to the pandemic, drivers may be able to recoup the charge through spreading the cost between operators, drivers and customers or by avoiding the zone altogether, drivers will financially benefit from improved journey times in the zone and the changes are temporary. Further widening exemptions or reimbursements would undermine the benefits of the scheme
Key workers	• Discounts, exemptions and reimbursements as outlined above • New reimbursement arrangements for NHS staff and care home workers	• New reimbursement scheme for those providing services on behalf of a local authority in response to the pandemic (e.g. domiciliary care workers) and those working for charities providing support to vulnerable people (as outlined above) • No further mitigations proposed as road space must be prioritised for essential journeys for those unable to complete their journeys on foot or by

		cycle, or who cannot use public transport. Further widening exemptions or reimbursements would undermine the benefits of the scheme
Businesses	• Cleaner Vehicle Discount	• No further mitigation proposed as there should be an overall reduction in need to enter the CCZ due to the pandemic, increased costs may be able to be wholly or in part passed onto customers and businesses will financially benefit from improved journey times in the zone and customers being able to access them more easily, and the changes are temporary. Offering discounts, exemptions or reimbursements to businesses could undermine the benefits of scheme

GREATER LONDON AUTHORITY ACT 1999
TRANSPORT ACT 2000

Greater London (Central Zone) Congestion Charging (Exceptional Variation) Order 2020 Instrument of Confirmation 2020

Made *15 June 2020*

Coming into force *In accordance with Article 1*

Whereas—

(1) On 9 June 2020 Transport for London made the Greater London (Central Zone) Congestion Charging (Exceptional Variation) Order 2020 ("the Exceptional Variation Order") which contained in a Schedule a Scheme ("the Variation Scheme") for varying the Greater London (Central Zone) Congestion Charging Order 2004 ("the Principal Order") on a temporary basis in response to the COVID-19 pandemic;

(2) pursuant to paragraph 4(1)(b) of Schedule 23 to the Greater London Authority Act 1999(**a**) Transport for London submitted the Exceptional Variation Order to the Mayor of London for confirmation; and

(3) the Mayor of London has decided to confirm the Exceptional Variation Order without modification:

Now, therefore, the Mayor of London, in exercise of the powers conferred on him by paragraph 4(1)(b) of Schedule 23 to the Greater London Authority Act 1999, and of all other powers enabling him in that behalf, hereby makes the following Instrument:—

Citation and commencement

1. This Instrument may be cited as the Greater London (Central Zone) Congestion Charging (Exceptional Variation) Order 2020 Instrument of Confirmation 2020 and shall come into force on the day on which it is made.

Confirmation of the Variation Order

2.—(1) The Exceptional Variation Order is confirmed without modification.

(2) Transport for London shall keep the variations to the Principal Scheme introduced by the Variation Scheme under review having regard to the transport challenges created by the COVID-19 pandemic.

Dated 15 June 2020 Mayor of London

(**a**) 1999 c. 29; Schedule 23 was amended by the Transport Act 2000 (c. 38), Schedule 13.

GREATER LONDON AUTHORITY ACT 1999
TRANSPORT ACT 2000

Greater London (Central Zone) Congestion Charging
(Exceptional Variation) Order 2020
Instrument of Confirmation 2020

MAYOR OF LONDON

Mike Brown
Commissioner of Transport
Transport for London
197 Blackfriars Road
London SE1 8NJ

Date:

I, SADIQ KHAN, MAYOR OF LONDON, in exercise of the power conferred on me by s 155(1)(c) of the Greater London Authority Act 1999 ('the GLA Act') hereby DIRECT Transport for London ('TfL') to:

1. exercise its functions in Schedule 23 of the GLA Act for the purpose of further engaging with local authorities and charities with a view to establishing rules for a new Congestion Charge reimbursement arrangement for workers, including volunteers, who are providing services on behalf of a local authority or charity in direct response to the Covid-19 pandemic or on such terms as TfL considers appropriate;

2. prepare and make a variation order to the Greater London (Central Zone) Congestion Charging Order 2004 to give formal effect to the new reimbursement arrangement(s) and submit the variation order to me for confirmation;

3. do anything ancillary, incidental or complementary to any of the above.

Dated this day 15 of June 2020

Sadiq Khan
Mayor of London