

London Cycling Campaign response to the London Assembly inquiry into congestion. August 2016

About the London Cycling Campaign

London Cycling Campaign (LCC) is a charity with more than 40,000 supporters of whom 12,000 are fully paid-up members. We speak up on behalf of everyone who cycles or wants to cycle in Greater London; and we speak up for a greener, healthier, happier and better-connected capital.

LCC is a member of the Healthy Air Campaign, a coalition of household-name health, environment and transport organisations co-ordinated by Client Earth, that campaigns to clean up London's and the UK's air.

Introductory remarks

London Cycling Campaign welcomes the opportunity to comment on the issues surrounding congestion in London.

At the outset we note, and challenge, what appears to be an assumption in the briefing that completed cycling infrastructure is a major cause of congestion. The use of relatively short stretches of cycling infrastructure to help double the number of cycling journeys in London (the current TfL target) is a more efficient use of road space that any alternative and helps, in the longer term, to relieve congestion and enable the movement of London's growing population.

It is worth noting that while road works and cycle lanes are singled out in the briefing as key causes of congestion, new tunnels, bus lanes and pavements are not. The two new cycle lanes in central London, which remove a relatively small portion of road space along their length (one lane out of four over a distance of 8 miles) have only been in place for three months so we cannot yet know what their impact will be. We do however know already that cycle use along them has increased by up to 70% at peak times. Cycles occupy less than a sixth of the space on a road compared to a private car. We can also reasonably assume that the introduction of eight miles of cycle lane in central London is unlikely to have been a major cause of congestion across the other side of London.

Below, LCC examines the factors affecting congestion and reinforces the case for improving cycling conditions as a way of easing pressure on the roads and public transport as well as benefitting Londoners through reduced pollution and greater public health.

Summary

We share the Mayor's view that London must become a 'byword for cycling.' Increased cycle use can help London tackle the daily transport needs of an increasing population while improving people's health and by reducing the amount of air pollution. The evidence of the past decade demonstrates that cycling levels can grow significantly if the right measures are adopted.

Increased road building will not, overall, reduce congestion, except for short periods, as motor traffic increases to fill the new road space – an effect known as 'induced demand'. Road pricing, recommended by most academics and motoring organisations alike, can be an effective way of addressing congestion over the short term but to deliver the full benefit of such schemes, the space gained must be used to facilitate more efficient transport modes than private motor transport. Otherwise, of course, the market eventually adapts and the traffic returns.

Factors affecting congestion

Factors restraining congestion include:

- Increased costs of motoring (including parking)
- Longer journey times
- Modal switch away from cars
- Economic slowdown
- Fewer collisions
- More efficient deliveries
- Fewer roadworks
- Promotion and facilitation of alternative modes
- Lower car ownership
- Lower car use
- Better use of rail freight

Congestion is increased by:

- Collisions
- Road works
- Reduced motoring costs (including parking)
- Shorter car journey times (which attract more motor vehicles)
- Modal switch to cars
- Economic growth
- Promotion and facilitation of motoring
- Population growth

Demand for road space

London already sees an effectively unlimited demand for road space and, according to TfL, this demand will remain high as London's population continues to grow¹. In such conditions it is

¹ TfL Investing in London's Road Network 9 January 2014

unrealistic to expect that increased allocation of road space to motor vehicles will create free flowing driving in the capital even if homes, bus lanes, cycle lanes and pavements were given over to motoring.

Professor David Begg, of Aberdeen University and former government adviser on transport, suggests that in dense urban conditions, with high demand for motoring, such as London, motor traffic average speeds tend towards 10 mph. Below this figure people will seek alternative transport modes (assuming these are available), restrict their travel, or local authorities will intervene to change conditions (for example by road pricing or by offering transport alternatives).

Attempts to support growth in motor vehicle use through road building (such as tunnels) and reallocation of road space (and signal time) to motor vehicles will, inevitably have detrimental effects on pollution, people's health and, in the longer term, lead to still more congestion.

Air Quality

To radically improve air quality the Mayor should incentivise "modal shift" to walking and cycling: the Mayor must make walking and cycling safe and attractive enough to become the norm (particularly for local journeys), as well as improve public transport and access to car-sharing schemes (as an alternative to car ownership). It is vital to enable a far wider range of people than ever before to feel confident and comfortable with these alternatives to driving if we want to see more than very minor modal shifts.

Mass modal shift is vital to reduce motor traffic and thus help clean up London's air, and the potential to do so is enormous: surveys show 25% of Londoners would like to cycle or cycle more (compared to the 2-3% of trips currently made by cycle), and in some parts of London around 50% of car journeys are under 3 miles in length. The need and opportunity to maximise modal shift requires the same attention by the Mayor as his justified focus on pollution.

Further, we note that Oslo has pledged to reduce motor traffic reduction by 20% by 2019, and phase out private car use in its city centre altogether. Large areas of Copenhagen are car-free, and Paris has begun to make areas of the city car-free (albeit only at certain times). London, which is of course a much bigger city than those cited can learn from these examples and itself introduce car-free zones across the city. Plans to make Oxford Street motor traffic free are an excellent start.

Costs of motoring

The recent increase in congestion in the capital parallels economic growth (following the downturn in 2008) and reduced motoring costs. The RAC foundation index of motoring costs for the UK http://www.racfoundation.org/data/cost-of-motoring-index shows them dropping compared to the cost of living with the purchase price of vehicles in particular showing a significant drop.

Motor vehicle sales in the UK In 2016 the UK reached a record of almost 1.5 million in the six months to June 2016 and showed steady growth of 2.5% <u>http://www.smmt.co.uk/category/news-registration-cars/</u>.

The costs of running an affordable car in London exceed £3,000 a year http://www.standard.co.uk/news/transport/car-ownership-costs-london-drivers-more-than-3000-a-

<u>year-a3172511.html</u> and while the proportional additional cost of an extra journey in terms of fuel may be perceived to not be great, other costs can play a role in deterring car use.

Access to car parking is a prime deterrent to motoring in some capitals notably Tokyo (City Cycling, Pucher et al 2012) and Amsterdam where there are long waiting lists for residential parking. In London, residential parking charges remain very low compared to the cost of commercial parking And car parking at workplaces remains a valuable tax-free benefit.

Congestion charging in London kicked off the upturn in cycle use with riders entering the CCZ after the first year up by a third. Clearly some motorists switched to cycling, or switched to public transport while public transport users switched to cycling. Congestion decreased overnight although it has gone up over time, exactly as predicted by the theories of Professor Begg. While the congestion charge in central London has since increased from £5 in 2001 to £10 in 2016 this has not been enough to reduce demand. The elimination of the western charging zone was an effective decrease in the costs of driving into Kensington and Chelsea.

The Mayor's London Plan does offer the option of road pricing as a way of reducing congestion and there are now the technical options to introduce sophisticated pricing systems depending on time and location. Charging for the most polluting vehicles may discourage a degree of car use though it is unlikely to have the impact of the CCZ.

Any pricing system needs to be accompanied by a reallocation of road space gained to the more efficient, and cleaner, transport modes whether walking, cycling or public transport. In the City of London, walking in particular benefitted from increased space allocation following the 2003 congestion charge implementation.

Journey times

People value their time when travelling while also considering costs, convenience and safety.

In the absence of congestion charging, in most of London longer journey times, along with parking access and charges, are the primary constraints on motor vehicle use. If significantly improved journey times were on offer in the short term, for example though the construction of more tunnels, a greater number of people would likely choose to drive to their destinations, thereby increasing congestion in proximity to any new road space. If, on the other hand, public transport, walking and cycling facilities were improved instead the switch would be in the other direction.

Origin/destination data from the Silvertown tunnel consultation indicates that a quarter of private cars journeys from south London and Kent via the Blackwall tunnel are to the Canary Wharf area which adjoins the northern mouth of the tunnel. Adding another two motor tunnels could double this demand. On the other hand, suitable cycling, walking and public transport connections to Canary Wharf, coupled with road pricing, could reduce the motoring demand significantly.

The literature on the link between road building and motor traffic growth dates back to SACTRA 'Trunk roads and the generation of traffic' of 1994. The converse approach, allocation of (albeit minimal) amounts of road space to cycle use in London has seen a surge in cycling in the capital with key routes now attracting more than 1,000 cyclists per hour at peak times (TfL presentation 2016)

and accounting for 70% of all vehicles crossing Blackfriars Bridge at peak. Overall London has already seen cycle use double from fewer than 300,000 journeys to more than 650,000 per day.

Modal switch

The growth in cycle use in London, as well as cities like Paris, Seville and Copenhagen, is undisputed. Copenhagen, with weather no better than London's, now boasts a cycling modal share of 40%. In London, as noted above, cycling growth has averaged 5% per annum since 2003 demonstrating that, with the right measures in place, a growth target of (originally quadrupling cycling) doubling cycling again is well within reach.

One of the biggest prizes in terms of transport strategy would be a modal switch for the school run. In Holland more than 40% of school journeys are by bicycle whereas in London it is less than 2%. At school drop off time many London roads are clogged with parents making short journeys by car – the Government has previously stated one fifth of peak traffic is from the school run (see http://news.bbc.co.uk/1/hi/uk/3115206.stm). The difference in congestion levels during school holidays is particularly noticeable.

Creating safe routes to school benefits the health of children and helps reduce congestion. Where safe routes already exist, for example on the periphery of the East End's large and cycle-friendly Victoria Park, cycle trips to schools and nurseries are much higher than elsewhere. The Mayor's commitment to cycle-friendly town centres and healthy streets is a policy that could encompass many school journeys.

It is worth noting that population growth has reduced many school catchment areas significantly making potential walking or cycling trips to school ever shorter and more easily improved for active travel.

It's also worth noting that some commentators have suggested that modal shift towards cycling will not be from cars – and thus not reduce congestion. The experience in Seville, according to transport researcher Dr Rachel Aldred (http://rachelaldred.org/writing/buses-bikes-and-congestion/), is that this is not the case – there, bus users were the primary group to switch to cycling; but then drivers switched to buses, growing overall use of the public transport network in doing so.

To summarise, to encourage mass modal shift, two key elements are required: for alternatives (walking, cycling, public transport, car-sharing etc.) to be comfortable, cheap, safe and attractive; and for driving to be less attractive as a transport choice (whether through congestion charging, or parking restrictions and route restrictions in residential zones).

Economic growth or slow down

The correlation between economic growth and higher volumes of motor traffic is well established. More journeys to work, more goods transported, more PHVs, more online sales all play a role. Unless there is a determined political commitment to minimise the growth of motor traffic and provide alternatives, as in Copenhagen for example, economic and population growth inevitably leads to greater congestion. Seeking to attribute congestion to a small number of cycling facilities, in circumstances of robust economic growth and wide-spread construction activity, can lead to poor long-term policy decisions which will have adverse impacts on congestion. A decision to restrain potential cycling growth by sustaining or increasing road danger levels instead of reducing them would undo the only consistently progressive and sustainable trend in London transport.

London is unusual in having a policy in the London Plan of reducing car dependency in central and inner London (though not yet in outer London). LCC would welcome the extension of a policy of reduced car use to apply across the whole of the capital because this would encourage the provision of improved public transport links and improved conditions for walking and cycling.

It is regrettable that the UK government currently accepts, and plans for, ever-increasing use and ownership of motor vehicles. As is well documented, this trend undermines public health, air quality targets and adds costs in terms of congestion.

Promotion and facilitation of motoring

Motoring serves a large number of useful functions, notably the delivery of goods and services and providing mobility for users with limited access to public transport, walking and cycling. Where road space is constrained, as it is in London, that space needs to be prioritised for essential transport uses and the most efficient transport modes.

The default position for transport is not a level playing field. Motoring, despite its evident inefficiencies in dense urban areas, is heavily promoted by manufacturers who are addressing sales growth and not traffic congestion or people's health. Annual spending on motor vehicle advertising in the UK at more than 350 million pounds, far outstrips the spending on cycle facilities. The outcome is that, all other factors being unchanged, people are buying more and more cars (a record of 1.4m vehicles was reached in the first six months of 2016).

To counter the influential weight of motor vehicle advertising the attractions of alternative transport have to be that much greater. London, which has fewer households with cars, and far better public transport than most cities, has the potential to reduce car dependency if the political will to do so is there. TfL pioneered cycling adverts at a time when cycle facilities in the capital were poor, yet that promotional activity, in combination with other factors, helped secure growth in cycling. If promotional activity is combined with reduced road danger the growth in cycling has even greater potential.

A further benefit of reduced car dependency is that fewer vehicles on the road can help reduce the number of collisions (see below)

Collisions

A report to the TfL Surface Transport Panel in 2010 provided the following chart of causes of congestion on London's roads

Collisions	28 per cent
Vehicle breakdowns	9 per cent
Highway Authority Works	19 per cent

Utility Works	19 per cent
Special Events	4 per cent
Other issues (e.g. spillages, general volume of traffic etc)	21 per cent

Minimising collisions would thus have a significant impact on reducing congestion and delays. One of the evident benefits of providing protected infrastructure for cycle users (such as the East West cycle superhighway) is that potential conflicts are eliminated and collisions with cyclists are likely to be reduced.

LCC's campaign for safer lorries with much greater direct vision as a way of reducing collisions has been echoed by Mayor Sadiq Khan and recently been strongly backed by the report on HGVs by Loughborough University. The study showed very significant differences between current vehicles and concluded that 'low-entry' vehicles with grater direct vision would help reduce collisions. While LCC's prime focus is on cycle users, the better visibility out of such lorries would also help reduce collisions with pedestrians. A quarter of pedestrian deaths in 2014 involved collisions with lorries and recent research by Living Streets shows that the most common circumstance of such deaths is when the lorry is moving off .

We commend to the Assembly the Loughborough University study² which illustrates the visibility of pedestrians and cyclists from 19 different vehicles – In some cases near forward vision is fully obscured forcing drivers to rely on mirrors which takes time and may only offer a partial image. It is also worth noting that lorry drivers may not see stationary objects if their view is impaired – such collisions can also contribute to congestion.

Efficiency

LCC's view is that cycling is one of the most efficient and clean modes of transport but much can be done to increase the efficiency of other transport modes.

Martin Low, of Westminster Council, has often cited the example of multiple waste collections in Bond Street. According to the Standard (29 June 2016) this has now been reduced from 144 to 37 per day. Such numbers are staggering and highlight inefficiency. Borough audits of unnecessary duplication of work could help reduce congestion

Consolidation sites for HGVs do exist in London but they are not yet common enough. A range of construction materials for a number of sites is delivered to a specific location and then single vehicles deliver a range of materials a each construction site. <u>https://tfl.gov.uk/info-for/deliveries-in-london/delivering-efficiently/consolidating-deliveries</u>. This is cheaper for developers because they can buy in bulk and save on the number of deliveries.

²

https://www.transportenvironment.org/sites/te/files/2016 07 Study Understanding direct indirect driver vision_HGVs.pdf

Concrete crushing on site has been pioneered in Southwark and enables developers to significantly reduce their number of lorry journeys. The crushed concrete can, in some cases, be directly transported to sites that need it. (Ref: TfL Michael Barratt).

So called 'early doors agreements' with developers and residents can allow a specified number of HGVs to arrive on-site at 7am and wait with motors off till the site opens. This reduces congestion and danger to school children at peak times. (Ref: TfL Michael Barratt).

Additional ducting installed during planned works can help reduce future works at nearby sites. It's effectively doing what the popular Carlsberg advert suggested.

The number of PHVs has grown significantly and may be undermining the incomes of those who offer such services. It remains unclear where the modal shift to PHVs is coming from. While PHVs do offer a public service, growth in numbers that does not replace private car journeys will have a negative impact on congestion and potentially on road danger.

PHV services, such as Uber, also rely on their drivers being in a state of constant movement – so the app's algorithms can spread drivers out across London and ensure a car is always nearby. Because the entire fleet is on the road constantly, rather than parked awaiting a fare, additional congestion is likely to be caused.

Innovations in transport and technology point to potential issues that London may face in the future – as car-sharing and PHV apps rise, and the "sharing economy" takes off, it's likely that even electric and autonomous cars won't solve the issues of huge numbers of cars drifting around London waiting between pickups and drop-offs – new sharing technologies could worsen the situation, as well as improve it). So we would urge the Assembly not to rely on a techno-fix that may not arrive.

Public transport improvements

Changes to public transport can deliver modal shift because public transport journeys are invariably quicker than car journeys.

The success of London Overground shows how improvements in rolling stock, stations, connections and reliability can make an existing public transport more attractive and efficient.

Following a policy of reduced car dependency across London (see above) can act as an incentive to local and London-wide authorities to improve public transport systems. Stratford is a case where the developer, Westfield, focused on motor vehicle access and car parking, but has found that public transport is the prime access mode with its car parks underused.

When car parking regulations in new developments are relaxed (as they were in the further alterations to the London Plan) the outcome is not only more parked vehicles at both origin and destination but a lower incentive for local authorities to improve public transport, walking and cycling.