

**Silvertown and Blackwall tunnels user charge  
consultation response from  
The Motorcycle Action Group  
6th September 2024**

**Background**

The Motorcycle Action Group (MAG) is a national riders rights membership organisation with over 60,000 full and affiliated members. The Motorcycle Action Group was formed in 1973 and represents its members views collected via a democratically elected network of local and regional representatives.

**Note on submission date**

The Motorcycle Action Group, British Motorcyclists Federation (BMF), and National Motorcyclists Council (NMC) were granted an extension to 10<sup>th</sup> September 2024 for submission of responses due to delays in replies to requests for data and evidence by Transport for London (TfL). The replies received from TfL have revealed information of significance, and we trust this submission will receive full and rigorous consideration.

**Position**

MAG opposes the proposed motorcycle user charges for Silvertown and Blackwall tunnels. The proposed charges are disproportionate, contradict the stated objectives of the Silvertown project, conflict with the Mayor's Transport Policy, the Mayor's commitment to Vision Zero, and established policy in the existing Congestion Charging Zone.

MAG proposes that motorcycles should be exempt from charges to meet the project objectives, align with wider policy and avoid increased road danger for this vulnerable road user group. Any loss of revenue will be insignificant and partly compensated for by increased revenue resulting from increased efficiency of vehicle movements.

Whilst the question of motorcycle access in the proposed bus/HGV lane in the Silvertown tunnel is beyond the scope of this consultation we feel it is vitally important to make comment on this issue and call for further discussion and a revision of the proposal to exclude motorcycles in that lane.

## **Context**

The current Blackwall tunnel has two bores, two lanes in each bore, no bus lane and is restricted to 30mph. The new Silvertown tunnel has two bores, two lanes in each bore, one lane in each bore being a shared bus/HGV lane and will also be restricted to 30mph.

There are currently no charges for any vehicles using the Blackwall tunnel, but charges will be introduced covering both tunnels.

There are no current or proposed charges for the nearest alternative crossings for motorcycles upstream (Tower Bridge) or downstream (Rotherhithe Tunnel)

There are no major river crossings in the UK that currently have a user charge for motorcycles.

We note the stated objectives of the project as follows:

PO1: to improve the resilience of the river crossings in the highway network in east and southeast London to cope with planned and unplanned events and incidents;

PO2: to improve the road network performance of the Blackwall Tunnel and its approach roads;

PO3: to support economic and population growth, in particular in east and southeast London by providing improved cross-river transport links;

PO4: to integrate with local and strategic land use policies;

PO5: to minimise any adverse impacts of any proposals on communities, health, safety and the environment;

PO6: to ensure where possible that any proposals are acceptable in principle to key stakeholders, including affected boroughs; and

PO7: to achieve value for money and, through road user charging, to manage congestion.

We also note the highlighted policies for Charging Policies and Procedures (CPAP):

- Policy 1: TfL must impose user charges at the Silvertown and Blackwall Tunnels to the extent that it is necessary or expedient to achieve the Project Objectives.
- Policy 2: In setting and varying the user charges (including the charge levels, the hours charged, the vehicles charged, discounts and exemptions granted, and other factors related to user charging), TfL must ensure that they are fair, justified and will not undermine the Project Objectives.
- Policy 3: TfL will use its power to set and vary the charges as a means to help fulfil its wider road network management duty under the Traffic Management Act 2004. Overall, in setting and varying the user charges, TfL will seek to manage traffic demand at the Blackwall and Silvertown Tunnels and make efficient use of the road network including other river crossings and to reduce congestion.
- Policy 4: TfL must set and vary the user charges in accordance with applicable legislation, the Mayor's Transport Strategy (MTS) and other relevant policies.
- Policy 7: TfL must set initial user charges prior to the Silvertown Tunnel opening for public use.

- Policy 8: Before setting the initial user charges, TfL will update its modelling using up-to-date inputs and the outputs of this modelling will be used to determine whether any changes to the Assessed Case user charges are required to more effectively deliver the Project Objectives.
- Policy 9: The extent to which the user charges will assist in achieving the Project Objectives is the primary consideration which TfL will have regard to when setting the initial user charges.
- Policy 10: TfL will set the initial charges at a level and subject to conditions so that the Scheme in operation is not likely to give rise to materially new or materially different environmental effects to those reported in the ES [Environmental Statement]

We note that the Mayor's Transport Strategy (MTS) policy 5 is as follows:

The Mayor, through TfL and the boroughs, and working with stakeholders, will prioritise space efficient modes of transport to tackle congestion and improve the efficiency of streets for the movement of people and goods, with the aim of reducing overall traffic levels by 10-15 per cent by 2041.

We note that motorcycles are exempt from charges in the London Congestion Charging Zone. This policy reflects the benefit of encouraging modal shift to more 'space efficient modes' as per the MTS.

In addition to congestion there is also a road safety policy aspect which aligns with the Mayor's commitment to Vision Zero. MTS Policy 11 (a) states:

"Ensuring that assets and infrastructure are maintained to the required safety standards and that all new assets and infrastructure are designed with Vision Zero in mind."

We note that in January 2005 a TfL Central London Congestion Charging Scheme impact monitoring report, stated:

"The numbers of powered two-wheelers and pedal cycles involved in accidents have decreased, by 8 percent and 7 percent respectively, despite a combined increase of 15 percent in numbers of these entering the zone since charging. Similarly there has been a decrease in the number of pedestrian casualties involved in accidents."

The full Third Annual Report published later in 2005 confirmed:

"Most noticeable was the decrease in the involvement of pedal cycles and powered two-wheelers despite the significant increase in the numbers of these observed in traffic counts. Further analysis indicates that the reduction in involvement of powered two-wheelers and chargeable vehicles (including cars, lorries and vans) after the introduction of the scheme was significantly greater within the charging zone than across the rest of London."

## **Motorcycles charges have not been fairly considered**

MAG has engaged at all stages of the Silvertown project since 2012, and consistently stated that motorcycles should be exempt from charges. There can be no case to claim that TfL have not been alerted to the need to carefully consider an exemption from charges for motorcycles.

As a result of engagement during the current consultation MAG has been informed that TfL has not carried out modelling to explore potential impacts of varied relative levels of motorcycle charge compared with other vehicle types, nor exemption from charges for motorcycles. The fundamental and well-established principles of gains from adjusting the vehicle modal mix have been ignored in TfL's User Charging Assessment Framework (UCAF).

The following statement has been made by TfL:

“Strategic models don't specifically model motorcycles. This is not unique to TfL's or London's highway models, but the case for highway models across the UK. Our modelling evidence of other vehicle types demonstrates there is very little scope to give additional concessions, as even small additional numbers of traffic by any vehicle type have an impact on the scheme's objectives.”

We note that TfL's transport modelling guidance does recognise the concept of the Passenger Car Unit (PCU) and states a PCU value for motorcycles of 0.4. For clarity this reflects the smaller footprint of a motorcycle compared to a car which is assigned the base PCU value of 1.0.

We also note that the same guidance document talks at length about the variable nature of the PCU for pedal cycles. This variable PCU value is a phenomenon shared by the motorcycle PCU due to the ability of motorcycles to filter. The guidance devotes an entire chapter to modelling pedal cycles and the need for cycle outputs, whilst remaining silent on the same needs for motorcycles.

MAG has completed rudimentary modelling which shows that with modest and reasonable assumptions on modal shift from cars to motorcycles resulting from favourable charging regimes the objectives of the project will be more robustly delivered.

Firstly, we show that if motorcycles were to be eliminated from the traffic flow the total revenue generated would be reduced by 0.8%, and the throughput of persons would be reduced by 0.6% given a fixed PCU capacity. This decrease in persons travelling through the tunnels clearly contradicts the key objective of improved network performance (PO2).

Scenario A shows that with a charge proportionate to the PCU value of a motorcycle, resulting in a modest 0.5% modal shift from car to motorcycle, the revenue generation would be reduced by 0.8% but network performance measured by persons travelling through the tunnels would increase by 0.1%

Scenario B shows that with a charging exemption resulting in a 1% modal shift from car to motorcycle, the revenue generation would be reduced by 2.1% but network performance measured by persons travelling through the tunnels would increase by 0.3%

Scenario C shows that with a charging exemption resulting in a larger 5% modal shift from car to motorcycle, the revenue generation would be reduced by 3.7% but network performance measured by persons travelling through the tunnels would increase by 1.3%

Scenario D shows that with the current proposed charges and what we believe to be a reasonable assumption of a 25% modal shift from motorcycles to cars, the revenue generation would be reduced by 0.2% and network performance measured by persons travelling through the tunnels would also decrease by 0.2%

Motorcyclists are typically more price-sensitive than drivers of cars and heavy goods vehicles due to lower vehicle operating costs. Even a relatively small toll fee might deter motorcyclists from using the toll route, especially if free alternatives are available. The deterrence is likely to be highest amongst riders of the smallest and least impactful motorcycles.

	Baseline (current proposed charge and modal share)	Baseline (with no motorcycles permitted to use tunnels)	Scenario A (PCU proportionate charge, 0.5% modal shift)	Scenario B (no motorcycle charge, 1% modal shift)	Scenario C (no motorcycle charge, 5% modal shift)	Scenario D (current proposed charge, -25% modal shift)
motorcycles/day	900	0	1087.5	1275	2775	675
cars/day	37500	37860	37425	37350	36750	37590
m/c charge	£1.50	n/a	£0.60	£0.00	£0.00	£1.50
m/c peak charge	£2.50	n/a	£1.60	£0.00	£0.00	£2.50
total daily revenue	£104,925.00	£104,115.00	£104,115.00	£102,712.50	£101,062.50	£104,722.50
% change from baseline		-0.8%	-0.8%	-2.1%	-3.7%	-0.2%
total person trips	57150	56790	57225	57300	57900	57060
% change from baseline		-0.6%	0.1%	0.3%	1.3%	-0.2%

Due to the lack of TfL modelling and thus data and assumptions possible with greater information, we have had to make ‘educated guess’ assumptions to arrive at our results. We accept that there will be a broad range of uncertainty in these figures, but they do show that modelling is possible and gives plausible grounds for scrapping the charges for motorcycles.

Assumptions made in the above models:

- Cars account for 75% of vehicles using the tunnels
- 50% of daily flow is subject to peak charges
- Average car occupancy = 1.5
- Average motorcycle occupancy = 1

There are no precedents for river crossing charges for motorcycles that enable us to accurately predict the implications on transport modal choice. But the results from the Congestion Charging Zone (15% increase in motorcycles) clearly show that exemptions will significantly increase the modal split in favour of motorcycles.

Limited data from TfL:

- Blackwall Tunnel north bound motorcycle daily flow is 900 motorcycles
- Blackwall Tunnel north bound total all vehicle daily flow is 50,000.

## Logic for charges by vehicle type has not been consistently applied

The consultation's supplementary information report states (our emphasis added):

“A key objective of the user charges is to manage demand and thereby lock in the benefits of additional capacity and, importantly, manage the effects of traffic on the environment (PO5). The user charges also help to fulfil PO2 – improving road network performance and PO7, managing congestion, and PO3, supporting economic and population growth by providing improved cross-river links. In order to fully realise these objectives, it is important that all vehicles which could use the tunnels and contribute to congestion and environmental impacts are in scope for charging. *It is recognised that the magnitude of this impact varies by vehicle and the proposed charge levels have been scaled in part to reflect this.*

Additionally, *all types of vehicles contribute to wear and tear on the road.* In addition to managing demand, the user charges would help to pay for the costs of construction of the Silvertown Tunnel as well as its ongoing maintenance and operating costs. It is fair that, unless there is a sound rationale for a discount or exemption, all road users contribute to this cost and the different level of impact of different vehicles – *HGVs contribute more to wear and tear than cars, for example* – has been reflected in the charging structure.

As set out above, managing demand is the principal reason for user charging and the main way to manage the environmental effects of a new road. It is also the principal means of paying for the new tunnel (as referred to in PO7). In this context *it is necessary to charge vehicles unless there is a strong policy reason not to* (as is the case for discounts and exemptions).

All drivers using the new tunnel (and the Blackwall Tunnel with the Silvertown Tunnel in place) would benefit from reduced congestion, shorter and more reliable journey times and not needing to time journeys to avoid congestion. It is therefore fair that all types of motor vehicles are charged to use the tunnel unless they are subject to a discount or exemption (Policy 2 of the CPAP refers to fairness in setting the user charges).”

A review of the charge rates set for cars, vans and HGVs makes the above statements plausible, but considering the rate set for motorcycles the plausibility ends.

The transport modelling PCU values provided in the TfL transport modelling guidance could logically be used to set the relative charges for vehicle types.

As can be seen from the table below this could be argued to have been done for all *except* the motorcycle charges.

	PCU	proposed off peak charge	PCU based charge	proposed peak charge	PCU based charge
Motorcycle	0.4	£1.50	£0.60	£2.50	£1.60
Passenger Car	1	£1.50	£1.50	£4.00	£4.00
Light Goods Vehicle (LGV)	1	£1.50	£1.50	£4.00	£4.00
Medium Goods Vehicle (MGV)	1.5	£2.50	£2.25	£6.50	£6.00
Heavy Goods Vehicle (HGV)	2.3	£5.00	£3.45	£10.00	£9.20

The proposed elevated rate for Medium and Heavy Goods Vehicles compared with the PCU based charge rate could be justified based on wear and tear caused by heavier vehicles, but again it would appear that the same logic has not been applied to motorcycles. We would expect to see a motorcycle PCU based charge reduced by virtue of the lower weight of

motorcycles compared with cars. We would suggest a weight-consistent adjustment for the PCU based charge for motorcycles would result in an off-peak charge of approx. £0.40.

### **Exemption from charges for motorcycles is the logical Vision Zero road safety response**

With respect to safety, we asked for details of any analysis regarding the safety of motorcyclists diverting to other routes to avoid the proposed charges. TfL responded as follows:

“We have not undertaken specific analysis on this point however, our specialists determine risks within the tunnel environment are significantly higher than on the above ground network. In a tunnel there are limited means of escape if an accident occurs both for those in an accident, tunnel users and operatives. It is also less accessible for the emergency services.”

When asking about the bus lane access we were informed:

“Motorcycles should not be allowed in the nearside lane on the basis of safety and our general policy regarding bus reliability.”

The latter statement is a direct contradiction of TfL’s policy on motorcycle access to bus lanes.

A key document where TfL has summarised its position and provided detailed evidence and rationale is the "Motorcycles in Bus Lanes Monitoring Report", published in 2010.

This report provides a comprehensive overview of TfL's decision-making process and the reasons behind the policy, including:

- **Safety Data and Analysis:** The report discusses findings from safety monitoring, including collision rates and road user behaviour before and after allowing motorcycles in bus lanes.
- **Traffic Flow Considerations:** The report analyses the impact on traffic congestion and bus journey times, providing data from before and after the trials.
- **Feedback from Trials:** It contains information about feedback from various stakeholders during the trials where motorcycles were permitted to use bus lanes, which influenced the final policy decision.
- **Air Quality and Environmental Impact:** Considerations related to environmental benefits, particularly in terms of potential reductions in emissions when encouraging motorcycles over cars.

We have searched for evidence on motorcycle risk in tunnels. We conclude that there is no definitive study that conclusively proves motorcyclists are at a greater risk in tunnels compared to surface roads. However, the inherent factors of tunnels—such as reduced visibility, restricted space, and challenging environmental conditions—do suggest that these environments can pose additional risks for motorcyclists. Further studies focused specifically on motorcyclists are needed to draw a more definitive conclusion.

The Silvertown Tunnel may provide a unique opportunity to carry out such research. As previously mentioned, the low running costs, especially of smaller motorcycles, makes riders more sensitive to tolls and more likely to take longer diversionary routes. Riders of the smallest

motorcycles are often less experienced and/or riding without full licences. Longer routes and journey times will thus subject inexperienced vulnerable riders to greater periods of exposure to risk. This risk exposure duration must be considered when balancing the tunnel charge for motorcycles.

MAG was concerned to receive confirmation from TfL on current motorcycle casualty statistics from the Blackwall Tunnel. TfL confirmed:

- Motorcycles are 4.8 times more likely than average to be involved in a collision while using the Blackwall Tunnel
- Motorcycles are 8.18 times more at risk of casualty as a result of collisions than average while using the Blackwall Tunnel.

We have not been provided with the context of relevant statistics for other transport modes in the Blackwall Tunnel. It is therefore questionable whether the stated statistics should necessarily be used to justify the decision on motorcycle access to the shared Bus/HGV lane in the Silvertown Tunnel.

We note that motorcycles make up just 1.8% of traffic in the northbound Blackwall Tunnel when the prevalence of motorcycles in Greater London is over 3.5%. As has been demonstrated in the Congestion Charging Zone an increased prevalence of motorcycles could well have a significant positive effect on the current statistics.

We would also ask TfL to consider what steps have been taken, using all five pillars of the Safe System approach, to address this road safety blackspot.

We are also significantly concerned that despite the claimed concern for safety there is a clear admission that the motorcycle road safety implications of the tunnel user charge, whether they be good or bad, have received no attention.

## **Conclusions**

We contest that the process for setting motorcycle user charges has been significantly deficient. Furthermore, the impacts “on communities, health, safety and the environment” (PO5) has not been extended to the health and safety of the motorcycling community.

The proposed motorcycle user charges are not consistent with the Mayor’s Transport Strategy, the Congestion Charging Zone or the Mayor’s commitment to Vision Zero. The charges are also inconsistent with the national precedent for free transit across all major rivers by motorcycle.

We would argue that the proposed charges for motorcycles significantly undermine the objectives of the project and as such the minimal impact on overall revenue should not override a choice to exempt motorcycles from the charges.

We urge TfL to scrap the proposed motorcycle user charge, and to reconsider the question of motorcycle access to the bus/HGV lane.