Campaign for Better Transport

London Assembly Transport Committee: Investigation into traffic congestion in London ~ submission from Campaign for Better Transport

Campaign for Better Transport is a leading charity and environmental campaign group that promotes sustainable transport policies. Our vision is a country where communities have affordable transport that improves quality of life and protects the environment.

We welcome the opportunity to contribute to the London Assembly Transport Committee's investigation into traffic congestion in London.

The issue is timely, with increasing congestion affecting every aspect of Londoners' lives, not least the quality of the air we breathe and the reliability of the public transport and emergency services on which London depends.

With London's population projected to grow to 9.2 million in 2021, rising to over 10 million in 2036, we face a strategic challenge as to what kind of city we want to be. Trying to accommodate 20th century car dependency in a 21st century city will condemn London to permanent congestion, pollution and stagnation.

We cannot build our way out of congestion: new roads generate new traffic, providing temporary congestion relief with permanent environmental damage. Proposals for new road-based river crossings are an expensive distraction from sustainable solutions.

Instead we need a radical change of approach, using the design, operation and pricing of London's road space to prioritise space-efficient travel options – public transport, walking and cycling – and to reverse the growth in delivery vehicles with a comprehensive modern freight strategy.

Cities around the world are embracing this approach. European cities have long adopted policies promoting sustainable transport and car-free zones, and this continues: Paris is reclaiming streets for walking and cycling, Oslo is phasing out diesel and petrol vehicles. New York has shown how dedicated cycle highways reduce congestion. Even Los Angeles – a byword for car dependency – has now adopted a transport strategy that puts sustainable transport and demand management at its heart.

London has led the world in many initiatives, including the congestion charge, smart ticketing for public transport, on-street bike hire, and lane rental for road repairs, as well as impressive management of the London 2012 Olympic Games.

We now have the opportunity to take the best examples from other great cities, and lead again, creating a dynamic and liveable London for the 21st century.

General questions

1. **How has traffic congestion changed in London in recent years? Are there differences in the amount, time, type and/or location of congestion?**
2. **What are the key causes of these changes in congestion?**

London is the 'congestion capital of Europe' according to the annual INRIX congestion report. It found traffic congestion in London had risen noticeably since 2012, with journey times in Central London increasing by 12

per cent annually, although the volume of car traffic continues to fall. [1] TfL's latest Travel in London report reports a recent fall in journey time reliability. with a 13 per cent increase in average traffic delay since 2013.[2]

The TfL Roads Task Force (2013) suggested that there was no one single cause of congestion: "the majority of the current unreliability, 79 per cent of it on the TLRN in a weekday AM peak is accounted by volume of traffic and day-to-day variability in traffic demand." [3]

Private car use in London has been falling over a number of years, despite the growing population: car use as a share of all trips, has declined from a peak of 50 per cent in 1990 to a current level of 36 per cent [4], with some analysts suggesting we have reached 'peak car'. [5] This is common trend as cities grow: denser populations can support greater concentration of services, reducing the need for travel, while mass transit is the only viable solution for peak time commuter travel. [6]

However in London there has been a significant growth in commercial traffic (freight and construction traffic). Light goods vehicles (delivery vans) now make up 13 per cent of all motorised urban traffic. [7]

In addition, INRIX attributes growth in congestion to the impact of major planned roadworks, citing a 362 per cent increase since 2012. This is reflected in the latest TfL monitoring report on the Lane Rental Scheme.

3. What impact does congestion have on Londoners, the city's economy and its environment?

The annual cost of congestion estimated the annual cost to London as $8.5bn (£6.4bn), rising to $14.5bn (nearly £11bn) in line with expected population growth if congestion is not addressed. [8]

Longer and unreliable journey times have obvious disadvantages for travellers, and specifically for time-sensitive journeys such as customer deliveries, with a perverse incentive for companies to deploy additional vehicles to meet deadlines, thereby contributing to worsening congestion.

Non-essential traffic adds to congestion, impeding the performance of essential road users. The London Ambulance Service has performance targets to reach 75 per cent of Category A calls (critically ill patients) within eight minutes: in 2015-16 they achieved 63.81 per cent in the target time.[9]

Idling traffic also contributes to London's lethal and illegal levels of air pollution: many of the measures to address congestion will also have a beneficial effect on air quality.

4. What can London learn from other cities in its effort to reduce congestion?

London has led the way in a number of approaches, including the congestion charge, smart ticketing for public transport, on-street bike hire, and lane rental for road repairs.

Equally there are many examples, from which London could learn, highlighted in this paper, including:

- Nottingham: Workplace Parking Levy (see q8)
- Milan: combined EcoPass for congestion charge/ULEZ (see q7)
- Liverpool: integrating public transport in retail developments (q13)
- New York: dedicated cycle lanes to reduce congestion (q18)
- Netherlands: 'Minder Hinder' approach to managing roadworks (q17)
- Brussels: congestion reduced through investment in rail (q13).
- Paris: consumer freight by rail (q9)
- Utrecht: water-based logistics (q9)

[1] INRIX 2015 Traffic Scorecard http://inrix.com/scorecard/
[2] TfL Traffic in London Report 8 http://content.tfl.gov.uk/travel-in-london-report-8.pdf
[3] TfL Roads Task Force Technical Note 11 http://content.tfl.gov.uk/technical-note-11-to-what-extent-is-congestion-and-unreliability-on-the-road-network.pdf
[4] David Metz: Traffic congestion in London http://peakcar.org/traffic-congestion-in-london/
[5] Professor Phil Goodwin: Peak car: evidence indicates that private car use may have peaked and be on the decline http://www.rudi.net/node/22123
[6] David Metz: Travel in the twenty-first century http://peakcar.org/travel-in-the-twenty-first-century/
[7] Cabinet Office (2009) An analysis of urban transport.
[8] CEBR The future economic and environmental costs of gridlock in 2030 http://inrix.com/wp-content/uploads/2015/08/Whitepaper_Cebr-Cost-of-Congestion.pdf
[9] London Ambulance Service http://www.londonambulance.nhs.uk/about_us/how_we_are_doing/meeting_our_targets.aspx

- Gothenburg: Smart city approach (q19)

Charging for road usage

5. How effective is the Congestion Charge? How should this scheme be modified?

The Congestion Charge is a vital part of managing traffic in London. Without it, current levels of congestion on the road network would almost certainly be far worse. However, the Charge is now less effective than when first introduced and as TfL figures show, it is now managing traffic growth rather than deterring it.

It is important to keep the Congestion Charge under review to ensure that its pricing level is appropriate, and to ensure that it is collected efficiently. We support the case made by TfL that diplomatic vehicles should pay the charge.

We note that the argument is sometimes made that such charges would discriminate against lower income users, as any fixed charge is inevitable regressive in nature. However it is important to note that the lowest income Londoners are both least likely to own or have use of cars, and are most likely to suffer the ill effects of air pollution. London pensioners, people with disabilities, young people and other groups also have free or discounted access to public transport, reducing their need for car use.

It may be appropriate to add additional Congestion Charge zones within London, not necessarily adjacent to the central London zone, in response to specific local need: for example, a congestion charge for Heathrow Airport. However, we believe that other options explored in this consultation – usage-based road pricing and workplace parking levies – provide even more effective options.

6. To what extent would a usage-based road pricing regime help reduce congestion?

Owning a car in London is an expensive choice: on average £3k a year to own and £18.88 per hour driving to operate. [10] Owner-drivers make a high cost investment in their vehicle, including purchase price, tax, insurance, depreciation and parking, but, fuel apart, do not pay per use: the greater the number of trips, the smaller relative cost per trip to the user. This contrasts with the 'pay as you go' model of car clubs, taxis and public transport.

In utilitarian terms, individual motor vehicles are highly inefficient users of road space, compared with buses, cycling or walking, yet there is no financial reward or incentive on travellers to make that choice. In addition, the lack of a 'pay as you go' model for road transport means that motor vehicles do not pay the cost of their impact in terms of carbon emissions, air pollution or road maintenance. Road user pricing reflects the principle that those who contribute to congestion and environmental problems should help pay for the costs to society this causes.

A usage-based regime moves closer to the concept of 'mobility as a service' where travellers make smart choices for each journey based on convenience and price, rather than being invested in a single mode.

Past surveys indicate that there is public acceptance of road pricing measures, provided that the scheme tackles congestion and the proceeds are seen to be reinvested in sustainable transport alternatives.[11]

The case is sometimes made that road use charging will unfairly impact lower income households. The evidence of car ownership in London shows that the poorest households will not be the most impacted, because they are least likely to have cars. 46 per cent of London households do not have a car, and the general trend is for household car access to rise as household income increases. Car ownership is lowest in the lowest income households, with a majority of households at or below London Living Wage income having no car. Car ownership is higher amongst men than women (46 per cent compared to 34 per cent). This gap is greater in lower income households. [12]

The introduction of the emissions surcharge and ULEZ charging, combined with existing congestion charges and other charges, makes the case for introducing a vehicle passport for London. By combining the various

[10] Zipcar research on car ownership costs January 2016 http://www.zipcar.co.uk/press/releases/zipcar-research-on-car-ownership-costs

[11] IPPR Charging Forwards 2006 http://www.ippr.org/publications/charging-forwarda-review-of-public-attitudes-towards-road-pricing-in-the-uk

[12] TfL Roads Task Force – Technical Note 12 How many cars are there in London and who owns them? 2012 http://content.tfl.gov.uk/technical-note-12-how-many-cars-are-there-in-london.pdf

charges, and with potential to incorporate Vehicle Excise Duty, parking charges and other insurance and licensing costs; this could see London lead the way in smart road user charging just as the Oystercard led the way in smart ticketing.

It would enable London to tackle both pollution and congestion in a smart and transparent way, while generating vital revenue for greener transport alternatives.

7. How might the UltraLow Emission Zone and Emissions Surcharge affect congestion levels?

The main purpose of the ULEZ is to tackle air pollution, a public health emergency that demands urgent action. London is the dirty diesel capital of Europe. Its main roads break EU legal standards on pollution every year. The legal case brought by Client Earth has added further pressure to national and local government to act. However, there are also potential benefits for congestion reduction.

The experience of cities around the world is positive.

- Rotterdam's LEZ was extended in January 2016 to affect cars and light duty vehicles, with a ban on diesel vehicles registered after 1 July 2001 and petrol and LPG vehicles registered after 1 July 1992. The impact of this scheme has been to reduce the number of severely polluting cars by half. [13]

- Milan's combined congestion charge and LEZ (Ecopass) saw incoming traffic fall by just over 30per cent while during operating hours, public transport operating speed increased by 5.7per cent for buses and 4.7per cent for trams. [14]

We support the early introduction of a wider Ultra Low Emission Zone and its extension to the North and South Circular initially, with potential to extend it further. The Mayor's proposal for bringing forward the ULEZ to September 2019 from 2020 is welcome but we believe could go further and faster.

We believe that both light and heavy vehicles should be ULEZ-compliant; we agree that the ULEZ should extend, as a minimum, to the North and South Circular Roads, and should be extended to cover London as a whole as soon as practicable. Charging goods vehicles will deter some vehicles from entering the zone, and encourage consolidation of trips by others.

Funding from the proposed "t-charge" and an expanded Ultra Low Emission Zone could contribute to the cost of modernising London's bus and taxi fleets, making them an even more attractive alternative mode. [15]

8. What would be the benefits and drawbacks of these other interventions?

- Tolling for river crossings or other major infrastructure

We do not support the introduction of new road-based river crossings as a congestion reduction measure: the evidence is that new roads generate new traffic, and simply add to congestion on feeder routes.

Tolls may be seen as necessary to pay for the road and to manage demand, but neither outcome is certain. The experience of toll roads, notably the M6 toll, is that drivers seek alternative untolled routes where available, undermining the business case: and where there is no alternative, tolls are no deterrent to traffic (as with the Dartford Crossing). [16]

In the case of the proposed Silvertown Crossing, the Preliminary Charging Report indicates that the proposed user charging will not reduce demand at peak times, with a majority of businesses consulted being happy to pay the charge. [17] If the aim is to use a toll to manage demand, then existing crossings could have tolls introduced, without the expense and disruption of constructing additional crossings.

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[13] ELTIS: New Rotterdam LEZ halves dirty cars in a month http://www.eltis.org/discover/news/new-rotterdam-lez-halves-dirty-cars-month-netherlands

[14] Milan Area C monitoring report http://www.comune.milano.it/wps/portal/ist/it/servizi/mobilita/Area_C/risultati_attesi

[15] Green Alliance: Greener London 2016 http://www.green-alliance.org.uk/Greener_London.php

[16] Campaign for Better Transport: Problems with Private Roads http://bettertransport.org.uk/sites/default/files/research-files/Problems_with_Private_Roads_FinalWeb.pdf

[17] TfL Silvertown Tunnel Preliminary Charging Report October 2015 http://content.tfl.gov.uk/preliminary-charging-report.pdf

If tolls are to be introduced, they should be applied as part of a wider package of road use pricing / demand management measures for similar routes, to avoid displaced traffic, and with pricing incentives to encourage low carbon and low emission vehicles, in line with other charging measures.

- Workplace Parking Levy

Workplace Parking Levies can reduce congestion directly, by encouraging commuters to car share or switch modes to reduce their travel costs. They can also reduce congestion indirectly, when the proceeds are invested in good quality public transport, cycling and walking facilities, which in turn reduce traffic volume.

- Nottingham's experience is a model for others to follow. Using powers under the Transport Act 2000, the City Council levies an annual charge of £375 (just over £1 a day) on each parking space provided by larger employers (those with 10 or fewer spaces and some categories of employer are exempt). The proceeds are reinvested in public transport, helping fund railway station improvements, new tram lines and city-wide bus services. [18] Despite initial reservations, the East Midlands Chamber of Commerce acknowledges that Nottingham's economy is thriving with growth in jobs and turnover: traffic levels have fallen, and the city has already achieved its 2020 carbon reduction target. [19]

London is well-placed to introduce Workplace Parking Levies. In outer London centres which are beyond the congestion charge zone, such as Uxbridge, Hounslow, Kingston or Croydon, they would provide an efficient congestion control mechanism which is currently lacking, while in Canary Wharf or the Royal Docks, they would complement existing measures in areas of intense construction activity where good public transport is already in place.

We recommend an early pilot of a Workplace Parking Levy, in partnership with supportive boroughs or Business Improvement Districts, for example in Hounslow. Such a scheme would be an important contribution to managing demand, tackling both congestion and pollution and providing a dedicated revenue stream that could be shared with boroughs, Business Improvement Districts or strategic landowners to enhance public transport and the public realm to mutual benefit.

In general, parking controls are an effective demand management measure, with knock on benefits to reducing congestion.

- City of Westminster Council has adopted a smart parking scheme to discourage the problem of motorists idling in search of parking spaces: a combination of RFID sensors on parking bays to track occupancy, with an app to locate empty spaces. Westminster is now issuing e-permits for residents' parking which can be read by the sensors, enabling efficient enforcement of parking controls. [20]

- Devolving Vehicle Excise Duty to London

The Government has announced that from 2020, Vehicle Excise Duty (VED) will be ring-fenced in a new Roads Fund, to be spent on the Strategic Road Network.

We support calls for a proportion of Londoners' Vehicle Excise Duty to be retained for spending on London's transport infrastructure. It is wrong that all the proposed Roads Fund should be earmarked for the Strategic Road Network outside London at the expense of local highways authorities across the country as well as the capital.

Whether devolving VED to London helps tackle congestion depends on how funds are used. We would encourage Roads Fund money for London to be used to help mend potholes, improve safety at junctions, and fund improved transport corridors for buses, coaches, pedestrians and cyclists, in line with the Government's Cycling & Walking Investment Strategy. Such an approach would contribute to a better environment for Londoners by improving safety and air pollution, as well as reducing congestion.

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[18] Tracks: Workplace Parking Levy Briefing http://cbtthoughtleadership.org.uk/WPL-Briefing-Nottingham.pdf

[19] CityMetric: Why other cities should copy Nottingham's revolutionary parking levy August 2016 http://www.citymetric.com//transport/why-other-cities-should-copy-nottinghams-revolutionary-parking-levy-2382

[20] Westminster Smart Parking http://www.smartparking.com/keep-up-to-date/case-studies/city-of-westminster-london-uk

Measures to target specific types of vehicle

9. How can the Mayor and TfL reduce the number of delivery vehicles on London's roads, especially in congested areas at peak times?

Freight vehicles are a major element in congestion, with TfL figures indicating that a third of vehicles in the morning peak are making freight-related journeys. We support TfL's policy to encourage the use of consolidation centres as a way to reduce adverse impacts of freight distribution and highlight the benefits of connecting rail sites, where possible, and thus using rail for long distance trunk haulage and lower emissions road vehicles for final deliveries.

Tackling the growth of Light Goods Vehicles for deliveries, particularly for retail fulfilment, is a crucial element of controlling congestion in London.

Online purchasing has grown from 9.4 per cent of the UK retail market in 2010 to 16.8 per cent in 2016. Unlike shopping in person, there is no incentive to combine purchases in a single delivery and there is a negative cycle of delivery companies deploying additional vehicles to achieve contracted delivery times, thereby worsening congestion. To address this, we advocate an accelerated rollout of smarter last mile delivery and area-wide servicing plans, to co-ordinate delivery times and promote shared use of vehicles.

The 'Total Transport' concept of co-ordinating shared use of vehicles from different public sector providers could be applied to delivery vehicles operating in particular areas. There is growing interest in sharing apps which can partner empty vehicles with freight to make best use of return trips: TfL could act as an honest broker to assist smaller businesses to access such services.

Encouraging the use of local and hyper-local consolidation hubs for neighbourhoods, housing estates, town centres, or business districts, is a cost-effective approach to manage deliveries, which, combined with the use of ultralow or zero emission last mile delivery vehicles (for example cargo bikes or electric shuttles), addresses both congestion and pollution.

- In Gothenburg, the City Delivery scheme provides a central HGV terminal from which city centre deliveries are completed by electric van and delivery bikes. [21]

- In London, Regents Street has pioneered a similar approach, with a consolidation centre outside the congestion charge zone where multiple deliveries are transferred to electric vehicles for scheduled delivery: the scheme has seen an 80per cent reduction in retail lorry movements. [22]

Employers can play a role by discouraging workplace delivery of personal shopping: some large organisations report that around a third of the deliveries made to their central London offices are private deliveries from on-line shopping.

Any plan for tackling congestion must include making better use of rail and water for longer distance freight. Water has particular potential for aggregates and waste transport, with the Port of London Authority hosting 70 independent terminals on the river with capacity to handle more than 40 million tonnes of cargo between them. [23] The Waterway365 project based in Sweden provides guidance on using inland waterways for public transport and urban deliveries [24] while in Utrecht, an established electric delivery boat service operates for canal side businesses. [25]

There is great potential for consumer rail freight to be transported in London in a safer low carbon mode which reduces road congestion and air pollution.

- Two important trials have brought trainloads of freight into Euston at night when the station is closed for passenger services, then transferred to electric or low emission delivery vehicles.

[21] City of Gotenburg Urban Logistics http://forlivochrorelse.se/en/sustainable-transport/urban-logistics/
[22] Arup Regent Street delivery and servicing reduction scheme http://www.arup.com/projects/regent_street_delivery_and_servicing_reduction_scheme
[23] POLA Handbook 2015 https://pla.co.uk/assets/plahandbook2015.pdf
[24] Waterway 365 http://waterway365.com/
[25] Civitas 2020 City distribution by boat http://www.civitas.eu/content/city-distribution-boat

- A similar approach has been adopted by Monoprix in Paris. Products are brought by rail from suburban warehouses to the Paris-Bercy freight facility, and low emission gas-powered delivery vehicles complete delivery to 90 Monoprix stores across the city.[26]

There is suppressed demand for rail freight due to lack of capacity on the rail network. As TfL sets out overarching spatial planning as well as transport planning across the capital, it is imperative that it gives the boroughs clear guidance on the need to protect future potential sites for rail freight interchanges of all sizes.

On already busy roads, HGVs have far greater impacts on traffic flow as they need longer braking distances, and longer times to manoeuvre, especially in urban areas.

Longer and heavier lorries (currently being trialled outside London) should be banned from the capital and any HGVs entering London should be required to have full visibility cabs. In addition to taking up large amounts of road space, extended turning areas and poor visibility combine to threaten other road users, in particular pedestrians and cyclists, which is at odds with policies to encourage more active travel.

10. To what extent is an increase in minicabs contributing to traffic congestion, and how could this issue be addressed?

The INRIX congestion report indicates that levels of car traffic, including private hire vehicles PHVs), are falling and that it is therefore incorrect to attribute a rise in overall London-wide congestion to minicabs. There is however evidence of local congestion hotspots caused by concentrations of PHVs and we think these hotspots need monitoring and possibly regulating.

There are also wider concerns about the impact of the growth of minicabs on other, more sustainable travel options, in particular the impact of pool car services on the viability of the night bus service.

We are neutral on the question of whether TfL should cap the number of private hire vehicle licences: occasional access to cab services is important for people without cars, but overall promoting non-car based alternatives should be the policy priority.

If such a cap were to be implemented, it should be on a per borough basis, to maintain a network of local provision within a London wide cap. This could be varied to reflect levels of access to public transport in the boroughs concerned and scaled down as public transport options improve. Licences should also be used to incentivise uptake of low carbon and low emission fuels – although these do not in themselves reduce congestion.

11. What contribution can car clubs make to tackling congestion, and how can the Mayor and TfL encourage these?

Car clubs are valuable in tackling congestion as they provide an alternative to individual car ownership, and operate on a pay as you go basis, encouraging more targeted usage. CarPlus, the car club industry body, reports that as of May 2016, there are 186,000 car club members in London, using 2,800 cars: they calculate that over 25,000 privately owned vehicles have been removed from the roads as a result of car club membership. [27] In addition LGV options reduce costs for and congestion from the growing small business sector.

Parking is the major challenge for car clubs: prioritising car clubs for parking places makes car clubs more attractive and also helps control private car parking by reallocating road space. In Tower Hamlets, electric charging points for car club vehicles have been provided within local authority housing estate car parks. The Mayor and TfL have a range of tools to encourage car club parking provision, including through planning requirements; requiring provision for car clubs in TfL-funded traffic management and/or parking schemes; on TfL land and through exemption from future workplace parking levies.

12. To what extent could greater efficiency in the provision of bus services help reduce congestion, and how?

[26] PTEG Delivering the future report http://www.urbantransportgroup.org/system/files/general-docs/Delivering%20the%20future%20FINAL%20020315.pdf
[27] CarPlus 2016 Annual Survey of Car Clubs in London http://www.carplus.org.uk/wp-content/uploads/2016/04/Carplus-Annual-Survey-of-Car-Clubs-in-London-A4-AW.pdf

Buses play a vital role in reducing congestion: every three buses replace approximately 200 cars on the road. They are high capacity, flexible, and provide far wider coverage than any other public transport option. We advocate regular audits of London's 'public transport deserts' to ensure there is appropriate bus coverage, including community transport options.

However, there is evidence that congestion is now impairing bus performance to the point where passengers are switching away from bus usage, with bus speeds declining faster in London than anywhere in the UK.[28]

TfL should continue to roll out dedicated bus lanes and bus priority at junctions, and review signalling at existing junctions with high bus usage. Bus lanes are part of the solution to congestion, not part of the problem. Dedicated bus lanes can reduce bus travel times by 7 to 9 minutes along a 10km congested route and also improve their reliability.

The introduction of cycle routes need not undermine bus efficiency any more than dedicated bus lanes undermine that of other vehicles, provided good design principles are followed. Both bicycle and bus use help reduce congestion, and having separate lanes reduces the risk of conflict between the two modes.

Good quality bus information and flexible ticketing are important to maintain and increase bus usage. We welcome the introduction of the bus hopper ticket and would encourage TfL to introduce a part-time travel card to benefit the many Londoners who work flexible hours.

Encouraging modal shift

13. How can TfL further encourage a shift from private car use to public transport or active travel modes?

We have outlined a number of solutions in this paper, including use of workplace parking levies and road user pricing to deter unnecessary vehicle use.

Provision of better public transport, walking and cycling options that are accessible, reliable and affordable has a direct, beneficial impact on reducing traffic and congestion. For example, Brussels has seen congestion levels fall from being ranked as Europe's most congested city in 2012 and 2013 following investment in expanded suburban rail services.

This includes providing dedicated space for walking and cycling, and flexible ticketing options for public transport that provide fair fare options for part-time workers.

In addition, land use planning and parking management pay a critical role. London's housing crisis is well known: using land to house cars rather than people is woefully inefficient, and fosters greater car dependency, reinforcing social and economic exclusion for people without access to a car.

A number of boroughs now have policies requiring new residential developments to be 'car-free', delivered by a combination of legally binding planning conditions, through property lease rules and/or exclusion from residents' parking permit schemes. This model is recognised in the 2016 London Plan and could be rolled out to other boroughs.

Concentrating new residential development close to public transport, including on TfL and GLA owned land, has the opportunity to deliver more affordable housing, and also reduces car dependency. In areas with a low PTAL, the emphasis of planning policy should be to secure developer contributions for enhanced public transport, rather than simply relaxing parking controls.

The South Yorkshire Passenger Transport Executive has developed a refinement of PTAL with a traffic light classification system known as LUTI (Land Use and Transport Integration). This scores development sites as red, amber or green according to their accessibility by public transport to assist developers in ensuring that sites are well served by public transport or, if not, that the necessary provision can be made. [29]

[28] The Impact of Congestion on Bus Passengers http://www.greenerjourneys.com/wp-content/uploads/2016/06/Prof-David-Begg-The-Impact-of-Congestion-on-Bus-Passengers-Digital-FINAL.pdf

[29] Campaign for Better Transport: Getting There How sustainable transport can support new development 2015 http://www.bettertransport.org.uk/sites/default/files/research-files/Getting_there_final_web_0.pdf

Through the London Plan, planning for new event venues and retail areas can require a move away from car-based travel.

- The Liverpool One shopping centre was designed to incorporate a new bus interchange. In 2013, Liverpool One's car parks received 1.6m cars, while 14m passengers arrived in the city centre by bus during the same period and Liverpool One bus interchange saw a 66 per cent rise in passengers on the previous year. [30]

There is also the opportunity to work with key retail/leisure destinations to incentivise modal shift, for example combined transport/admission tickets for sports and arts events. A consistent policy of including local or regional public transport free with event tickets - similar to the German 'Kombi Ticket' - would have wide benefits. [31] London's successful 'Get ahead of the Games' initiative from 2012 showed how additional road congestion from events can be managed and this approach could be extended to more regular events.

TfL and boroughs are well-placed to work with employers, schools and other destinations to support better travel planning and information to encourage smarter travel choices, in particular targeting single occupancy car use.

- The London Borough of Sutton saw traffic levels reduced by 3.2 per cent through the Smarter Travel Sutton programme which combined travel planning for larger employers and in every school with personal travel advice promoted through events and a touring roadshow, complemented by launching a car club and providing additional cycle parking and cycle training. [32]

Providing new road infrastructure

14. Can new road infrastructure help reduce traffic congestion? What specific new infrastructure is required in London?

No. New roads cannot help reduce congestion: on the contrary, new roads generate new traffic. This 'induced traffic' effect is well-known: the real or perceived benefit of using the new road attracts additional traffic. This comes in the form of 'triple convergence' – people switching to the new road from other times, other routes and other modes, to the point where levels of usage and congestion eventually reach or exceed their former levels. [33]

The additional traffic does not evaporate at either end of the new road: additional traffic will add to congestion on existing roads, pressure on parking, and adverse environmental impacts. We cannot build our way out of congestion: it can only be tackled by reducing traffic through more efficient use of transport.

While we understand and support the aims to improve regeneration and connectivity in east London, this is better achieved through managing demand on existing roads and investing in better public transport, walking and cycling instead.

The Mayor and Transport for London should instead take a leadership role in transforming London's road network for the better, engaging with Highways England to challenge plans for new roads that will increase congestion in London.

There is a great opportunity to right some of the wrongs of the past where badly designed roads have created severance in London's communities: investing in improving crossings, removing gyratories and enhancing interchanges with public transport would be a much more sustainable long-term solution to tackling congestion.

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[30] Mayor of Liverpool: Liverpool City Centre Main Retail Area Review June 2014 http://www.liverpoolvision.co.uk/wp-content/uploads/2014/07/ Liverpool-City-Centre-Main-Retail-Area-Review-June-2014.pdf

[31] Campaign for Better Transport: Door to turnstile Improving travel choices for football fans http://www.bettertransport.org.uk/sites/default/files/research-files/Door_to_Turnstile_CfBT_FINAL_web.pdf

[32] Smarter Travel Sutton http://thensmc.com/sites/default/files/Smarter%20Travel%20Sutton%20FULL%20case%20study_0.pdf

[33] Sorensen, Paul, et al. Reducing Traffic Congestion in Los Angeles. Santa Monica, CA: RAND Corporation, 2008. http://www.rand.org/pubs/research_briefs/RB9385.html.http://www.rand.org/pubs/research_briefs/RB9385.html

15. To what extent is there a risk of new roads encouraging more people to drive? How can this risk be avoided?

The risk that additional traffic will be stimulated is real and has been seen on existing new road schemes, such as the widening of the M25 and the increased capacity at the Dartford Crossing.

Across the country, post-opening evaluation reports produced on major road schemes demonstrate that traffic levels on both the new and the existing road network grew once "bypass" routes had opened. [34]

The risk can only be avoided by dropping plans for expensive and damaging new road plans, such as the proposed Silvertown Tunnel, and investing instead in sustainable alternatives, such as the dedicated walking/cycling bridge proposed to connect Rotherhithe to Canary Wharf, or new Overground connection to Barking Riverside and across to Abbey Wood.

There is however potential for a new approach to investing in redesign of existing road infrastructure, for example removing gyratories, improving the quantity and quality of public realm, with provision for cycling and bus routes, as part of a comprehensive traffic reduction approach.

16. How should new road infrastructure be funded?

The proposed Silvertown, Gallions and Belvedere road crossings are estimated at £1bn each. We urge that these road schemes are dropped and the funds identified be invested in the sustainable transport and demand management approaches outlined in this paper instead.

Ongoing demand for new homes and workspace in London will see more unused brownfield sites being developed. There will be instances where new local access roads are required to bring these sites into use. In these cases, there should be a developer contribution to the construction cost of the new roads, allied with contributions for sustainable transport.

Examples include contributions from a hotel developer to providing step free access at Tower Hill tube [35]and contributions from the redevelopment of Battersea Power Station to new tube provision.

Maximising available road space

17. How effective are TfL's measures to limit roadworks, such as the lane rental scheme? How can these measures be made more effective?

The Lane Rental scheme levies a charge on road works at peak times in key locations on TfL roads, with higher charges at pinch points. Revenue is reinvested in traffic management infrastructure such as the rollout of ANPR. We support the principle that operators should pay a contribution reflecting the impact of their work on the road network and incentivising working at the least disruptive times.

TfL's monitoring reports show that the Lane Rental Scheme had a significant impact in reducing congestion caused by roadworks in its first two years of operation (2012-2014). The scheme coverage was later reviewed with fewer roads included. The most recent report (2014-15) shows that journey time reliability has deteriorated across the network, including areas where the Lane Rental Scheme is operating, reflecting the overall growth in traffic. [36]

The scheme should continue to be reviewed to ensure that priority routes, in particular bus routes, are included. To be made more effective, the scheme could be extended through partnership working and better co-ordination to borough roads, with the aim of avoiding simultaneous works on parallel routes.

TfL could consider adopting the Dutch 'Minder Hinder' approach: this holistic approach to managing major roadworks includes publicising and incentivising alternative modes as well as alternative routes and working

[34] Campaign for Better Transport: Bypasses don't work http://www.bettertransport.org.uk/roads-nowhere/bypasses-dont-work
[35] Transport for All: Tower Hill becomes the 68th step-free Tube station in London http://www.transportforall.org.uk/news/tower-hill-becomes-the-68th-step-free-tube-station-in-london
[36] Transport for London Lane Rental Scheme Monitoring Report – July 2014 to March 2015 http://content.tfl.gov.uk/lane-rental-monitoring-report-july-2014-mar-2015.pdf

with major employers and attractions nearby to stagger arrival times and provide discounts for customers using public transport. [37]

In addition to roadworks, there is a significant impact from construction sites taking over parts of the public highway. There is an important role for boroughs and the Mayor in his planning role to play in enforcing the Considerate Constructors Scheme as part of all planning consents.

TfL and boroughs should be rigorous in issuing, monitoring and enforcing licences for works on the highway to ensure these are only issued as a last resort and that time limits are adhered to. By better phasing of construction, developers may be able to contain more of the works within their site boundaries, and this should be incentivised by reviewing costs for highways licences.

18. What effect has the additional space provided for cycling and pedestrian infrastructure had on congestion?

The environmental, economic and health benefits of walking and cycling are well established. In addition, better provision for walking and cycling is effective in tackling congestion.

It is sometimes argued that reallocating road space from motor traffic for walking and cycling will increase congestion. The opposite is the case. The FLOW project studied the impact of walking and cycling in reducing congestion looking at twenty schemes across eighteen EU cities and New York. Ten of the schemes reduced congestion, eight were congestion-neutral: only two schemes increased congestion. [38]

- In the case of dedicated cycle routes introduced in New York, key routes saw improved traffic flow as a result of modal shift reducing the number of cars, combined with safer and more efficient junctions: for example, travel times on 8th Avenue improved by an average of 14 per cent. [39]

We strongly support measures to extend pedestrianisation to London's high streets, including Oxford Street, and local centres, along with improved networks of walking and cycling routes between local centres and across central London. This must be co-ordinated with bus route planning and design to deliver an integrated public transport system that complements active travel options.

On roads with traffic, locating crossings at 'desire lines', improving pedestrian crossings with "all green" phases and providing crossing time countdowns, all facilitate pedestrian movement in a way that reduces conflict with motor traffic. The initial trial of crossing time countdowns in London showed reduced traffic queues as well as improved pedestrian safety. [40]

Borough level 20mph zones help tackle congestion by improving the capacity of existing roads, in addition to their proven safety and environmental benefits.[41]

Active traffic management
19. How can the use of technology be enhanced to help TfL manage congestion? For instance, how can the iBus system be used for this purpose?
20. How effective has the Road and Transport Enforcement team been in tackling congestion?

Technology offers a range of solutions to congestion: real time information and smartcards make sustainable modes more accessible and attractive, while big data can assist in traffic management and transport planning.

- Gothenburg has adopted a comprehensive Smart City approach, using a range of apps to manage electric bike hire schemes, low emission delivery vehicles, as well as sharing data with private sector

[37] Learning From The Dutch: Improving Customer Experience During Roadworks http://www.highways-uk.com/content/huk/docs/ib1-improving-customer-experience-during-roadworks.pdf
[38]FLOW The Role Of Walking And Cycling In Reducing Congestion A Portfolio Of Measures http://h2020-flow.eu/fileadmin/user_upload/FLOW_REPORT_-_Portfolio_of_Measures_v_06_web.pdf
[39] New York City Department of Transportation (2014). Protected Bicycle Lanes in NYC. http://www. nyc.gov/html/dot/downloads/pdf/2014-09-03-bicyclepath-data-analysis.pdf
[40] Transport Research Laboratory (2011). Pedestrian Countdown at Traffic Signal Junctions (PCaTS) - Road Trial http://tfl.gov.uk/cdn/static/cms/documents/ PCaTS-Note-3-PCaTS-Trial-Results-Report.pdf.
[41]20's Plenty: 20mph Limits Save Time And Improve Traffic Flow http://www.20splenty.org/20mph_limits_save_time_and_improve_traffic_flow

partners to deliver integrated transport such as electric buses and park & ride services across neighbouring local authorities. [42]

Modern traffic technology and effective enforcement of highways rules will continue to play a role in managing congestion. Examples of how technology can assist are found across all modes.

- For freight, sharing apps increase the use of empty capacity on return trips for backloads.
- Bus priority measures that maintain bus service reliability, combined with real time travel information apps, are a vital part of promoting public transport and reducing congestion.
- Westminster's Smart Parking scheme uses RFID sensors to detect parking infringements.

We commend the work of the Smarter Travel Forum, which brings together a range of transport and technology industry partners to develop solutions, for example, making use of mobile phone traffic patterns to help model transport demand. [43]

London as a leading tech city is well-placed to harness and deploy emerging technology and the appointment of a Director of Innovation is a welcome move.

Conclusion

In summary, we propose a combination of traffic demand management through introducing measures such as workplace parking levies, road user pricing, smart freight solutions, and using land use planning to move away from car dependency.

We oppose the expensive fallacy that we can build our way out of congestion with new roads, and call for an immediate end to plans for new road-based river crossings in east London: instead, we advocate investing the substantial sums currently allocated for these new roads, together with a fair share of London's VED income, in better walking, cycling and public transport options.

We believe such a package of measures would have wider social, health, environmental and economic benefits for London as a whole, and help make our capital a model of liveable 21st century cities.

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Stephen Joseph & Bridget Fox
Campaign for Better Transport

Campaign for Better Transport's vision is a country where communities have affordable transport that improves quality of life and protects the environment. Achieving our vision requires substantial changes to UK transport policy which we aim to achieve by providing well-researched, practical solutions that gain support from both decision-makers and the public.

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[42] OptiCitiesGothenburg http://www.opticities.com/pilot-cities/gothenburg/
[43] Smarter Travel Forum http://www.bettertransport.org.uk/smarter-travel-forum