London Councils' Response

London Assembly Transport Committee: Investigation into traffic congestion in London

London Councils represents London's 32 borough councils and the City of London. It is a cross-party organisation that works on behalf of all of its member authorities regardless of political persuasion.

Q1. How has traffic congestion changed in London in recent years? Are there differences in the amount, time, type and/or location of congestion?

A number of the boroughs that are able to monitor congestion levels confirmed that there has been a noticeable increase in the levels of congestion in London, especially since the 2008 financial crash. An increase in Heavy Goods Vehicles (HGVs) and Light Goods Vehicles (LGVs) is one of the biggest changes to the congestion in London. Another point identified is the large increase in Private Hire Vehicles (PHVs) (which is addressed later in this document). Another key factor in the increase in congestion identified by many of the boroughs is the increase in population in London, and the strain this is putting on the road network.

Q2. What are the key causes of these changes in congestion?

The causes of the changes to congestion highlighted above are numerous. The key factors in the increase in HGVs and LGVs have been the increase in construction work in London, and the increase in e-commerce, and the corresponding level of journeys by both HGVs and LGVs these two factors create. The increased number of PHVs could be put down to population growth and proliferation of mobile-based vehicle hire business models, for instance Uber. This increase in population, coupled with the increasing percentage of people choosing to cycle, has contributed nominally to congestion. This is mainly due to the building of separate cycle infrastructure on roads, but also in some instances the larger number of cyclists, which could slow traffic on smaller roads as there is a lack of space for overtaking. Despite this, in the long-term, increased numbers of cyclists will actually contribute to lesser congestion as more people decide to ditch private vehicles. More active travel will also bring a number of wider benefits to society, including reducing air pollution, and reduced obesity ill health associated with inactivity.

Q3. What impact does congestion have on Londoners, the city's economy and its environment?

Traffic congestion imposes costs on Londoners in terms of delays in journey times; the health effects of poor air quality, noise pollution, and community severance. The annual INRIX Scorecard (2015), a report which analyses and collates transport data in over 100 cities across the world, shows that London continues to be one of the most congested cities in the world. Congestion has a significant impact on cities — both on businesses that drive economic growth, on individuals' quality of life (for instance health), community cohesion, and on the environment. Congestion problems involve extra travel time and/or unpredictable arrival times and are caused by an imbalance between travel demand and transportation capacity. London is the UK's most congested city. Drivers spent more than 250 hours idling in traffic in 2013, which is double the UK average – and this is set to increase to 299 hours

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by 2030, equivalent to 40 working days a year. Although less than a third of Londoners commute to work by car, the cost of living and the value of time for the capital's 1.4 million car commuters is at such a premium that in 2030, traffic congestion has been calculated to cost London £9.3 billion, an increase of 71 percent from today (approx. £4.4bn), costing each car commuting household more than £4,000 a year by 2030[1].

London's population is growing, and large increases in the absolute numbers of vehicles on the road are expected by 2030. This has led to estimated increases in annual hours wasted in congested traffic of 19% in London between 2013 and 2030. This filters through to higher forecasted economic costs to households, but also higher environmental costs from CO2 emissions. The fuel that is consumed while stationary in traffic results in higher emission of greenhouse gases and pollutants, which leads to poorer air quality. Boroughs are aware of this problem, and are actively tackling it, for example through the promotion of walking, cycling and public transport use.

Poor air quality generates a burden to both mortality and morbidity, with a general consensus around the UK Committee on the Medical Effects of Air Pollutants (COMEAP) estimate of 29,000 attributable deaths brought forward because of exposure to ambient PM2.5 air pollution each year in the UK. According to research by King's College London, the figure of deaths brought on by long term exposure to air pollution in London is nearly 9,500 per year[2]. Reported morbidity effects vary greatly in severity, from impacts that are seriously debilitating, such as chronic or obstructive pulmonary disease (COPD or cardiac events, to those that are less serious individually but which affect a larger number of people, e.g. 'restricted activity days' or 'symptom days'. The costs of these impacts, for welfare, healthcare and productivity, are considered to be large[3].

Q4. What can London learn from other cities in its effort to reduce congestion?

There is no one city-wide strategy that can be adopted to reduce congestion and its impacts and there are few cities that compare to London in terms of its size, streets, complexity and society. Despite this, lessons can still be learnt from London's similarities to other global cities, and applied to different contexts. We encourage the Mayor and TfL to learn from the experiences of other international and UK cities, in the way that they restrict traffic movement, promote walking and cycling, and have integrated public transport; for example cities like Oxford. Further abroad, there are a series of cities looking to restrict car usage, by creating routes and places where walking and cycling is the method of transport opted for. For example, Oslo in Norway is planning to permanently ban all cars from the centre, and replace 35 miles of roads with bike lanes, while Madrid are looking for a modal shift from driving to walking by again banning cars from certain areas. These are just a few examples from a number of innovative projects from around the world[4]. There are also many examples of innovative policies to restrict car use in cities such as Copenhagen, Helsinki, Milan and Nottingham (as referenced in more detail in the London Borough of Hackney's submission).

Careful attention should be paid to previous outcomes and emerging outcomes from relevant EU projects and publications and from advice of the London European Partnership for Transport (LEPT).

Q5. How effective is the Congestion Charge? How should this scheme be modified?

According to official figures and data, there has been a 53 per cent reduction in car use in the congestion charge zone since its inception in 2003. This can also be attributed to improved public transport provision. Levels of road traffic in central London have fallen for much of the last decade, but have increased for the last two years, and this is thought to reflect the increasing population and economic growth post-recession. There have also been large increases in truck (LGV) traffic in central London, which could be attributed to the rise in e-commerce, and huge

[1] CEBR & INRIX (2014) The future economic and environmental costs of gridlock in 2030
[2] Understanding the health impacts of air pollution in London (2015)
[3] Royal College of Physicians (2016) Every breath we take: The lifelong impact of air pollution
[4] UK Business Insider

increases in the amount of roadworks in this area (362 per cent)[5]. This would suggest that there needs to be a new focus on ensuring that this trend isn't long-term. Boroughs suggest that the Congestion Charge's effectiveness has declined over time. Its benefits have been eroded because traffic is changing away from private cars, which were the focus of the Congestion Charge, to commercial vehicles and vehicles for hire, which have increased substantially. Technologies are also changing with PHVs introducing the concept of a variable cost model based on predicted times of higher congestion and this should be monitored. The introduction of the night tube and the Elizabeth line that will greatly affect the central area and thus the Congestion Charge should be tailored in response

Q6. To what extent would a usage-based road pricing regime help reduce congestion?

London Councils would like to work with TfL to identify how road user charging could be developed to tackle congestion as well as improve air quality. Road user charging could be an effective way to tackle traffic congestion and fund road maintenance in certain contexts. A lot of research from organisations such as the OECD, Friends of the Earth, and Deloitte, shows that road pricing can help to reduce congestion when planned correctly. TfL and DfT need to explore the potential technologies that could assist with more intelligent road pricing systems. While there is some fairness in charging more according to distance travelled, and this might help with public acceptability of road user charging, there is an incongruity with charging more for a long journey on uncongested roads than for a shorter journey in heavy congestion. A system that is aware of these issues would need to be developed.

London Councils acknowledges the potential issues of displacement. Given recent trends (highlighted in this response) it will be important to focus on reducing PHV, HGV & LGV and coach journeys alongside private vehicles.

Q7. How might the Ultra-Low Emission Zone (ULEZ) and Emissions Surcharge affect congestion levels?

London Councils strongly support the ULEZ and Emissions Surcharge. Air pollution is a huge problem in London, and is exacerbated by high levels of congestion. Air quality in London needs to be a priority, and specific policies like the ULEZ and Emissions Surcharge are necessary to addressing this. It makes sense to coordinate the expansion of the ULEZ so that there is a unified plan to tackle congestion as well as air quality. It has been noted by a number of boroughs that if continued improvements in vehicle efficiency and the development of electric and ultra-low emission vehicles continue, then the ULEZ will not be an effective anti-congestion measure. While this is true, it should be expected that the policy will adapt and evolve over time in connection with these changes, ensuring it remains effective. More information is needed by the boroughs on the impacts of the potential boundary for the ULEZ.

Whilst there is widespread support for the ULEZ in general, there is concern from boroughs about the potential north/south circular being used as a boundary, given the fact it cuts through a number of boroughs, and also the nature of the road in the south. This policy, although focused on central London, will also impact the outer London boroughs, with many road journeys made for commuting and leisure along the west/east axis as well, therefore supporting policies, such as improved and cleaner public transport provision is essential. London Councils calls on TfL and the Mayor to ensure detailed modelling is conducted to discover the most affective route for the boundary of the ULEZ, what the next steps in the long term should be for improving air quality in London, and to share this information effectively with boroughs.

London Councils strongly supports an increase in low carbon public transport (for example electric and hydrogen buses) operating on routes beyond central and inner London, to fully spread the benefits of the ULEZ and Emissions Surcharge. This would also need to address the weaker provision of public transport in certain areas of outer London.

[5] London First (2016) London Congestion Trends

Q8. What would be the benefits and drawbacks of these other interventions?

- Tolling for river crossings or other major infrastructure – There is some support from a number of boroughs for road tolling, and is considered by some an acceptable way of funding new infrastructure. It might be beneficial for the revenue raised in this way, to be allocated to significant transport investments in the sub-regional area concerned, providing more of an incentive to support this measure.
- Workplace Parking Levy – London Councils Executive has considered the introduction of a workplace parking levy as one of many options for funding new infrastructure in the capital. We note that Nottingham City Council has introduced a workplace parking levy which is ring-fenced for extensions to the tram system, the redevelopment of the city railway station and the running of an accessible bus service for residents. The same powers are already available to boroughs. Understandably there could be concern from business about the introduction of such a scheme, and we would encourage learning from the Nottingham scheme, for example issues with the 'cliff-edge' nature of a boundary based charge, with a gradually reducing zonal charge suggested. A number of boroughs voiced their concern with this policy, believing it could have negative impacts on businesses, and therefore employment opportunities.

Q9. How can the Mayor and TfL reduce the number of delivery vehicles on London's roads, especially in congested areas at peak times?

London Councils supports efforts by boroughs and TfL to reduce the number of goods vehicles on London's roads. As well as congestion and air quality impacts, the safety of cyclists and pedestrians is a major factor in this work. London Councils delivers the London Lorry Control Scheme (LLCS), which restricts the movement of heavy goods vehicles over 18 tonnes maximum gross weight, at night and at weekends on specific roads. The controls help drivers and operators of goods vehicles to understand their responsibilities when driving in London. We also support TfL's Freight Operator Recognition Scheme (FORS) in improving vehicle safety.

Boroughs have been active in encouraging businesses to re-time deliveries to take place outside of peak hours where possible, and encouraging the consolidation of deliveries for the 'last mile'. For example, the freight consolidation service in the borough of Hackney and Islington, and the Low Emissions Logistics project being run by Wandsworth, Southwark, Croydon and Lambeth. The Mayor and TfL could help boroughs to establish consolidations schemes. This can help to reduce pollution and congestion, as well as having other benefits. Suppliers have lower costs as a result and have passed these onto the boroughs by way of rebates[6].

In central London, we support greater use of the River Thames for the movement of freight and people, and encourage TfL and the Port of London to facilitate increase usage of the river where appropriate. Additionally, a number of boroughs highlight the need for an increase in the number of parcel drop-off points (especially important in light of post office and delivery office closures). The use of planning powers to require consolidation for new development and /or restrict servicing and deliveries to outside certain times could also be considered.

Behavioural change has been seen as a key driver in reducing congestion. London Councils form part of the Retiming Deliveries Consortium (RDC) and actively engage with the industry to address barriers to delivering goods and services outside of peak hours. Many business do not consider deliveries to be a problem in London at all, mainly because they order their supplies and they arrive with very little problem. There is no connection for them between their own behaviour and the wider issues faced by Londoners. In addition, suppliers offer an increased level of service such as one hour delivery etc. which simply increases congestion but is not really necessary. A communications programme focussed on behavioural change for consumers would help to educate and raise awareness of the overall problem.

[6] London Councils

Q10. To what extent is an increase in minicabs contributing to traffic congestion, and how could this issue be addressed?

London Councils is aware of concerns from boroughs about the number of minicabs (private hire vehicles) operating in London. We support measures to ensure the private hire industry is well-regulated and maintains high standards in driver training and customer care. TfL needs to better understand the demand for private hire vehicles and match this to locations to avoid minicabs and taxis driving around looking for business, which worsens traffic congestion and air pollution.

There has been an increase in the number of minicabs and private hire vehicles in London, but research shows that these mainly operate outside of the CCZ times. Private hire vehicles increased by 12,500 (this equates to the highest relative growth rate among all vehicle types, at 7.68%) between 2012 and 2015[7].

Q11. What contribution can car clubs make to tackling congestion, and how can the Mayor and TfL encourage these?

The promotion of car clubs was identified in the Roads Task Force report in 2013 as one of a number of demand management measures which could reduce overall car dependence by making access to cars more flexible, thereby reducing pressure on road space and encouraging sustainable transport. Car clubs were recognised as a key tool in providing for Londoners' urban mobility needs by offering a realistic and economical alternative to private car ownership. They could play an important role in reducing the need to have a car because they offer an alternative to conventional car use models and can reduce habitual car use while still enabling access to a car for essential journeys. The 2013/14 Carplus Annual Survey calculated that for each round-trip car club vehicle in London, 5.8 cars were removed from the road as a result of car club members selling a car[8]. More data is needed on the effect car clubs that operate all journey types (round trip, floating & fixed one way) have on congestion and car numbers in London. It is also important to note that car clubs will have different impacts in different parts of London, and planning should be done with a local and sub-regional input.

It is important that this expanding market is supported where it is seen to be working, by encouraging the development of both on and off street car club infrastructure. Car clubs could be encouraged through the provision of dedicated parking spaces via section 106 agreements in new developments. Providers need to work with boroughs to increase the network in areas where demand will be greatest to improve the marketing of car clubs, which would require more regular data about usage; that all models of car club are supported by boroughs where they are proven to work in both reducing congestion and minimising model shift away from walking, cycling and public transport.

With the stated commitment of car clubs to delivering 50 per cent ultra-low emission vehicles in their fleet by 2025, it is crucial to ensure that the charging infrastructure is developed to ensure that this is possible, and that car clubs contribute towards cutting air pollution. The Go Ultra Low City Scheme (GULCS) is one such example of funding being used to develop charging infrastructure for car club electric vehicles.

Q12. To what extent could greater efficiency in the provision of bus services help reduce congestion, and how?

We would be cautious of any attempts to reduce London's bus provision. We acknowledge that greater efficiency in the provision of bus services could be achieved with more strategic planning. This requires borough engagement as well as local and sub regional planning, especially for growth areas and areas of poor accessibility. We welcome TfL's current review of bus service provision to the capital's hospitals, and hope that TfL and the Mayor of London will undertake a wider review of bus provision as a consequence of the

[7] London First (2016) London Congestion Trends

[8] Carplus (2014), Annual Survey: London, p25. As only round-trip car clubs operated at the time of the survey, these findings apply to round-trip car clubs.

pedestrianisation of Oxford Street. The outer (and especially southern) boroughs have less public transport provision, and there is scope to grow the bus and tram networks here, whilst more efficient routing in other areas is needed. Whilst buses can contribute to congestion, private car usage is a far greater contributor, and the main focus needs to be to encourage people to swap their car for the bus, to tackle congestion and improve their health. With Crossrail, and other rail terminus and service improvements, the bus network needs to be improved in between these areas, and areas of low penetration should be addressed.

Q13. How can TfL further encourage a shift from private car use to public transport or active travel modes?

This is a crucial part of reducing congestion in London, as London's population grows. With pressure on public transport capacity, improving and expanding the public transport offering and encouraging walking and cycling becomes even more important.

London Councils supports the improved and increased provision of cycle infrastructure, as we believe it is key to encouraging a greater shift to cycling across London, which will have positive impacts on air quality and congestion in the long term. We support Cycle Superhighways, where planned appropriately and believe they can benefit from further development to ensure they maximise their potential to deliver safety. TfL needs to continue to provide the infrastructure (for example bicycle parking spaces) to encourage cycling, as well as information that encourages active travel modes. This could include providing more information at tube and bus stops on walking times between various locations, as well as more signage to the nearest available bike hire site. Improving streetscapes and urban environments to make places more attractive, and therefore encouraging walking is important (for example, by providing more green infrastructure and pedestrianised areas) as well as improve air pollution. The new Mayor's focus on a holistic approach to street design (inclusive, safe and accessible) is welcomed. London Councils supports the objective of encouraging modal shift to more active transport, as well as public transport.

Improved bus and tram reliability and more real-time information whilst waiting for and undertaking a bus or tram journey is important to encourage a shift to bus and tram use. Londoners need to be able to rely on the public transport provided, so more needs to be done to ensure the reliability of bus services, especially in areas where the alternatives are limited (especially in some outer London boroughs). Londoners also want to feel safe, especially at night, when using public transport or walking. The night tube might help reduce private hire vehicle and taxi trips at night, which although not a peak time, could help improve congestion in some areas.

London Councils have been involved with a number of projects on modal shift, for instance the PTP Cycle which is a project co-funded by the Intelligent Energy-Europe Programme granted by the Executive Agency for Small and Medium-sized Enterprises (EASME). PTP aims to influence people's decision making by providing information directly to the individual on sustainable mobility options through a one to one discussion with a PTP Adviser. The resulting information pack is then hand-delivered, leading to a greater likelihood of behaviour change than a one-size-fits-all-approach. A report on the project notes that over two phases 7,193 PTPs were delivered to residents in the London borough of Haringey. In phase 2 the follow-up survey revealed that 16.7% of residents in the project area changed their travel behaviour to a more sustainable mode of travel as a result. This dissemination of information on sustainable alternative modes of transport could be encouraged more.

It is important to bear in mind that this issue isn't just relevant to central London, but can also apply to situations like the 'school run', which is a key cause of congestion at peak times in a number of areas, again more likely to be in boroughs where car use is more heavily relied upon. The STARS (Sustainable Travel Accreditation and Recognition for Schools) will develop a pan-EU accreditation scheme and a peer-to-peer engagement programme to get more children cycling to school in 9 EU cities, including the London Borough of Hackney. The project aims to attain a 5% modal shift from car to bike for journeys to school, and engage over 270 primary and secondary schools across Europe. In the interim review of the projects' first year, it showed that car journeys to primary

schools fell by 10.8 per cent with cycling increasing by 12 per cent. In the secondary schools taking part, the modal shift to 'active modes' (walking and cycling) grew by 6.9 per cent[9].

London as a city has different traffic profiles in different areas and we encourage continued borough engagement by TfL to select the best options for encouraging modal shift. Open sourcing of all transport and travel related information to enable IT / App development is a key action for TfL and the Boroughs.

Q14. Can new road infrastructure help reduce traffic congestion? What specific new infrastructure is required in London?

There are a number of theories which suggest that the best way to reduce congestion is to improve public transport. The move of people onto public transport needs to be done at high levels which ensure that it can be provided affordably. Building additional road capacity often leads to it being consumed by additional demand for road space. But there could be a need for widening and improving certain routes in London to remove pinch-points and bottle necks and ensure a safer and more effective traffic flow. There are also strong arguments for the provision of new and improved river crossings in east London to significantly improve connections between areas north and south of the river, supporting jobs and business growth. London Councils supports this in principle and has been doing so for some time, but any proposal would be judged on its merits. We strongly support the feasibility work TfL is undertaking to explore river crossings in the east of London. Whilst road crossings are important to improve the resilience of the south east London road network, we believe they must incorporate safe and viable walking and cycling crossing options. Bus routes should also be scheduled to use the crossings and we support TfL in exploring the inclusion of public transport options.

In areas of major regeneration and growth opportunity, key transport links, such as the A13 trunk road, a focus on better design and on improved resilience measures must be ensured as part of a wider package of investment.

Q15. To what extent is there a risk of new roads encouraging more people to drive? How can this risk be avoided?

There is strong evidence that new road links can induce trips onto the network meaning that any congestion relief provided by such roads can be short-lived. Development projects could provide opportunities for new and adequate provision of cycling and walking infrastructure, and freight consolidation. Where new roads are the appropriate solution, design aspects could help ease congestion issues and discourage the use of cars, rather than provide more road capacity. Issues such as freight consolidation and deliveries to residential addresses should be 'designed-in' from the beginning.

Q16. How should new road infrastructure be funded?

Funding infrastructure is important for London to accommodate its population growth. Sources of funding should be a mixture of government, TfL, borough, developer contributions, and business contributions. We encourage the exploration of other options to create new ring-fenced funding streams such as the workplace parking levies and road-charging, for example.

The road maintenance budget for councils is inadequate. Only 5 per cent of the road network in London is managed and overseen by TfL, whereas the overwhelming majority of the road network, 95 per cent, is managed by the London boroughs. Funding for London's highway authorities does not fully recognise its population and the fact that on average roads are 40 per cent more densely trafficked than in other UK conurbations. Resultant congestion not only causes disproportionate damage to the capital's road network, but has a negative impact on the economy and environment. London Councils has asked that the government takes account of these factors when allocating road maintenance funds to London in future Spending Reviews.

[9] STARS (2015) Interim Review (Monitoring and Evaluation Report for 2013-14)

Theoretically, there is potential for road-tolling to cover new road infrastructure, but any such proposals would need to be laid out in detail to be considered, and planned at a pan-London level to avoid inequalities in travel costs to London residents.

Q17. 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 has been highlighted as a successful means of reducing roadworks, and creating income. At the moment, lane rental is only in operation on a small proportion of roads, the Transport for London Road Network (TLRN). The lane rental scheme was introduced on the TLRN in 2012 and currently applies to 56% of the TfL road network. London Councils believes that this has been effective in managing road-space and ensuring that necessary works are undertaking in a timely manner whilst reducing highway occupation and minimising congestion. These measures would be made more effective by rolling them out across London so that borough roads (which account for 95% of the roads in London) can also utilise this proven control. Not only does this reduce congestion, it also provided revenue which can be used to improve the road network. London Councils urges DfT to allow the extension of Lane Rental to further traffic-sensitive locations at the most traffic-sensitive times of day across the whole of Greater London i.e. allow schemes to be developed for the most important borough roads too, and would appreciate the future assistance of GLA and TfL in exerting more pressure on DfT to do this. The legislative powers for boroughs to do this already exist but authorities require DfT approval to operate a Lane Rental scheme. DfT have only approved two pilot schemes so far, TfL and Kent CC. They have committed to review the results of both schemes as well as the impact on utility companies before approving further schemes. Any DfT response or debate from Ministers whether they will consider further schemes should be carefully considered. More benefit could also be delivered if the rules around spending Lane Rental income were relaxed a little. Authorities should also be able to challenge the duration of works at any time.

There is a need to ensure all key stakeholders engage with each other to improve works coordination. For example, boroughs, TfL, utilities and developers could work together more transparently to provide more effective information sharing to ensure roadworks cause as little impact as possible. As mentioned above, lane rental has been deemed a success and it would be interesting to learn whether an extension of this to borough roads would be welcomed by the boroughs themselves.

Q18. What effect has the additional space provided for cycling and pedestrian infrastructure had on congestion?

While no data is available to assess the effect of recent cycling and pedestrian infrastructure improvements on congestion, TfL's most recent monitoring report on the effectiveness of the Congestion Charge (dated July 2008) states that some of the benefits realised from the Congestion Charge was offset by reduced road space following improvements to pedestrian and cycling infrastructure, such as the remodelling of Trafalgar Square[10]. Also anecdotally, there is general agreement that the increase in cycling infrastructure on the highway has had a negative impact on congestion as in many areas the existing limited space is shared. There is an expectation of this in the short term, but that in the medium to long term it will improve as hopefully more people move from private vehicles to cycling.

Q19. 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?

There could be an opportunity to provide more detailed traffic alerts, and use of smart motorway technology – providing useful, up-to-date, information on traffic to drivers, enabling them to make better decisions. The technologies used on smart motorways are a mixture of message signs and signals, CCTV, vehicle detection and

[10] Transport for London, 2008, Congestion Charge impacts monitoring – sixth annual report, released July 2008

variable mandatory speed limit enforcement. Some of these could be used on London's major roads, where appropriate, to help provide up-to-date information to drivers, helping them make better decisions when planning, or during, a journey. We support the trialling of the use of technologies to improve journey experiences across London's roads. Open sourcing this information will enable the private sector to develop standalone solutions or integrate this information with their own transport planning activity.

Demand Management measures, such as integrated urban mobility (use of multi-modal, public and private transport solutions), will be an important component in reducing the number of non-essential car journeys made on London's roads in a way that is attractive to Londoners. Such measures should take into account public transport accessibility, urban landscapes and social exclusion to ensure they are as effective for as wide an audience as possible.

Boroughs and TfL need to understand how they can influence the Mobility as a Service (MaaS) solutions that are being developed.

Q20. How effective has the Road and Transport Enforcement team been in tackling congestion?

It is important to highlight the importance that traffic enforcement teams play in reducing congestion. Good compliance comes with effective enforcement**.** London boroughs also manage congestion by having effective parking and traffic enforcement regimes. Parking policies, provision and enforcement are largely designed to reduce congestion by ensuring that permitted parking bays are available in areas where parking demand is high, and reduce 'illegal' parking which has a negative effect on congestion and traffic flow. The majority of boroughs in London (27 out of 33) undertake bus lane enforcement which is critical in reducing congestion and ensuring that buses can run to schedule. This has added importance in encouraging the use of public transport (thus reducing car use) if people feel confident in the network. 28 out of the 33 boroughs also enforce moving traffic contraventions. As well as being safety critical, moving traffic contraventions on box junctions, for example, also ensure smooth traffic flow and reduced congestion.

It is also crucial that there is alignment and coordination between TfL and borough enforcement.

Although there is no data to show the effectiveness of the team, before TfL was created in 1999/2000 it is understood that management of the strategic roads across London was limited in number and scope. The immediate implementation of the Red Route Network with its greater controls on parking, loading and waiting had a sea change effect on the capacity management of these roads. It has been suggested that this indicates that it may be beneficial for boroughs to be given similar powers to improve their control over their Strategic Roads.

Additional Information

Alternative working models

Places of employment, private or public sector, should look into the possibility for alternative working models to be adopted at their organisations. Organisations that implement innovative alternative working policies should be supported by the Mayor. Encouraging flexi-working could also be a potential contributor to reducing congestion, allowing staff flexible working hours outside of the usual working weekday. Another example is the need for employers to have access to improved 'superfast' broadband connections and the associated infrastructure, so that workplaces can provide 'virtual meeting' technologies confidently. These types of facilities could encourage organisations to allow their staff to work from home more often, knowing they have the necessary ability to work with no reduced productivity.