

AGENDA

Meeting Transport Committee

Date Thursday 2 February 2017

Time 10.00 am

Place Chamber, City Hall, The Queen's Walk, London, SE1 2AA

Copies of the reports and any attachments may be found at www.london.gov.uk/mayor-assembly/london-assembly/transport

Most meetings of the London Assembly and its Committees are webcast live at www.london.gov.uk/mayor-assembly/london-assembly/webcasts where you can also view past meetings.

Members of the Committee

Caroline Pidgeon MBE AM (Chair)
Keith Prince AM (Deputy Chairman)
Kemi Badenoch AM
Tom Copley AM
Florence Eshalomi AM

David Kurten AM
Joanne McCartney AM
Steve O'Connell AM
Caroline Russell AM
Navin Shah AM

A meeting of the Committee has been called by the Chair of the Committee to deal with the business listed below.

Mark Roberts, Executive Director of Secretariat
Wednesday 25 January 2017

Further Information

If you have questions, would like further information about the meeting or require special facilities please contact: Vishal Seegoolam, Principal Committee Manager; Telephone: 020 7983 4425; Email: vishal.seegoolam@london.gov.uk; Minicom: 020 7983 4458

For media enquiries please contact Alison Bell; Telephone: 020 7983 4228; Email: alison.bell@london.gov.uk. If you have any questions about individual items please contact the author whose details are at the end of the report.

This meeting will be open to the public, except for where exempt information is being discussed as noted on the agenda. A guide for the press and public on attending and reporting meetings of local government bodies, including the use of film, photography, social media and other means is available at www.london.gov.uk/sites/default/files/Openness-in-Meetings.pdf.

There is access for disabled people, and induction loops are available. There is limited underground parking for orange and blue badge holders, which will be allocated on a first-come first-served basis. Please contact Facilities Management on 020 7983 4750 in advance if you require a parking space or further information.

If you, or someone you know, needs a copy of the agenda, minutes or reports in large print or Braille, audio, or in another language, then please call us on 020 7983 4100 or email assembly.translations@london.gov.uk.

Si usted, o algùn conocido desea recibir una copia del order del dia, acta o informe en Braille o en su propio idioma, y gratis, no dude en ponerse en contacto con nosotros llamando al teléfano 020 7983 4100 o por correo electrónico: assembly.translations@london.gov.uk.

Se você, ou algûem que conheça precisa uma cõpia da ordem do dia, anotações ou relatorios em prensa grande ou Braille, ou em outra lingu, então por favour nos telephone em 020 7983 4100 ou e-mail assembly.translations@london.gov.uk.

Haddii ama ama qof aad taqaanid, uu ugu baahan yahay koobiga ajendhada, haddaladii ama warbixinta in far waaweyn loogu qoro ama farta qofka indoolaha akhrin karo, amaba luuqad kale, fadlan naga soo wac telefoonkan 020 7983 4100 ama email assembly.translations@london.gov.uk.

Ta ba ri eniken ti o ba ni ife ni eda ewe nla ti igbimo awon asoju tabi papa julo ni ede ti abinibi won, ki o kansiya lori ero ibanisoro. Nomba wa ni 020 7983 4100 tabi ki e kan si wa lori ero assembly.translations@london.gov.uk.

જો તમને અથવા તમે જાણતાં હો તેવી કોઈ વ્યક્તિને એજન્ડા (કાર્યસૂચિ), મિનિટ્સ (ટૂંકી નોંધો) અથવા રિપોર્ટ્સ (અહેવાલો)ની નકલ મોટા અક્ષરોમાં છપાયેલી કે બ્રેઈલમાં અથવા બીજી કોઈ ભાષામાં જોઈતી હોય, તો કૃપા કરીને 020 7983 4100 ઉપર ફોન અથવા assembly.translations@london.gov.uk ઉપર અમને ઈ-મેઈલ કરો.

আপনি বা আপনার পরিচিত কেউ যদি এজেন্ডা, মিনিট বা রিপোর্টের একটি কপি বড় ছাপা বা ব্রেইল অথবা অন্য কোন ভাষায় পেতে চান তবে দয়া করে আমাদেরকে 020 7983 4100 এ নাম্বারে ফোন করুন বা assembly.translations@london.gov.uk এ ই-মেইলে যোগাযোগ করুন।

ਜੇ ਤੁਹਾਨੂੰ ਜਾਂ ਤੁਹਾਡੇ ਵਾਕਫ਼ ਕਿਸੇ ਹੋਰ ਵਿਅਕਤੀ ਨੂੰ, ਏਜੰਡੇ, ਮੀਟਿੰਗ ਦੀ ਕਾਰਵਾਈ ਜਾਂ ਰਿਪੋਰਟਾਂ ਦੀ ਕਾਪੀ, ਵੱਡੇ ਅੱਖਰਾਂ ਵਿੱਚ ਛਪਾਈ ਜਾਂ ਬਰੇਲ ਦੇ ਰੂਪ ਵਿੱਚ ਜਾਂ ਕਿਸੇ ਹੋਰ ਬੋਲੀ ਵਿੱਚ ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ 020 7983 4100 'ਤੇ ਟੈਲੀਫ਼ੋਨ ਕਰੋ ਜਾਂ ਇਸ ਪਤੇ 'ਤੇ ਈਮੇਲ ਕਰੋ : assembly.translations@london.gov.uk

اگر آپ یا آپ کے جاننے والے کسی فرد کو اس ایجنڈا کی کاپی، تفصیل یا رپورٹیں بڑے پرنٹ یا بریل یا کسی دوسری زبان میں درکار ہوں تو براہ کرم ہمیں 020 7983 4100 پر فون کیجئے یا درج ذیل ای میل پر رابطہ کیجئے assembly.translations@london.gov.uk



Certificate Number: FS 80233

Agenda
Transport Committee
Thursday 2 February 2017

1 Apologies for Absence and Chair's Announcements

To receive any apologies for absence and any announcements from the Chair.

2 Declarations of Interests (Pages 1 - 4)

The Committee is recommended to:

- (a) Note the offices held by Assembly Members, as set out in the table at Agenda Item 2, as disclosable pecuniary interests;**
- (b) Note the declaration by any Member(s) of any disclosable pecuniary interests in specific items listed on the agenda and the necessary action taken by the Member(s) regarding withdrawal following such declaration(s); and**
- (c) Note the declaration by any Member(s) of any other interests deemed to be relevant (including any interests arising from gifts and hospitality received which are not at the time of the meeting reflected on the Authority's register of gifts and hospitality, and noting also the advice from the GLA's Monitoring Officer set out at Agenda Item 2) and to note any necessary action taken by the Member(s) following such declaration(s).**

3 Minutes (Pages 5 - 48)

The Committee is recommended to confirm the minutes of the meeting of the Transport Committee held on 11 January 2017 to be signed by the Chair as a correct record.

The appendices to the minutes set out on pages 9 to 47 are attached for Members and officers only but are available from the following area of the GLA's website:

www.london.gov.uk/mayor-assembly/london-assembly/transport

4 Summary List of Actions (Pages 49 - 52)

Report of the Executive Director of Secretariat
Contact Vishal Seegoolam, vishal.seegoolam@london.gov.uk, 020 7983 4425

The Committee is recommended to note the completed and outstanding actions arising from previous meetings of the Committee.

5 Action Taken Under Delegated Authority (Pages 53 - 58)

Report of the Executive Director of Secretariat

Contact: Vishal Seegoolam; vishal.seegoolam@london.gov.uk; 020 7983 4425

The Committee is recommended to note the action taken by the Chair under delegated Authority, namely to agree a letter to the Department for Transport about surface transport access to Heathrow Airport.

6 Bus Safety (Pages 59 - 62)

Report of the Executive Director of Secretariat

Contact: Georgie Wells, scrutiny@london.gov.uk, 020 7983 4000

The Committee is recommended to note the report, put questions on bus safety to the invited guests and note the discussion.

7 Traffic Congestion (Pages 63 - 132)

Report of the Executive Director of Secretariat

Contact: Richard Berry, scrutiny@london.gov.uk, 020 7983 4000

The Committee is recommended to note its report, *London stalling: Reducing traffic congestion in London*, as agreed by the Chair under delegated authority in consultation with party Group Lead Members.

8 Transport Committee Work Programme (Pages 133 - 142)

Report of the Executive Director of Secretariat

Contact: Richard Berry, scrutiny@london.gov.uk, 020 7983 4000

The Committee is recommended to:

- (a) Agree its work programme for the remainder for the 2016/17 Assembly Year, including the schedule of topics for forthcoming meetings set out at paragraph 4.11; and**
- (b) Agree to hold an additional meeting on Wednesday 19 April 2017 at 2pm, with the main purpose being a discussion with the Mayor's new Cycling and Walking Commissioner; and**
- (c) Notes the record of its site visits to (a) the Dearman Technology Centre and (b) the High Speed One service at St. Pancras station, as included at Appendices 1 and 2.**

9 Date of Next Meeting

The next meeting of the Committee is scheduled for Thursday 2 March 2017 at 10.00am in the Chamber, City Hall.

10 Any Other Business the Chair Considers Urgent

This page is intentionally left blank

Subject: Declarations of Interests

Report to: Transport Committee

Report of: Executive Director of Secretariat

Date: 2 February 2017

This report will be considered in public

1. Summary

- 1.1 This report sets out details of offices held by Assembly Members for noting as disclosable pecuniary interests and requires additional relevant declarations relating to disclosable pecuniary interests, and gifts and hospitality to be made.

2. Recommendations

- 2.1 **That the list of offices held by Assembly Members, as set out in the table below, be noted as disclosable pecuniary interests¹;**
- 2.2 **That the declaration by any Member(s) of any disclosable pecuniary interests in specific items listed on the agenda and the necessary action taken by the Member(s) regarding withdrawal following such declaration(s) be noted; and**
- 2.3 **That the declaration by any Member(s) of any other interests deemed to be relevant (including any interests arising from gifts and hospitality received which are not at the time of the meeting reflected on the Authority's register of gifts and hospitality, and noting also the advice from the GLA's Monitoring Officer set out at below) and any necessary action taken by the Member(s) following such declaration(s) be noted.**

3. Issues for Consideration

- 3.1 Relevant offices held by Assembly Members are listed in the table overleaf:

¹ The Monitoring Officer advises that: Paragraph 10 of the Code of Conduct will only preclude a Member from participating in any matter to be considered or being considered at, for example, a meeting of the Assembly, where the Member has a direct Disclosable Pecuniary Interest in that particular matter. The effect of this is that the 'matter to be considered, or being considered' must be about the Member's interest. So, by way of example, if an Assembly Member is also a councillor of London Borough X, that Assembly Member will be precluded from participating in an Assembly meeting where the Assembly is to consider a matter about the Member's role / employment as a councillor of London Borough X; the Member will not be precluded from participating in a meeting where the Assembly is to consider a matter about an activity or decision of London Borough X.

Member	Interest
Tony Arbour AM	Member, LFEPA; Member, LB Richmond
Jennette Arnold OBE AM	Committee of the Regions
Gareth Bacon AM	Member, LFEPA; Member, LB Bexley
Kemi Badenoch AM	
Shaun Bailey AM	
Sian Berry AM	Member, LB Camden
Andrew Boff AM	Congress of Local and Regional Authorities (Council of Europe)
Leonie Cooper AM	Member, LFEPA; Member, LB Wandsworth
Tom Copley AM	
Unmesh Desai AM	Member, LB Newham
Tony Devenish AM	Member, City of Westminster
Andrew Dismore AM	Member, LFEPA
Len Duvall AM	
Florence Eshalomi AM	Member, LFEPA; Member, LB Lambeth
Nicky Gavron AM	
David Kurten AM	Member, LFEPA
Joanne McCartney AM	Deputy Mayor
Steve O'Connell AM	Member, LB Croydon
Caroline Pidgeon MBE AM	
Keith Prince AM	Member, LB Redbridge
Caroline Russell AM	Member, LFEPA; Member, LB Islington
Dr Onkar Sahota AM	
Navin Shah AM	
Fiona Twycross AM	Chair, LFEPA; Chair of the London Local Resilience Forum
Peter Whittle AM	

[Note: LB - London Borough; LFEPA - London Fire and Emergency Planning Authority. The appointments to LFEPA reflected above take effect as from 17 June 2016.]

3.2 Paragraph 10 of the GLA's Code of Conduct, which reflects the relevant provisions of the Localism Act 2011, provides that:

- where an Assembly Member has a Disclosable Pecuniary Interest in any matter to be considered or being considered or at
 - (i) a meeting of the Assembly and any of its committees or sub-committees; or
 - (ii) any formal meeting held by the Mayor in connection with the exercise of the Authority's functions
- they must disclose that interest to the meeting (or, if it is a sensitive interest, disclose the fact that they have a sensitive interest to the meeting); and
- must not (i) participate, or participate any further, in any discussion of the matter at the meeting; or (ii) participate in any vote, or further vote, taken on the matter at the meeting

UNLESS

- they have obtained a dispensation from the GLA's Monitoring Officer (in accordance with section 2 of the Procedure for registration and declarations of interests, gifts and hospitality – Appendix 5 to the Code).

3.3 Failure to comply with the above requirements, without reasonable excuse, is a criminal offence; as is knowingly or recklessly providing information about your interests that is false or misleading.

- 3.4 In addition, the Monitoring Officer has advised Assembly Members to continue to apply the test that was previously applied to help determine whether a pecuniary / prejudicial interest was arising - namely, that Members rely on a reasonable estimation of whether a member of the public, with knowledge of the relevant facts, could, with justification, regard the matter as so significant that it would be likely to prejudice the Member's judgement of the public interest.
- 3.5 Members should then exercise their judgement as to whether or not, in view of their interests and the interests of others close to them, they should participate in any given discussions and/or decisions business of within and by the GLA. It remains the responsibility of individual Members to make further declarations about their actual or apparent interests at formal meetings noting also that a Member's failure to disclose relevant interest(s) has become a potential criminal offence.
- 3.6 Members are also required, where considering a matter which relates to or is likely to affect a person from whom they have received a gift or hospitality with an estimated value of at least £25 within the previous three years or from the date of election to the London Assembly, whichever is the later, to disclose the existence and nature of that interest at any meeting of the Authority which they attend at which that business is considered.
- 3.7 The obligation to declare any gift or hospitality at a meeting is discharged, subject to the proviso set out below, by registering gifts and hospitality received on the Authority's on-line database. The on-line database may be viewed here:
<http://www.london.gov.uk/mayor-assembly/gifts-and-hospitality>.
- 3.8 If any gift or hospitality received by a Member is not set out on the on-line database at the time of the meeting, and under consideration is a matter which relates to or is likely to affect a person from whom a Member has received a gift or hospitality with an estimated value of at least £25, Members are asked to disclose these at the meeting, either at the declarations of interest agenda item or when the interest becomes apparent.
- 3.9 It is for Members to decide, in light of the particular circumstances, whether their receipt of a gift or hospitality, could, on a reasonable estimation of a member of the public with knowledge of the relevant facts, with justification, be regarded as so significant that it would be likely to prejudice the Member's judgement of the public interest. Where receipt of a gift or hospitality could be so regarded, the Member must exercise their judgement as to whether or not, they should participate in any given discussions and/or decisions business of within and by the GLA.

4. Legal Implications

- 4.1 The legal implications are as set out in the body of this report.

5. Financial Implications

- 5.1 There are no financial implications arising directly from this report.

Local Government (Access to Information) Act 1985	
List of Background Papers: None	
Contact Officer:	Vishal Seegoolam, Principal Committee Manager
Telephone:	020 7983 4425
E-mail:	vishal.seegoolam@london.gov.uk

This page is intentionally left blank

MINUTES

Meeting: Transport Committee

Date: Wednesday 11 January 2017

Time: 10.00 am

Place: Chamber, City Hall, The Queen's Walk, London, SE1 2AA

Copies of the minutes may be found at:

www.london.gov.uk/mayor-assembly/london-assembly/transport

Present:

Keith Prince AM (Deputy Chairman)

Florence Eshalomi AM

David Kurten AM

Joanne McCartney AM

Steve O'Connell AM

Caroline Russell AM

Navin Shah AM

1 Apologies for Absence and Chair's Announcements (Item 1)

- 1.1 Apologies for absence were received from the Chair, Caroline Pidgeon MBE AM and from Kemi Badenoch AM.

2 Declarations of Interests (Item 2)

2.1 Resolved:

That the list of offices held by Assembly Members, as set out in the table at Agenda Item 2, be noted as disclosable pecuniary interests.

3 Minutes (Item 3)

3.1 Resolved:

That the minutes of the meeting of the Transport Committee held on 8 December 2016 be signed by the Deputy Chairman as a correct record.

4 Summary List of Actions (Item 4)

4.1 The Committee received the report of the Executive Director of Secretariat.

4.2 Resolved:

That the completed and outstanding actions arising from previous meetings of the Committee be noted.

5 Action Taken Under Delegated Authority (Item 5)

5.1 The Committee received the report of the Executive Director of Secretariat.

5.2 Resolved:

That the action taken by the Chair under delegated authority be noted, namely to agree:

- **The scope and terms of reference for investigations into bus network design and bus safety; and**
- **A letter to the Prime Minister in support of the Mayor's proposals for devolution of rail services to Transport for London.**

6 Bus Network (Item 6)

6.1 The Committee received the report of the Executive Director of Secretariat as background to putting questions on Bus Networks to the following invited guests:

- Leon Daniels, Managing Director, Surface Transport, Transport for London (TfL);
- Gareth Powell, Director of Strategy and Service Development, TfL;
- Dr Ronghui Liu, Associate Professor, Institute for Transport Studies, Leeds University;
- Katharina Winbeck, Head of Transport, Environment and Infrastructure, London Councils;

**Greater London Authority
Transport Committee
Wednesday 11 January 2017**

- Bob Scowen, Managing Director, Arriva London;
- Peter Batty, Commercial Director, Arriva London; and
- Tim Pharoah, Independent Transport and Urban Planning Consultant.

6.2 A transcript of the discussion on Bus Networks is attached at **Appendix 1**.

6.3 During the course of the discussion, the Deputy Chairman welcomed to the public gallery pupils and staff from Fullwood Primary School in Redbridge.

6.4 During the course of the discussion, the Committee requested the following further information, in writing, from Leon Daniels:

- A breakdown of the bus routes which had seen the biggest fall in passenger numbers;
- Details of the arrangements being investigated and proposed improvements to the plans at Archway; and
- A breakdown of the figures for bus passenger numbers for outer, central and inner London.

6.5 **Resolved:**

That the report and discussion be noted.

7 Transport Committee Work Programme (Item 7)

7.1 The Committee received the report of the Executive Director of Secretariat.

7.2 **Resolved:**

- (a) That the work programme for 2016/17 be noted; and**
- (b) That authority be delegated to the Chair, in consultation with party Group Lead Members, to write to the Department for Transport about surface transport access to Heathrow Airport.**

8 Date of Next Meeting (Item 8)

8.1 The next meeting of the Committee was scheduled for Thursday 2 February 2017 at 10.00am, in the Chamber, City Hall.

9 Any Other Business the Chair Considers Urgent (Item 9)

9.1 There was no other business.

10 Close of Meeting

10.1 The meeting ended at 12.43pm.

Chair

Date

Contact Officer: Vishal Seegoolam, Principal Committee Manager; Telephone: 020 7983 4425;
Email: vishal.seegoolam@london.gov.uk; Minicom: 020 7983 4458

Transport Committee – 11 January 2017**Transcript of Agenda Item 6 – London's Bus Network**

Keith Prince AM (Deputy Chairman in the Chair): Our main discussion today will be with the invited guests from the bus network. I would like to welcome our guests. First of all Leon Daniels, Managing Director of Surface Transport, TfL; Gareth Powell, Director of Strategy and Contracted Services, Transport for London (TfL); Dr Ronghui Liu, Associate Professor, Institute of Transport Studies, Leeds University - I hope you had a good journey down; Katharina Winbeck, Head of Transport, Environment & Infrastructure, London Councils; Bob Scowen, Managing Director, Arriva London; Peter Batty, Commercial Director, Arriva London; and Tim Pharoah, independent transport planning consultant. Welcome.

If I can just start - I will open the batting, as they say - in light of the recent deterioration in bus service performance and fall in passenger numbers, is London's bus network still fit for purpose?

Leon Daniels (Managing Director, Surface Transport, TfL): I would be very pleased to start that discussion.

The first thing to say, which I hope is useful context for members of the panel, is just to remind ourselves that the bus network in London runs at a deficit currently of about £600 million a year. That is the difference between the revenue received and the cost of the operation. The reason for that deficit is that successive Mayors have had as a matter of policy to have a comprehensive bus service running across the network across Greater London to and from places just over the boundary, where everybody should be within 400 metres of their nearest bus stop, to run that service all day - and, if possible, all night where there is demand - and to do so at a cheap fare. Successive Mayors have in one form or another had this as a policy because they believe that this provides mobility for all members of society, people going to and from work, going to and from school and further education and people looking for work. I am reminded that more than half the passengers on our night bus network are travelling to or from work. The price of that, of course, is that a combination of affordable fares and a comprehensive service means that it runs at a deficit.

I raise it with the Committee because you will imagine that my postbag is full from members of the public as well as from Assembly Members asking for more bus service, either more volume, services to new places, longer operating hours, higher frequencies and so on. The position of course is that, since it runs at a deficit, any further expansion of the network in terms of extent or volume makes the deficit worse. As part of the business plan, which has now been approved by the TfL board, we are working very hard to hold on to the volume of the deficit and not to increase it because that deficit gets paid only in two ways: either from fare-payers or from taxpayers, and the business plan is seeking to hold on to that.

The second thing to say is that it is not possible to provide a direct bus service from everywhere that everybody wants to start from to everywhere that everybody wants to go to. In terms of the way bus services in London are planned, we think not in terms of the number on the front of the bus, which tells the passengers where it goes, but we think in terms of the volume of passengers travelling between places. Basically, we think in terms of corridors and we think in terms of the volume on those corridors. Of course, using origin and destination information, we are trying to make it possible for people to travel as seamlessly as possible, which does not

always mean on a direct service. In general, what our planning does is to look at the volume that is demanded on corridors, look at the volume that we provide and subtract one from the other. Where that demand is overprovided, we look to trim the services back. Where that volume is underprovided, we look to increase it. As you can tell from what I said earlier, there is a little bit of taking from one and giving to another to hold the overall volume in balance. Only very much later in the discussions and in the planning do we seek to work out which of our bus services we might change to do that. We are thinking blind, away from bus route numbers. We are thinking about the volume of passengers we can carry on particular corridors, directly and indirectly and, when we look to change those later in the discussions, we think about which services we might amend, change the frequencies, reroute and so on. Our planning is all around journeys; our planning is not around the number that we put on the front of the buses to explain to passengers where they go. A lot of people, as you might imagine, write and say, "Why not extend the 99 bus to somewhere else?" In our minds, we are thinking about how many people want to go to that place and how most economically we can serve it.

Our biggest challenge, clearly, now is that after a very long period of volume growth on bus services, we have seen some reductions. We are pretty certain that the reduction in bus ridership is for a combination of both good and bad reasons. Some people have moved to walking and cycling, which is a good thing for people to do. Some people have moved to improved rail services in and around the Overground and in and around where the Underground is now running. There are 32 to 34 trains per hour at places like Finchley Road, which mirrors the Jubilee line, and a big movement of people from buses to the Jubilee line.

Some of the reasons why people have left the bus service are bad reasons. The principal reason why people are not travelling is because journey speeds have become worse over time. No matter how frequent and no matter how reliable the bus service is – and bus service reliability is still very good – there does come a point where, frankly, it is quicker to walk. Whilst walking and indeed cycling are good things to do, if the cumulative effect of this is a significant reduction in bus fare revenue, then that impairs our ability to further improve the service going forward. We will hear during the course of this morning, I am sure, about some of our more detailed plans, some of which are already out to consultation.

The final thing to say in this area in terms of bus ridership is to say that bus ridership anywhere in the world is easily lost if the service becomes unattractive. Even if we could just turn the clock back a year or two, we would not automatically get back all of the passengers who have decided to make a change. We will, as part of our plans going forward, have to take some measures to encourage people to come back to buses, which not only will include marketing and information but may well include improvements to the offering itself such as air conditioning, the ambience, Wi-Fi, all sorts of things that you might do to attract people back to buses in a way that we have not had to do in the past because we had been growing strongly anyway.

I have just one other thing to say in respect of bus volumes, which is to say that not only as part of these discussions do we have to see where the bus sits alongside walking, cycling and other forms of travel, but that we have to also look forward in terms of technology. People increasingly are using smartphones to improve their personal mobility. They are using them for journey planning and using them for finding ways to get about. Also, with the proliferation of private hire vehicles in London, which is now almost double what it was six years ago, people are using their smartphones to order personal transport or shared transport to make their journeys. We have to come to a view as to what the right balance and what the right offering should be for buses in the future, taking into account what people are trying to do.

The bus remains the most efficient user of road space in our city. It carries 57% of the users and takes up only 11% of the road space. The bus remains a very efficient form of transport for people in a crowded city. It is

very much the Mayor's policy and it is very much of course, therefore, our policy to encourage bus usage and encourage bus ridership by any means that we can. I hope that kicks things off.

Keith Prince AM (Deputy Chairman in the Chair): Thank you for that brief explanation. Could I invite anyone else who would like to speak on whether we feel that London's bus network is still fit for purpose? Would anyone else like to comment on that at all at this point?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): I understand very much what Leon [Daniels] just said and I also appreciate that we cannot just include more bus lanes where lots of people would like to see them because of cost reasons. We absolutely get that at London Councils and I just want to make that clear.

A lot of our members do get a lot of those questions asking why they cannot have an extended bus service, longer hours, slightly different routes and so forth. Just having that really close working relationship with boroughs is very important to make sure that the bus network continues to be responsive to changing needs, which are changing across London. We have lots of development happening and lots of opportunity areas and intensification areas. It is really important that that bus network also reflects those changes.

What is very important also to remember is that the bus network is one of the most accessible in London and so it is really important for many more vulnerable users in London. They rely on the bus network to get about. Again, particularly around areas like hospitals, it is really important that the bus network is reflective of that and the changes that hospitals are facing. I know TfL is looking into that and we have input into that as well.

Another issue that needs to be high up on the agenda - and I have noted that certainly the current Mayor is doing that more and more - is air quality. Buses do contribute to the air pollution problem, which in the planning of the bus network should be a real factor when it is planned to make sure that those areas that have poor air quality get cleaner buses. I know that we have ambitions to have clean buses across all of London and we fully support that and we want that to happen, but we also realise there has to be some prioritisation. It is really important that that happens.

Another issue to note is that buses remain one of the most affordable public transport modes as well. I am very aware that particularly passengers in outer London choose buses, although they take a lot more time and particularly in recent years, over the train network or the Tube network because it is cheaper. We should not forget that. Those people are on very tight budgets and there are quite a few of them. They are moving to outer London areas and the poverty profile of London is changing to outer London. We should not forget that and we need to make sure that we deliver services for those people as well.

In terms of getting passengers back into the bus services, some of the passenger information will probably help that, too. Leon [Daniels], you mentioned a couple of things, but for passenger information we seem to now rely on people using their smartphones. Not everybody has the ability to do that and so we need to be aware of it and make sure that that happens as well.

Tim Pharoah (Independent Transport Planning Consultant): Good morning. I would like to preface anything I say this morning with an acknowledgement that the London bus system is one of the best in the world. In that sense it is fit for purpose, but it is a broad question and maybe we can incorporate other aspects.

It does seem to me that we went through a golden period in the noughties following the introduction of the Congestion Charge in particular when, all of a sudden, London got it in terms of where the bus service should be headed. That produced enormous improvements in services. I remember campaigning about the state of the buses back in the 1970s and the current service bears no relationship at all to what Londoners suffered at that time. Fantastic strides were made: an enormous increase in passenger numbers, improvements in reliability and all that we have heard.

However, it does seem to me now that we probably have reached a threshold where a new traffic limitation initiative is needed to get the next step of improvement. I will not go into what sort of improvement – I am sure that that will be discussed – but it does seem to me that the buses, despite their efficient use of road space, are operating within a system which by and large they do not control; the width of the road, essentially, and the amount of other traffic that presents itself on the road at the same time. It does seem to me that London could benefit from a major further traffic limitation initiative, whether it is an extension of the Congestion Charge zone, whether it is a different kind of charging, whether it is some kind of regulation of private hire vehicles or whatever it might be. That is for others to consider, but the alternative might be facing yet another period of decline as buses suffer from deteriorating road conditions.

Dr Ronghui Liu (Associate Professor, Institute of Transport Studies, Leeds University): Good morning. It's interesting to hear Leon's [Daniels] summary of the current issues with the London bus network. I would just like to perhaps pick up a couple of the points Leon mentioned.

One is to do with the network and the bus network design. I understand we will be discussing that issue in more detail later, but I would just like to add here that I am very excited to hear that TfL sees the need to redesign its network, particularly talking about a different layer, the trunk, the corridor bus network. I would just like to add, perhaps one design in the network that they could consider are different layers of different functions: the trunk roads serving the main corridor routes, perhaps long distance, more direct routes, whereas more local feeder types of bus services serving more local areas. On the network design issue, maybe we will come back to that later.

Another point I would just like to pick up from the discussion earlier is to do with the reduction of passengers and the desire to get those passengers back and increase passenger numbers. The various studies have shown that, depending whether they are existing bus users or not existing bus users, their desire for the bus service is quite different. For example, existing bus users want better reliability and more frequent services way above anything else; whereas for people who have not been using bus services before, what they want is better information – they need to know what services they can get and where to get them – and they want better interchange and bus stop facilities. It might be useful to consider also the issue of increasing bus passenger numbers. You want to attract a combination of existing bus passengers and new users to the system.

Keith Prince AM (Deputy Chairman in the Chair): Just to come back to you, Mr Daniels, if I may, your comprehensive first answer covered a lot of the points, but could you just confirm the extent to which the recent TfL business plan supports the forecast growth – as we know, there is a decrease at the moment – and whether the £200 million for bus priority measures will be enough to deliver significant improvements in journey reliability?

Leon Daniels (Managing Director, Surface Transport, TfL): I would be happy just to further clarify. Of course, the principal areas where ridership is falling are in those areas where road speeds have become worse. In fact, passenger ridership in some areas of London, particularly in outer London, continues to grow very strongly. The overall picture you see is a deep average. As a generalisation, in the centre of London traffic

speeds are worse and bus ridership is down, and in outer London road speeds are not significantly worse and bus ridership is continuing to grow strongly. We expect that ridership to continue to grow strongly as the Mayor pursues the very much-needed improvement and increase in the volume of housing because of course the extra housing will be provided generally in outer London and to some extent the centre of gravity is a bit more to the east than to the west. The business plan anticipates that we will halt the general decline in bus ridership and reverse it. That is supported by the fact that there will for certain be very many more journeys necessary in outer London for a number of reasons: increase in housing, increase in economic activity and, for example, rail heading for the Elizabeth line. Abbey Wood will become a major railhead for bus services when the Elizabeth line opens because large numbers of people will use the bus to get to Abbey Wood to get onto the Elizabeth line. Those are the things that underpin the forecasts in the business plan.

In answer to your second question in terms of bus priority measures, as ever with bus priority measures, it is not actually the cash that is the limiting factor. It is the speed at which the physical improvement can be made on the highway. Firstly, nearly all the bus routes are running on the boroughs' roads and not on TfL's roads and so it requires the co-operation of the local authority to get bus priority measures through; and the local authorities, like us all, are trying to balance the need for deliveries, loading and unloading, access for people with mobility difficulties, buses, walking, cycling, air quality and improvement in urban realm. In general, I am less worried about the quantum of the funding for bus priority measures. I am more concerned about our ability generally to deliver the physical improvements across the period.

Tom Copley AM: It was just following on from the point about the fall in bus ridership on certain routes. There has been a 10% fall since 2013, which is quite significant. I was going to ask which of the routes have seen the biggest falls, but it is probably better, perhaps, if you are able to make that information available to the Committee so that we can see where falls are and we can see where the increases are. Is that possible?

Leon Daniels (Managing Director, Surface Transport, TfL): We will gladly provide that information and it is available on a detailed basis. I would, if I might, just further clarify on this. Of course, we can do it by route, but road speeds are a feature of geography rather than specific routes.

It is important to say that for all of the glory days of the bus service that we have seen the improvements in since the very late 1990s and certainly from 2000 onwards, the proxy for volume has tended to be reliability and our particular measure, excess waiting time. Generally, where excess waiting time improves, bus ridership improves. It is fairly reasonable, is it not? If the reliability gets better and better, people are more encouraged to use the service and so on.

Excess waiting time, as a matter of technicality, basically assumes that you and everybody else arriving at a bus stop randomly will on average wait half of the frequency. It stands to reason, does it not? If the bus is every five minutes, sometimes there will be one straight away and sometimes you will wait for four and a half. On average, excess waiting time has been a good measure because people arrive at bus stops randomly and, if it is worse than half the frequency, it is an indication that the service is not running reliably.

In the most recent past, that link has been broken. Our excess waiting time figures are still extremely good, as good as ever, because we have added resource and we have taken measures to improve bus reliability, but the truth is that people no longer always arrive at the bus stop randomly. Now that real-time information is in their smartphones, instead of going to bus stops randomly and waiting randomly, they are using their phones. For example, if they are one minute from a bus stop at home, they will wait until it is two minutes before the bus is due and then go to the stop. Excess waiting time has, thanks to technology, ceased to be the driver of volume and passenger satisfaction.

We are pretty sure that it is road speed or traffic speed that is now the problem. Our evidence for that is that there is a direct correlation between the routes that have the worst falls in passenger ridership and the ones that have suffered the worse journey time detriment as a result of congestion and so on. I hope that was helpful.

Keith Prince AM (Deputy Chairman in the Chair): It was very helpful. Thank you.

Tom Copley AM: How has the decision by this Mayor to say no to more orders of new Routemasters affected your plans for capital expenditure?

Leon Daniels (Managing Director, Surface Transport, TfL): If I might explain, under normal circumstances the buses themselves are bought by the private sector operators because, in effect, we are buying the resource from the operators. The operators have the property, the operators employ the labour, the operators buy the vehicles and so on. In general, the London bus network never consumes any capital expenditure from TfL. It all goes out on revenue and it is the operators that invest in the assets.

In the case of the new Routemasters, as a result of policy decisions of the previous administration, it was appropriate for TfL to buy the vehicles. The reason it was appropriate is that because there is almost certainly not a market outside of London for a three-door, two-staircase bus, then there would almost certainly be no resale value. If the operators were to buy them for a five-year contract, either they would be forced to depreciate them over five years, which would be horrendously expensive, or they would have to risk that they would find another use for those vehicles at the end of the contract period. By TfL buying them, we were able to insulate the operators from the financial downside of a loss on sale of an asset. That was cheaper for the taxpayer generally.

There is no intention to buy any further new Routemasters after the current orders. That means zero capital expenditure for buses going forward. We will go back to the normal arrangement, which is typical across London generally, whereby the operators put out all of the capital expenditure and TfL does not.

Tom Copley AM: Do I recall seeing the previous Mayor trying to flog one of these in Hong Kong at one point?

Joanne McCartney AM: That is what we were told, was it not? There would be a world market for these buses.

Tom Copley AM: We were told, yes.

Leon Daniels (Managing Director, Surface Transport, TfL): There was quite an extensive effort by the manufacturer to sell the concept overseas. Whilst nobody bought the new Routemaster as it stands, quite a number of operators have shown an interest and are taking vehicles using some of its features. For example, in Singapore, where the new Routemaster went on its tour by the manufacturer, they already now have their first three-door, two-staircase bus. It does not look like the new Routemaster, but the concept that the new Routemaster demonstrated has caused Singapore to experiment on those, too.

Tom Copley AM: Am I right in saying that you have secured the intellectual property (IP) rights to the design?

Leon Daniels (Managing Director, Surface Transport, TfL): Yes, we did.

Tom Copley AM: Does that mean you get any money from that?

Leon Daniels (Managing Director, Surface Transport, TfL): No. For interest's sake, the Singapore three-door, two-staircase bus is not a new Routemaster and, therefore, the IP rights do not apply.

Tom Copley AM: It has inspired something but we have not directly benefited financially?

Leon Daniels (Managing Director, Surface Transport, TfL): To be perfectly clear, the trip around potential markets was done and paid for by the manufacturer, not by TfL. The Mayor, when he happened to be in places on ordinary mayoral business, of course was there supporting it, but the attempt to sell the product overseas was entirely by the manufacturer and there was no TfL involvement in that.

Tom Copley AM: Again, to Leon, could you tell me how TfL currently plans the bus network?

Leon Daniels (Managing Director, Surface Transport, TfL): If I might bring Gareth Powell in. Firstly, it is his direct responsibility, although it is my overall responsibility, and I am sure you would like to hear from him.

Gareth Powell (Director of Strategy and Contracted Services, TfL): We plan the network on an ongoing and iterative basis. It is not the case that we save up a whole series of things in general and then review the network in set pieces. The network is constantly evolving based on observed changes to demand, things like housing developments and changes in capacity where we know there is extra crowding and areas where we have the opportunity to change a service where volume is reducing. What we do is we take the volumes that we observe on the network, we take the intelligence that we get from housing developments and other planning activities, from the conversations we have with the boroughs and with other stakeholders and the requests and demands that we have generally. We take all of those things together and then make changes to the network where we can.

We make changes in two ways. We can make changes at the time which we go to the market for the operators to re-let a contract for a given route, which happens every five or seven years on average, and so we can do it then. We can also do it outside of that contract cycle by making changes to the specification of those routes and then negotiating the financial consequences of that with the incumbent operator. We are able to do both. We tend to do it when we observe the changes.

One example I will give you where we are making proposed changes and consulting currently, of course, is the central London bus consultation where those changes are both as a result of experience in terms of what passengers are actually doing now, the sorts of changes that Leon [Daniels] highlighted where people are now taking a more frequent Tube service instead of a bus service, which gives us an opportunity to change them there, and also the anticipated changes brought about by big interventions such as the Elizabeth line. For that, we have predictive modelling, which is consistent across London. Rail plan modelling, for example, will predict the impact of very big capital enhancements such as the Elizabeth line on predicted travel patterns. We are then able to predict what might happen with the bus network and therefore where it makes sense to do so - and in the case of the central London consultation, it does make sense to do so - to package things up to be able to better explain the anticipated changes and have more joined-up conversations with stakeholders and customers.

Tom Copley AM: Perhaps if I could bring in London Councils and then Arriva and if you could tell us about your experience of working with TfL and how well TfL takes into account the needs of the boroughs and then the bus operators.

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): Certainly, because there was an investigation three years ago - or almost four years ago now - in 2013 by the London Assembly, we have done a lot of work to improve collaboration around the bus network and we have seen significant improvements, I would say and certainly many boroughs say that. However, still, there is the perception that the bus network is the most adaptable [mode] of the public transport network just because it is the easiest to change. I absolutely get that it is not easy, but it is easier than the Tube network, the rail network and so forth. Some boroughs are still getting a little bit frustrated in terms of the time it takes sometimes for bus changes to take effect and there were maybe very good reasons to --

Tom Copley AM: Your issue is the length of time in getting something changed rather than TfL changing things and your residents not knowing what the changes are or is it a combination?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): There is some of that as well. The current consultation on the central bus network highlights some of those issues because it is not very well explained for some of the reasoning why a certain bus now stops at a different location and all of that. I do not get that the explanation is in the consultation documentation. That is frustrating as well for boroughs because we need to understand them to explain them to our residents if they come and ask their councillors or even their leaders about what is going on there. That would be most helpful.

What is starting to happen is that we have those conversations before consultations being made public and that is really helpful. Borough councillors are aware of the changes that they are proposing before they are going out into the public domain. We could do a lot more of that so that we are better prepared. That would be really helpful.

Tom Copley AM: How responsive do you think TfL is to consultations? Do you tend to find that TfL tends to go ahead anyway or that it generally takes the views of residents into account?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): We do think that certainly the views from London Councils that we put out there and from the boroughs are taken into consideration. We do see that. Sometimes it does have to go ahead in any case and explaining why that it is the case would be appreciated because there will be reasons sometimes why TfL has to go ahead in a certain instance. Boroughs do get that. They would just like to know the reasons for it so that they can go back to their residents and explain it as well.

Tom Copley AM: It is a communication issue?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): It is more the communication that is the issue and we absolutely get that. We now have the Hopper ticket and we are starting to get a little bit concerned about the Hopper ticket being seen as a reason why we can shorten some of the bus journeys or bus routes and why it is not a problem anymore for people to change buses. That is not necessarily the case. We talked about how long some people travel on buses already and it can be more than an hour, quite frankly. If you travel from outer London into central London, it can take you more than an hour to get to where you need to go and so the Hopper ticket does not apply to you anymore. If you already change your bus once at this point in time, you will not be able to change further. The central London

consultation does suggest that some people may have to change their buses further and, if you are travelling from outer London, you will not get a further cost reduction any longer.

That needs to be taken into consideration because the aim behind the Hopper ticket was to make it easier for some of the people on the lowest incomes. That benefit seems to be getting lost if we change the buses in that way so that the routes are being shortened and people change more frequently. Also, some people do not want to necessarily have to change. They want a convenient journey without having to change buses, wait at the bus stop for a new bus and those sorts of issues. We should not forget those just because we have the Hopper ticket now.

Tom Copley AM: Can I ask, yes, on the Hopper ticket, what you are doing to mitigate that?

Leon Daniels (Managing Director, Surface Transport, TfL): Through the Chairman, could I work through a couple of things and then come to the Hopper at the end, if I may? Firstly, huge appreciation to the boroughs. I mentioned earlier the conundrum that many boroughs have to face. We talked earlier about, as I said, access for buses balanced against other demands for road space and, indeed, kerbside space. It is probably true to say that people in general want very good bus services, but they are not quite so keen to have a bus stop outside their house, they are certainly not very keen to have a bus terminus outside their house and they are not very keen to have a bus garage in their vicinity. One of the things that the boroughs have to cope with through planning and one of the things that TfL has to cope with in organising its bus services is trying to provide all of the services that people who want to travel want whilst having some respect for those frontages, householders and others who do not find the idea of a bus stop, a bus terminus or a bus garage terribly attractive. That does mean that sometimes the sorts of decisions that have to be made are, I am afraid, trying to balance all of those things together with the needs of the travelling public and I am sorry about that.

Also, I will just say as far as the Hopper ticket is concerned, let us be really very clear. If you happen to take two buses, say, to work and two buses back, you are already caught by the daily cap. Ever since we have had price-capping through Oyster, people are insulated from the extra cost of taking extra buses because the price cap kicks in before they get to their fourth journey. The Hopper ticket is providing an additional benefit for those people who, for example, might have waited for the first through bus to somewhere but now with the Hopper ticket can take the first bus, make part of the journey to where perhaps further downstream there are more choices and then be able to change. We like people to do that and for people to keep moving. Instead of waiting, they keep moving.

We very much see the Hopper ticket as a way of improving life for passengers and in the balancing of planning. Of course everybody would like a direct journey from everywhere to everywhere and it cannot be done. To improve reliability, sometimes we have to shorten the routes because the shorter the route the better the reliability. When we are taking into account shortening the routes, we always take a view for the number of links that would be broken and the number of passengers who currently do not have to change but would have to change. We have always done that and I can assure the Committee that the introduction of the Hopper ticket is not now being used as a way of doing that because, as I already mentioned, because the price cap catches them anyway. The Hopper ticket is simply making it easier, especially for people on lower incomes, to make a better journey choice. I hope that was helpful.

Tom Copley AM: Thank you. Can I come to Arriva now and just put the same question I put to London Councils about how well TfL works with you and takes into account any concerns that you have.

Peter Batty (Commercial Director, Arriva London): As a bus operator in London, we have the choice to tender for the routes. When a bus route is put out to tender every five or seven years, it is the operator's choice whether it is going to submit a bid. To submit a bid, you are going to make sure that you have assessed that route, you have put adequate resource in to run that route, it has adequate time right across all periods of the day or through the night or whatever is necessary, you have adequate resource and you are confident that you can meet and exceed the minimum performance standards set by TfL. It is fundamental to understand that it is our choice.

If we are successful with our tender and win the contract to run that bus route, we then set out to deliver exceptional service. During the course of any contract, there will be issues. Some of those issues may be short-term that we deal with, but there may be other issues that could have a long-term impact on the performance of the route. This, for us as bus operators, in this review is where network design and network planning impact on day-to-day service delivery because we have to manage bus routes every day. We have to manage bus routes when there is a strike on the Underground and when there is bad weather. Whatever there is, we have to deliver - or try to deliver - the same quality of service every day. We are challenged with doing that.

When we can see there are issues around the design or there are issues around the route that are fundamental to performance, it is so important and it is obviously our responsibility to work very closely with TfL to address that because we are not here to run out the contract for another so many years underperforming. You may say, "What are those issues?" Those issues could be the length of the route and the difficulty in being able to schedule that with issues like driver hours or disruption on the route. It could be changes to the route itself. It could be the terminal points. It could be issues to do with the road investment programme and long-term changes to the design. That is where we can have conversations and discussions with TfL about whether it is right to change it. At the end of the day, it has to be TfL's decision.

Those things happen all the time. There is ongoing dialogue with TfL on the routes we operate. Some of the short-term options may be the diversion of a route, the cutting-back of a route or the change of a terminal, as is being proposed with a route like the 78, one of the routes that we operate, which is going to be moved to Liverpool Street. There are also opportunities to widen the headway: use the same amount of resource but accept that the journeys take longer; do not increase the resource but provide a more reliable service. They may be short term but, equally, they may be issues that then can be built into the long-term contracts. Again, that is a matter for TfL. The important thing to be understood is that there is a day-to-day relationship.

There are weekly discussions about key routes that are suffering problems. You may have seen recently that route 78, which normally goes over Tower Bridge, could not because it was closed and it was going over via London Bridge. We have a responsibility to deliver the same quality of service on that route when it goes over London Bridge as when it normally runs over Tower Bridge. It is working with TfL to see how we do that. Maybe we have to add some more timing from the existing resource, but it is how we do that. That then could lead to long-term change if it is network planning that is impacting on the reliability. If the impact on the reliability is a period of roadwork or some other issue that we have within our control or we can influence, it is different.

Gareth Powell (Director of Strategy and Contracted Services, TfL): Only to say that that is all we try to do. We try to make sure that the bus network at any point in time, on a day-to-day basis or in a planning sense for the months and years ahead, is working as effectively as it can. There are things that impact the bus network all the time. Things like Tower Bridge, the works here at Tooley Street and so on have significant impacts on routes and on the local area. We have to work very closely with operators to try to make sure that

the service provided to customers down a given corridor remains adequate even when there are lots of changes – for all sorts of reasons – to the road environment that the operators are operating on. It is a constant set of dialogue. That is absolutely right.

Tom Copley AM: Just finally, why is there no long-term strategy for the bus network?

Gareth Powell (Director of Strategy and Contracted Services, TfL): I guess it depends what you mean by a “long-term strategy”. The role of the bus network in London’s overall transport provision is set out in the Mayor’s Transport Strategy and, again, will be set out no doubt in the forthcoming--

Tom Copley AM: You have a cycling strategy, for example, a distinct cycling strategy. I am just wondering why there is no distinct bus strategy.

Gareth Powell (Director of Strategy and Contracted Services, TfL): The role of the bus network in terms of how it fits into London’s transport needs has been set out for us in the long-term Mayor’s Transport Strategy that we operate under and will be again in the revision. What our job is to do is then to translate that into the day-to-day service provision we are able to contract for operators to deliver. As Leon [Daniels] said, there may be things we need to do to evolve the offer over time and so we may be responsive to things like customer needs, additional services, the environment, the vehicle and so on. We may do all of that, but that very much is an iterative process. That is not something that we would set out for the long term. For the bus network itself, our overall plans in the business plan are set out over a five-year period.

Tom Copley AM: There are infrastructure things, there are bus priority measures, there is the issue of bus stations, bus garages and things like that. You could argue that cycling is included in the business plan and so why do we need a cycling strategy, but there is a cycling strategy. It is something you might want to think about.

Gareth Powell (Director of Strategy and Contracted Services, TfL): Absolutely. We have tended to focus on the provision for a given geography that is changing and so we might have a strategy for a big area of development, for example, Barking Riverside and so on, about how the bus provision is going to be planned in an area of new growth. When we experience changes – like we are now – in terms of reductions in speed of buses and associated ridership falls, then, clearly, we have to respond to that and we have to have a plan and a strategy for that. That is exactly the review process that we are undertaking at the moment.

Your suggestion is a good one in the sense that, if you are saying we should communicate more what our thoughts are about the future of the bus network at a London-wide level, then we can take that on board because what we are about at the moment is trying to make sure that we are able to explain what the bus network is there for and how we are able to improve its ridership position, absolutely.

Joanne McCartney AM: I just want to ask a little bit about planning and I suppose a couple of quick things, really. It just seems that, when looking at changing the bus network, it is done on quite a piecemeal basis, route by route. I remember lobbying for many years to get the 307 an extra half-mile in to Barnet Hospital when at Chase Farm in Enfield some of the departments were going and relocating. We finally had that and so we were very grateful, but we found that I had angered Andrew Dismore [AM] because you had taken a section from Barnet out to realign the route.

Also, I am aware that the London Borough of Enfield, from memory, three or four years ago did a comprehensive borough-wide bus review, engaging with local residents groups and the community and

presented you with a plan as to how bus routes on certain Enfield roads could be streamlined to ease congestion and where new routes could be. In doing that, they sought to add no cost to you and to streamline routes. It is fair to say that they felt that perhaps TfL did not really engage with that process as they would have liked.

I am just wondering, on the planning process, what are your future plans? Are you able to do that borough-wide engagement?

Leon Daniels (Managing Director, Surface Transport, TfL): Let me start this off and hand over to Gareth [Powell], if I may.

Firstly, here is another piece of art and science. The postbag is almost exactly divided between the people who write to complain that the bus network has not changed since the days of the horse and that it is about time it is brought up to date and another load of people who say that the whole network should be completely changed because it is not fit for purpose. The truth is that the public in general does not like revolutionary change on its bus network at all and we get a lot of complaints when we try to make what we might call substantial changes. The public does not like us reviewing all the routes in a borough and changing them all. They hate it because they like the stability and they like the simplicity. What you call "piecemeal" I would simply call "evolutionary" as opposed to revolutionary, inasmuch as we are constantly monitoring demand and seeing if we are providing for it.

It is of course possible, as Barnet did, to redraw all the lines on the map and come up with something different, but in general the effect of that is to worsen the perception of the service in the eyes of the public - which might sound familiar - and people do not like the change and, often, it is catastrophic in terms of ridership. London learned that lesson many years ago when it used to do area schemes and make big changes. We make no apology for the fact that it is evolutionary because that is gentle change and that gentle change balances the need to make the change because of a change in demand and softens it so that there are not major radical changes that the public suffers from.

The Committee might well come to the view that we do not have that balance right. The Committee might well say that, in the current financial circumstances, amid the huge changes taking place across London generally, in fact the changes ought to be a bit more aggressive and a bit more revolutionary. We would be very happy to have that debate, but all our experience to date has been about "softly, softly" and in general that has served us very well, at least since the start of the Greater London Authority in 2000 until about a year or so ago when the growth in ridership finally tailed off. I hope that has answered your question. Gareth, do you want to --

Joanne McCartney AM: That is a fine answer, yes. I am not sure Enfield realised that when it did the review.

Leon Daniels (Managing Director, Surface Transport, TfL): I am sorry, Joanne, I failed to cover that point. As a result of what happened two or three years ago in north London, we completely overhauled the way in which we dealt with the boroughs because for too long people came forward with suggestions and had a letter back from TfL that said, "Thank you for your suggestion, but no". Two or three years ago, we opened the lid on the box and let the light shine in and we have given much more information about why the sorts of changes that people have suggested could not be carried forward.

I would just say that sometimes they could not be carried forward straight away because sometimes the planets align. In a recent case, demands for more capacity, demands for better connectivity to and from a couple of

hospitals and other changes in dynamics allowed us to make quite a significant change in Wembley. All of the things that we did had been suggested by people in the past. It was only when all of the circumstances came together – the money, the demand, the opportunity – and so we did actually do those things. We would say that that was a success because we have done it. It might well be argued by some of the people who suggested some of those changes three or four years ago that it was not. Sometimes that happens.

Florence Eshalomi AM: Just following on from that, Leon, in terms of demand and behaviour, I suppose one of the things that we would need to look at in terms of declining passenger usage on buses is the data you are using to monitor some of that. It is right to say that the technology is not as sophisticated as we have on the Tube and rail networks because passengers going on buses tap but do not tap out and so you do not capture all of that for stuff around overcrowding, where people are coming off and what the key routes are. Some of that information is still patchy.

On the stuff around passenger demand and behaviour, how do you actually know that you are providing a good service for passengers in London?

Gareth Powell (Director of Strategy and Contracted Services, TfL): We use a variety of data sources for the bus network. We do manual surveys. One of them is called the Bus Origin and Destination Survey. That, effectively, covers every route once every five years and so we are doing something like 150 different routes a year. We also monitor the 200 busiest locations every two years to make sure that we understand what is happening there and across the network.

Your point is very well made on actual smart data from Oyster cards and contactless. It is a long-held aspiration of ours to be able to use that data more effectively in planning the network. What we have done over the last couple of years is to work with the Massachusetts Institute of Technology (MIT) students to see whether there is in fact a way, even though passengers do not tap out on a bus, to infer where they got off the bus. The way for doing that that they have come up with is simply that there are a certain number of customers who tap on a bus in one location, make their journey and then, on their return journey, tap back on the bus on the same route but in another location. From that, we can infer that they got off the first bus around that location and then made the repeat journey in reverse on the way back. We know where people tap on because we can link the data through to the Intelligent Bus Utility System (iBus) that is on the bus giving passenger information and location information to operators. By putting those two things together, what the MIT students have been able to give us is an approximation – a matrix, if you like – that helps us to understand more about where people are getting on the bus and inferring where they might be getting off the bus.

This is not a panacea and it is not 100% accurate, like we would have on the Tube where we have tap-in and tap-out data. Nonetheless, we are very keen to explore that data to see how that can better inform what is happening at a given bus stop, for example, throughout the course of a day or at different times of year. That is something very new to us. It is something that we have worked with them to do. It is a very exciting development that we have and a new source of data that we can use.

You are absolutely right. We would love to have very granular data. We would love to be able to have that in real time. We would love to be able to explain to customers how busy their next bus is and so on. We have tried looking at different technology in the past such as surveying the number of people on buses from closed-circuit television (CCTV), weighing the buses and things like they do with trains. We have not been able to get that technology to work reliably, but we are continuing to try to explore areas where we can get much more real-time granular information.

Florence Eshalomi AM: On the last point you mentioned, Gareth, is there any move to look at the automatic passenger counters, which I am sure you know are used in some countries abroad in terms of measuring the flow of passengers coming onto the buses, or some of the other data-capturing that you mentioned? Why was that not pursued by TfL? Was there a cost implication or was it the case that you felt it was not reliable?

Gareth Powell (Director of Strategy and Contracted Services, TfL): Yes, in the main, we have not been able to get things like weighing technology and so on. We do not know of it to work sufficiently reliably for us to be able to use that as an evidence base for planning.

What we do know, though, is that when we have adopted this new technology looking at the Oyster data and inferring where people have got off by their return journeys, we can look at the correlation that we already understand from our manual surveys. There is a very good correlation in the sense that what we are not seeing is a significant deviation from what we were expecting to see on the network.

Therefore, what we are really trying to do is to drill down to a much more granular level to be able to understand what is happening in specific bus stops and on given routes by loading profile. It is a continual drive to get to a further level of granular understanding. That will help us – and, indeed, help operators – plan and deliver a reliable service because we will understand much more in real time the cause and effect of loading on the reliability of the overall service that we give. If we can come across another technology or another way of doing that, of course we will look at it because we are very keen to explore those data sources.

Florence Eshalomi AM: Peter [Batty], is there anything you wanted to add from the operator side in terms of, again, capturing some of that data?

Peter Batty (Commercial Director, Arriva London): We are controlling the route and so we are always trying to maximise the data that we have in terms of understanding where the issues are on a route and where the problems are. Again, it comes back to us sharing our information with TfL, which we do, to help with the longer-term network design because we are trying to look at problem areas where the routes are having the worst performance and where the disruption is greatest. We do that because it is our interests, clearly, to provide the best possible service. Yes, we do and we use the iBus technology.

I think you have been to one of the control centres in London. We have a setup with three control centres for our share of the network, which is 17%, and so there is a lot of focus on consistency around service delivery wherever the route may be in London. We have the technology and it is about us using that to its potential and then sharing it with TfL. I would also offer if anyone wanted to come to see a control centre and if you did not make the visit. We would be very keen to show you around one of ours.

Florence Eshalomi AM: No, I did come on that visit and it was really useful and insightful. Just finally, one of the other things I want to touch on around passenger needs and behaviour – and we have touched on it before – is in terms of the interchange, infrastructure and facilities at town centres. One of TfL's guidelines in planning bus services states:

“Good interchange and infrastructure facilities in town centres and other hubs are important if people are encouraged to use multiple buses and continue their journeys.”

I think Leon knows where I am going to go with this in terms of Elephant and Castle and Brixton Town Centre and your inbox and my inbox are currently filled with Vauxhall as well. What do you think defines a good bus hub, Leon?

Leon Daniels (Managing Director, Surface Transport, TfL): It would be fair to say that over recent years, bus passengers have suffered as a result of other initiatives both generally and locally. The most obvious cases of those are where new improved urban realm, which is desired by local authorities, has the effective of greater room for cycling and wider footways making it easier for people to walk. Many town centres have been dramatically improved as a result of this improvement in urban realm, but some of the cost has been that the bus interchange has been worsened.

If I were to pull out a non-contentious one, not from our current inbox, I remember Twickenham Town Centre, which is basically the fulcrum of a [pair of] scissors where buses come from two sides and go out on two sides. It was always the case that the bus stops existed in the middle of the town centre by the shops and where interchanges from the various axes were. As a result of the urban realm improvement, which has made Twickenham Town Centre a very much nicer place, those bus stops have been cast to the four corners and it is now not possible to make the interchange that used to be possible from a common stop without crossing a couple of roads.

I would say that in general bus passengers have suffered a deterioration in interchange in many places as a result of – not surprising and to many extents perfectly desirable – improvements in urban realm. It just might be the case that bus passengers are now starting to vote with their feet a bit and are saying, “We have given ground on a number of areas for a number of years. Actually, it is now starting to make the service sufficiently unattractive as to cause us to think about how we might make our journeys”.

This is, I am afraid, back to the conundrum that we have with the boroughs. The boroughs have it because they want to make improvements for cycling, they want to make improvements in air quality and they want to make improvements in their urban realm. It is very hard to balance that with the needs of bus passengers, in particular those who are interchanging because, of course, a town centre would say, “If the passengers are interchanging, they are of no value. They are not going to spend in our local retail. They are not coming to or from facilities. All they are doing is changing buses and so they are of no value to the community”. Therefore, we know the value of interchange and the passengers know the value of interchange, but it is sometimes hard to strike that balance with the local community.

In the specific cases that you mentioned, it remains a case of a number of changes. Lewisham is a good case in point. The development in the centre of Lewisham is for many reasons highly desirable because it is improving the urban realm, it is providing more housing and it is providing more affordable housing. It has caused the interchange between us, the Docklands Light Railway (DLR) and rail at Lewisham to be very seriously worsened. At some of the major stops in the centre of Lewisham, the space is now just not available to us. We agree.

Caroline Russell AM: I just wanted to jump in on the back of that. You were saying that town centre passengers who are interchanging may be of less value to the people at the town centres. At Archway, where we are experiencing at the moment a complete reorganisation of the bus stops and routes, it is making it much more difficult for passengers to interchange. If you want to go to Muswell Hill, you could go to several different bus stops to catch different buses on different routes and so it really does not work particularly well for the bus users.

First of all, goodness, could that be a deliberate decision to make it less easy to interchange at somewhere like Archway? Or, if it is not a deliberate decision, do you think that it could have been managed better so that we did not end up in the situation we are in at the moment? I am sure Leon's [Daniels] post-box is very full - mine certainly is - with a lot of residents with very reasonable inquiries about why it has been made so much more difficult to interchange between buses at Archway. Do you think it could have been better if there had been slightly less silo thinking within TfL and the bus route organisation had come in at a much earlier stage in the junction review process? I used to sit on junction reviews and so I know. Whilst as someone representing pedestrians I was raising the issue of buses, it did not come into the early stages of the design process.

Gareth Powell (Director of Strategy and Contracted Services, TfL): Absolutely. We know the issues that have been caused by the change in the road layout there. I agree that where we used to have common stops to common destinations and where we are now not able to provide common stops for destinations, it is very much a more confusing and difficult situation for our customers. As the worst thing, it is exactly the point that Leon [Daniels] was making previously: to accommodate other changes and other objectives, there is a worsening of the interchangeability for customers in that location.

To your point of whether we could do better, we are continually striving to do better. I might observe that the point you make about considering all of these issues upfront in a scheme design is one that we have not always been the best at and one that we really do need to continue to strive to be better at. In the end, it is always a balanced choice between conflicting and competing objectives for any given road space. We must make sure as best we can that we are able to design schemes that do the best for everybody. We are continually striving to do that. We are certainly not the first to say that we are perfect in this area - certainly not - and we want to try to do better for each scheme that we design to get these compromises worked out properly.

Caroline Russell AM: Are you saying that in future reviews of these very big strategic junctions, bus users will be considered - I am thinking of Highbury Corner but there are lots of them all over London that are coming down the track - and that the bus-user thinking will go into the road design much earlier on?

Gareth Powell (Director of Strategy and Contracted Services, TfL): Yes.

Leon Daniels (Managing Director, Surface Transport, TfL): We might go one step further, of course, which is to say that the scheme at Archway - a case in point - is not actually finished. We are still able to make changes. Sometimes things do not turn out quite the way that you wanted. Sometimes the effects turn out to be not what you expected. We never finish. At Archway, we have some ideas to improve things further.

David Kurten AM: Thanks, everyone, for coming. I would like to ask you about demand and what the key drivers are for bus demand in London.

Particularly to Tim Pharoah and maybe Katharina [Winbeck] as well to start off with, what do you think are the key drivers for demand in London now and have they changed over the years? What do you think? We will start with you, Tim.

Tim Pharoah (Independent Transport Planning Consultant): That is an interesting question. We get into the division between inner and outer London, perhaps, at this point. On the potential for mode-switch, for example, from car to bus, it would seem to me that the field is worth ploughing mostly outside the inner ring. In central London, the potential for mode-switch is probably virtually zero and in inner London there is some potential but perhaps particularly at off-peak times.

The main potential increase in demand from passengers and satisfying other elements of the Transport Strategy in London would be to see what steps we can take to improve bus services to the point where they can compete with the car for more than just journeys to work. It is worth bearing in mind – and the point was made earlier – that existing passengers by definition are satisfied; otherwise, they would not be there. For potential passengers, there is a huge variety of factors that need to be investigated to see to what extent barriers to bus use or disincentives to bus use can be overcome. That will almost certainly involve improving the character of the bus services and perhaps also a certain degree of network realignment to suit changing needs, as we have been discussing. I would be interested to see a lot more surveying and investigation – household surveys and so on – to really try to get under the skin of what it is.

My benchmark is my wife. If I can persuade her to ride a bus, I will know we are getting somewhere!

David Kurten AM: You see outer London as the area where this --

Tim Pharoah (Independent Transport Planning Consultant): From the point of view of mode-switch, which is a key element of what we are trying to achieve here for environmental and other reasons, yes.

David Kurten AM: What might be the view of London Councils?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): I am not sure I have seen that much change in terms of demand. What is happening is because of population growth and that is increasing more and more over recent years. It might change in the areas where there is increasing demand, but it is not a change of circumstances in that sense. It is just more people needing to travel. Because more of that is probably happening in outer London, we have seen from the figures that passenger numbers in outer London continue to grow and that is reflective of that. What we have talked about quite a lot already is that TfL needs to continue to be able to collaboratively with the boroughs meet the demand that is happening and changing demand in terms of locations where there is intensification of homes, for example, or where there are changes to services generally. That needs to happen.

In terms of just the point I made earlier as well, this is the most accessible form of transport that London has and so it is very important that we listen to the demand from those more vulnerable users in particular so that they can travel more freely around London as well.

A point we touched upon in terms of planning for the bus network – and Leon [Daniels] and Gareth [Powell] have both made that point – is that we need to take an integrated approach in terms of all the different modes of travelling and we should look at walking and cycling because we are trying to encourage that more, particularly with our big issue around air pollution in London. We need to take an approach that considers all of those issues – walking, cycling, bus, train, Tube – and how the interchanges between all of those different modes work. The intelligence that boroughs do have will be really important for that dialogue to happen as well.

Dr Ronghui Liu (Associate Professor, Institute of Transport Studies, Leeds University): I would like to add on that. You are asking where the demand comes from or – another question – where you would want the demand coming from. There is this concept called transport-oriented demand (TOD). It is an American term that is being applied around the world. In Europe there is a similar development, although we do not call it that. What it means is that you develop good public transport and link transport with land use and planning together to allow for high-density housing and business development around your public transport hubs and routes and the demand coming from that.

For example, Singapore is very much built around that. The housing and land development and the transport development went together. Most of the housing development was built around major transit routes. Hong Kong initially went the way when there was a housing demand and then they built the metro line and key fast routes and soon they realised that they need to go hand-in-hand together.

Public transport developments and housing developments go alongside each other. What then you have is high-density housing and business development around fast public transport hubs and then density is gradually decreasing with the distance from the bus stop, for example. That is something that needs to be combined, not just transport issues but planning housing development and business development issues as well as --

David Kurten AM: I know, Leon, you touched on this a little bit earlier. TfL is projecting an 11% increase in passengers over the next five years and you did mention that there might be more in outer London than inner London. Do you have anything else to add to that or does anyone else have anything that they might say about their thoughts? Is this 11% increase going to happen and where is it going to happen?

Tom Copley AM: Is it not 20%?

David Kurten AM: It is 11% in bus passenger numbers and we have another part of the briefing that says --

Tom Copley AM: I thought it was 20% over five years.

David Kurten AM: Is that 20% bus use?

Tom Copley AM: Yes.

David Kurten AM: I also have a figure of an 11% increase in passenger numbers. I have two different figures there.

Tom Copley AM: Can you clarify, just that so we all know what figures we are talking about?

Keith Prince AM (Deputy Chairman in the Chair): What is your predicted increase in bus usage in the next five years? Is it 11% or 20%?

Leon Daniels (Managing Director, Surface Transport, TfL): It is from 2.278 billion in the current financial year through to 2.521 billion passenger journeys in 2021/22.

Keith Prince AM (Deputy Chairman in the Chair): What is that as a percentage, then?

David Kurten AM: It is about 11%, is it not?

Gareth Powell (Director of Strategy and Contracted Services, TfL): On your question, I would categorise it as two things that are driving demand. The first is general population growth, housing growth and so on. You can see that that therefore is more people wanting to make more trips. What the bus network of course needs to do is to respond to what we call "journey opportunities". That is that at any given location, people there have as many opportunities to go to different locations as they can. That is about integrated network planning. The other thing that we know drives bus volume is of course the direct links that we can make to places. We have talked a bit about that so far. Population growth, outer London housing growth, the

development of town centres in outer London and so on have a very big bearing on demand for the bus network.

The second thing, which is the point that was made earlier, is then the relative attractiveness of the bus service as compared with other ways of getting around for that population. The relative attractiveness can be broken down into things like price. Is it more expensive to take your car and park and so on? Of course, many of the land use decisions that are made in town centres have a direct bearing on that, such as the provision of car parking, the relative positioning of bus stops versus car parks and all of those things. Then of course there is the quality of the bus service. We talked at the beginning about speed. Are you able to get there in a reasonable time? Are you able to make that journey reliably and predictably?

If you put those things together, what you have is what we base our assumptions on. We base our assumptions both on the growth of London that is predicted and the relative things that we know about changes, which may or may not come to pass - there may be greater or lesser development in given areas, or so on, and we take a forecast on that. Then we look at what we are trying to do to try to preserve the attractiveness of the bus service, which was what we talked about at the beginning of this session. Those two things combined give us an ability to forecast the sort of passenger growth that we have in those figures. Clearly we have to work hard to do what is our control to make that come to pass, but of course it is ultimately a factor of how London develops over the next five years. We try to facilitate that as best we can.

Leon Daniels (Managing Director, Surface Transport, TfL): It might be helpful just reminding ourselves of the deficit. The best sort of growth for the bus network is to fill existing spare capacity with revenue-driven passengers. The most expensive thing to have is continued demand in the morning peak, when in many areas the services are already overloaded, because the cost of running the bus network in London hangs off the morning peak. Having provided the morning peak as best we can to carry the maximum number of people to school and to work, the cost of the network for the rest of the day is marginal. We already have the infrastructure. We already have the buses, we already have the staff, we already have the vehicles and so on. When we are talking about growth, economically the best sort of growth we can have is where there is existing capacity, which includes off-peak but also includes peak services in certain parts of London. What is very expensive for us is continued demand on radial corridors into central London in the morning peak.

David Kurten AM: That goes a little way to answer my next question. We have this 11% rise in passenger numbers predicted, but the business plan says there is going to be only a 0.2% in the mile length of the routes. Is that enough? What you have just said goes partway to explaining that.

Leon Daniels (Managing Director, Surface Transport, TfL): Firstly, it is all we can afford. Secondly, it is born out of, as you might appreciate, taking capacity where it is not required and reinvesting it in places where it is. That sounds perfect but the downside is that when you take capacity, you upset some people. In the democracy, taking away service levels to reduce capacity to more match demand is not liked even though it is a worthy cause to redistribute that capacity into areas where people are being left behind. As you might imagine, there are some difficult conversations. For example, one might get the support of the local representatives if that excess capacity was being reinvested inside the same borough. On the other hand, if it was being reinvested across town you probably would not get the support from the local representatives. It is important to understand that in this redistribution, there are always winners and losers. Walking through the path for the people for whom services are being reduced is always going to be tricky for us and for local representatives.

David Kurten AM: What is the view of Arriva? Maybe you can say something as a bus company. What do you think about growing demand?

Peter Batty (Commercial Director, Arriva London): We are very close to the day-to-day operations. You are going to notice changes in the demand for the route. Again, as a contractor, it is about sharing that with TfL if we notice a considerable change over time in the requirements, if we have capacity issues or perhaps if people are being left behind when there is a full service being operated. Picking up Leon's point, there is pressure on times of day when frequencies are less. There are vehicles available so that we can improve the frequency at certain times, maybe on Sundays, at times when there may be only a two- or three-bus-an-hour service. It is about providing TfL with that information from our own understanding because it can impact on performance if you have a considerable increase in the amount of people using the service. Again, it is the responsibility of a bus operator to share that information with TfL, which we do.

David Kurten AM: Do you see any difference in issues between central London, inner London and outer London?

Peter Batty (Commercial Director, Arriva London): Yes, we do because of the amount of population growth in outer London. We see different movements. We operate bus routes in Croydon and there is a tremendous amount of development in Croydon. We see the different changes, the different demands, and we see it again differently in London. It is about being able to share our experiences on certain routes. If there are issues with performance, it is understanding what they are. Is it just sheer volume of people? Equally, the right thing to do is to run the most reliable service because that in itself will generate demand. It is both of those factors. We have seen that on certain routes. Where we are running a consistently reliable service because we have the right resources and the right scheduling, it will generate demand in itself, which has already been covered.

David Kurten AM: Thank you

Dr Ronghui Liu (Associate Professor, Institute of Transport Studies, Leeds University): I would just like to add that we were talking about generating demand and we also mentioned that we want to attract more people from outer London into using buses, but then we also hear that during the peak period bus capacity is full. This is where bus network design could really do a good job. Bus network design includes not just redesigning the routes - and we talked about perhaps corridor routes, trunk routes and the feeder buses - but also timetables. Here there is scope, perhaps, to consider the network design issue.

For example, if you want to attract people from outer London onto the buses, they may not use buses all the way to London because of the capacity issue. There is a second level of network design where you could provide what we call feeder buses and use them to take people on to the key transit hubs, for example to Tube stations, making that connection easier and more frequent and co-ordinating it with the Tube timetable. Feeder bus routes tend to be shorter, running from residential locations to key public transport hubs, and because they are shorter you can run them more frequently. That way, you relieve some of the pressure on the key bus routes into the city and it is more attractive for people to use a wider public transport network.

Navin Shah AM: I have questions regarding new bus services. To start, does TfL plan bus services to stimulate demand or do you respond to demand that is already there?

Gareth Powell (Director of Strategy and Contracted Services, TfL): It is a mixture of both. We do both. We can observe changes in demand on the network itself. We get feedback from the operators and our data

sources and clearly we try to evolve but also there are cases where we know there is going to be a new development, for example, or we know from feedback from residents, London boroughs and others that people want to have a particular link that we do not think is well served. Then we will look in the ongoing review process to try to provide, as best we can, a bus route between an area of, say, residential growth and an area of employment growth, shopping and so on. We do both. Sometimes we will put a service in because we anticipate there will be demand for it based on what we know rather than responding to the demand we see on adjacent bus corridors. We try to do both, but it is an ongoing rolling process to try to balance both of those things.

Leon Daniels (Managing Director, Surface Transport, TfL): It is quite important. Simplistically, where there is a housing development, we want to get the bus service in as soon as possible, even if the demand is not yet there, before people start making choices that exclude the bus and it is too late to have them back. In general, where there is development of any sort but particularly housing development, we would seek to get the bus service in as soon as practical so that it becomes part of the fabric of the area and people start to use it from the moment that they are needing to.

Navin Shah AM: This Committee in 2013 heard about the whole process of review. There was criticism that there were long timescales when it came to the review for changes and alterations in our applications. It also heard that there was a lack of transparency about the process itself and consultation was very limited. Has there been any change in these last three years or so in that process?

Leon Daniels (Managing Director, Surface Transport, TfL): Yes. As I referred to briefly earlier on, we took the lid off the box and we let people see inside. I hope that our stakeholders will report that the transparency of the consultation and the reasons for the response are much better than they were when the Committee reported on this in 2013. It was one of the outcomes of the Transport Committee's review and so I hope people will feel it is better. Certainly, we have many more occasions when we have representatives from the local authorities together collectively, as well as making sure we are visiting them on a regular basis.

On the timescale, again, I am afraid it is another one of those trade-offs that we have talked about in the past. For the bus service consultation, it is gold standard. We are sending very detailed information to a phenomenally long list of stakeholders, giving them adequate time to look and consider them, bringing back all of the responses and considering all the responses. I am afraid we are just a bit caught on this. If we do a very good consultation and give it adequate review time, time to consider, really look at the plans and so on, by definition the timescales are extended. We hope we have a compromise between changing things as quickly as practicable, taking into account changes in demand, and having adequate consultation and time to respond.

Not that it was a question but just to confirm this to Committee members, please do not be misled by the five-year rolling tendering programme. We change many more services mid-contract than we ever change at contract. It is sometimes a myth. Sometimes people say, "Bus services change every five years because that is when the contracts come up". Far from it. There are many more changes mid-contract than at contract. Neither is a slave to the other.

Navin Shah AM: Can I raise this question, probably to Katharina? Do you think that TfL is able to react to change and make an informed decision in the context of the new bus services?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): I would say there have certainly been improvements since 2013 but that should not mean TfL can sit on its laurels. There

is room for further improvement and consistency in the approach that it is taking with boroughs in terms of collaboration.

We still do get complaints from boroughs that things are taking a long time. I appreciate that Leon just said that in some instances it just takes time to do these things, but particularly for new developments, it is crucial. Sometimes it makes a real difference to the viability of a development. It is important for the planning authority to have good public transport accessibility. That is required to make a development viable. In that instance, the link to planning that was mentioned before is important and that is where the local authority, as the planning authority, is an important part and needs to be at the table at the very beginning of any changes that are looked into.

There is also an onus on the planning authority to talk to TfL. When it knows that new developments are going to happen, it should initiate those conversations as well. That is certainly something that we tell our members consistently and that I think they are doing in most instances but I am sure there could be improvements there as well.

Navin Shah AM: Thank you.

Leon Daniels (Managing Director, Surface Transport, TfL): I wonder if I might just also say that some of the worst examples we have had have been where hospitals have been changed and consolidated into new sites, selling off part of the land for redevelopment to do work on a main site, where we have been in the process very late indeed, as a result of which our ability to respond and to service hospitals has been harmed.

You will not be surprised to know that new hospitals sometimes get built alongside major roads. We have to balance the penalty for through passengers of coming off the main road, going in and serving the hospital and coming back out again, against the needs of people who need to go to the hospital. Some journey patterns change as hospitals are consolidated. People who used to go to one hospital now need to go to another. The work we did in Wembley for Northwick Park Hospital I referred to earlier.

With changes as a result of changes inside the National Health Service (NHS) and hospitals, in many cases we have been really late in being able to understand what is taking place and then find ourselves on the back foot, trying to make changes urgently to serve those hospitals adequately. It is the case that while the review of bus services in London continues on an evolutionary basis, we are having a good look at how we serve all hospitals in Greater London as part of the work we are doing currently.

Navin Shah AM: Is this being strategic, really? I have similar issues representing the northwest London area, where we have had issues with lots of accident and emergency departments being shut down and so on. We have a constant outcry from local community patients about accessibility and bus service changes to link those hospital sites.

Leon Daniels (Managing Director, Surface Transport, TfL): Yes, it is. We are very much trying to get around the front of the problem. We are having a holistic look at how we serve hospitals generally and doing a lot of work to find out what the needs are for people who visit those hospitals. It is strategic but it also has to be on a case-by-case basis because of course areas of London are different. There is one hospital in Greater London where, as a result of selling some land for redevelopment, the redevelopment of the hospital that it funded caused the entrance to be moved from the front to the back and from a place where we could serve it by bus to a place where we could not. We have cases clearly where - as you said with accident and emergency

- the needs of not just patients but the people who are visiting, their supporters and companions, change dramatically.

As I say, we are working very hard to get around the front of this problem so that the changes to the bus service can be planned at the same time hospital developments are planned and we are ready at the same time the changes take place.

Tim Pharoah (Independent Transport Planning Consultant): I wanted just to emphasise again the point made by my colleague on my left that it is all very well having TfL planning bus services and the London boroughs responding to applications for development and the two talking together to see if these things can be brought to a reasonable conjunction, but it is quite another thing to approach it from a different point of view. How is London going to develop? Are we going to organise that development on the basis of public transport? The answer for everyone around the table here is that it should certainly be orientated towards public transport and not car traffic. I doubt there is anyone that would disagree with that.

The growth of London is a relatively recent phenomenon. We have had a declining population and we have had a reasonably stable period but now London is beginning to grow quite quickly in terms of population and jobs. Going back to the question that was posed earlier about why we do not have a bus strategy, perhaps the question should be about why we do not have a transit-oriented development strategy. To some extent, we do. For example, the London Opportunity Areas and the regeneration projects are probably planned in that way. However, they do not account for the whole of the growth that is forthcoming. I would suggest there is a need for a more strategic look at the way in which development occurs to ensure that not just buses but also rail is the main structuring element for that new development.

Dr Ronghui Liu (Associate Professor, Institute of Transport Studies, Leeds University): Just quickly, I agree completely with what Tim has said. We ought to have more radical thinking about the best network now we are talking about redesigning the London bus network. There is the point of using our rail network and the Underground as the bones for public transport and buses as supplementary to some of the key routes at different levels. Our rail network would be the key network and then we would have our strategic bus routes and, at a low level, the feeder buses connecting residential streets to our key routes. Perhaps I would also add another level, a circulatory level serving the local district or connecting local districts together. That is some radical thinking about redesigning our public transport.

I would also suggest adding a walking and cycling strategy. There are lots of new developments around the world making smarter use of bike systems. For example, in China a private company overnight installed hundreds of thousands of bikes in 20 cities. They used new technology so that you do not have to get a bike stand to get the bikes. There are smart apps on the phone to tell you where the bikes are available. You get the code, take the bike and then can leave it literally anywhere and the net will know where the bikes are available. That is making it really accessible. People can take it home and leave it outside their door, and other people can just take it. It is making the use of bikes as a way to do the first mile or last mile of your journey much easier. Integrating public transport with walking and cycling strategies is a really important thing.

Leon Daniels (Managing Director, Surface Transport, TfL): I would just have to say, Chairman, if I may, that - hearing the points, of course - there is no capacity on the London rail network to feed in more passengers to take the train instead of taking the bus. One of the reasons why the bus network is the way it is that it is carrying those passengers who cannot be accommodated on the rail network because it is full, those for whom access to the rail network, including the Underground, is not possible and those for whom the price

is prohibitively expensive. The key radial bus corridors, even the ones that do parallel the rail network, are doing a good job. I am afraid there is just not the capacity on the rail network to give more of those bus passengers to it. In fact, if anything, we are carrying the surplus rail demand because adding rail capacity takes some time. If I might just clarify, it would not be practical to feed more rail passengers in by bus.

Keith Prince AM (Deputy Chairman in the Chair): We are talking about long-term thinking. A lot of the useful suggestions being made would take quite a lot of time to implement. It is a very good point, is it not, that we should take a more holistic approach? Rather than just talking to you about buses, someone else about railways and someone else about cycling, we should be taking a more holistic approach.

Navin Shah AM: A joined-up approach or whatever you call it. Yes, the point is well-made. Something obviously is happening and does need to happen more comprehensively. Coming back to my last but important question, it is about the accessibility of the network. To what extent is the network designed to maximise accessibility and reduce deprivation? We have here information that clearly illustrates that access is not equally spread across London. When you look at the map we have been provided, what it shows is that inner London areas are very well connected but outer London boroughs have very poor accessibility.

Given what we have been talking about, the major requirements of growth in outer London areas where there are designed opportunity areas, intensification areas and so on, and what Leon [Daniels] mentioned in his earlier contribution, that as it is outer London usage in terms of ridership is very high, certainly there is a case for better accessibility of the bus network in outer London. Can you comment on that, please?

Gareth Powell (Director of Strategy and Contracted Services, TfL): In short, yes. We work from the overall appraisals of transport connectivity. There are various measures, such as the Public Transport Access Level (PTAL) measure, that are used to define that. In fact, to the earlier point, in the long term the London Plan, which is setting out spatial development, opportunity areas and the Mayor's Transport Strategy, and the bus network's role in individual communities, those three things, need to come together and work hand-in-hand.

You are absolutely right. We know that ridership demand is likely to grow in outer London because of housing growth and population growth there. It is also true that public transport provision is much less dense in outer London than it is in central London. The bus network is very well placed to be able to accommodate growth by public transport as opposed by growth by other forms of transport and we need to be able to continue to evolve the bus network in outer London to be able to match development and to improve the connectivity of town centres to broader sites.

We do try to plan on a feeder basis. If you look at the very centre of London, you can see there are a number of radial routes that generally are going from central London to about zone 2 on the London Underground zonal system. Outside of that, you very much see the hub and spoke model, where we have local urban centres with bus services connecting them and then supplying people in and out of those centres or into major transport interchange hubs. We need to do more of that.

Leon gave the example earlier of Abbey Wood and the Elizabeth line, where we know we need to strengthen the bus service over time to enable people both to go the last couple of miles to the housing growth that is promised down there and to connect onto the Elizabeth line, if that is what they want to do, to allow fast access to central London jobs and employment. The bus network has to do both and we have to work very hard to be able to do that. That is where we see the opportunity for growth going forward.

Navin Shah AM: Do you want to comment from a borough perspective?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): It is certainly something that our members keep raising with us that not everybody, particularly in outer London, wants to travel into the centre of London. There are lots of other town centres that they want to travel to. A lot of people work either in their borough or neighbouring boroughs or slightly further afield, but not necessarily central London. Our members keep raising that as an issue for TfL to perhaps provide a few more orbital routes and particularly bus orbital routes to connect those different places.

Navin Shah AM: I absolutely endorse that as somebody who represents an outer London borough. Our linkages are very important between the boroughs, not just town centre to local areas but inter-borough linkage as well. This is a major issue. There are major opportunities as well that go with that given the vast level of growth that we are obviously observing and we require for the future.

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): Yes. This goes back to our overall vision: what do we want London to be? We want a reduction in car use and, particularly in outer London boroughs, this is a bit more difficult to achieve because accessibility to rail and Tube is not as frequent as in central London. That is definitely something that our members keep raising, and we would very much welcome working much closer with TfL on those routes.

Leon Daniels (Managing Director, Surface Transport, TfL): I am delighted to submit in evidence 100 bus services in London today that only provide orbital links and do not provide services on radial routes to or from the centre of London, which we will submit in evidence. There is a perception that the orbital bus network is very thin. In fact, it is very strong. Over 100 bus routes in London do nothing but provide orbital links. They do not provide radial links into the centre of London and they do not provide radial links between outer zones and inner zones.

Navin Shah AM: The question is whether they are dedicated and efficient enough to serve the purpose and what future-proofing there is.

Gareth Powell (Director of Strategy and Contracted Services, Transport for London): Absolutely. To that point, that is about the evolution of the bus network to reflect growth and where the demand is. If it is the case and it is possible to serve it by an alteration to the bus network, then that is clearly something that we look at and we are keen to do. It is not possible in every case for all sorts of different reasons: for feasibility of where the bus can go, highway constraints, bus stands, bus stop locations, etc. Certainly that is exactly what we intend to do and what we do on an evolutionary basis, absolutely.

Navin Shah AM: Thank you.

Steve O'Connell AM: Before we go on to the next section, I will just pick up on some of Navin's points. I had one or two minor transport problems myself. In fact, I should have taken about three buses to get in. It might have been a bit quicker.

On the last point, which was Navin's very good point about outer London areas that are over-reliant and around the deprivation piece, I would just be interested in how you assess where you have communities that may be over-reliant on the bus service, may not have that bus service, but then it is the weighing up of a business case. I do not think we are covering that later. In outer London areas, there may be estates that may

become over-reliant on bus services. There may be a local demand for the bus, but then there is that question of usage against business case. How does TfL judge that sort of issue?

Gareth Powell (Director of Strategy and Contracted Services, TfL): On business case methodology itself, we use a standard appraisal methodology based on the Department for Transport's (DfT) WebTAG, which takes into account the net cost of providing the service - so that is the cost of the service on an annual basis - less the revenue that we receive from Customs for that. It then weighs that up against the monetised benefits for faster travel or greater connectivity and so on, the so-called social benefits that go into that. The net cost versus the benefit is what you see in the benefit-to-cost ratio that we do. Generally speaking, we are looking for a benefit-to-cost ratio of more than two to one to be able to have something. That can vary up and down depending on all sorts of factors - the availability of cost and resource and money to put into the area - or of course what our forecast is and what the local borough's forecast is for growth and demand. It is not the case that we always wait until we can observe that we are going to definitely have that level of demand because in some cases we know that there is a development plan, then we want to proactively provide a bus service that --

Steve O'Connell AM: As we said, in outer London there are a lot of developments going up and around, and you can anticipate that, but then again it might be in areas that are identified as in need of improvement. I am just interested in that, so thanks for that.

The next set of questions is particularly around the physical network, where there are ways of improving the network without changing routes. I understand that TfL has committed a lot of money towards this, £200 million on bus priority schemes over the next four years, and it looks like £41 million of it on Tottenham Court Road (TCR). These are schemes around bus lanes, bus-only roads and bus-only access to housing, so you are not changing the routes as such but you are changing in essence the way the routes operate to give more priority to help the flow. Would you like to elucidate that type --

Leon Daniels (Managing Director, Surface Transport, TfL): That is entirely right, and we mentioned it briefly before you arrived. We are seeking to redress the balance a bit. Bus services have suffered as a result of increased population, increased economic activity, slower traffic speeds, changes in the road network across London for perfectly good and reasonable reasons, improvement of urban rail and so on. Now, I am afraid, that has eroded the priority that buses have typically had in the past, and we now need to redress that balance. I said in an earlier answer but I am happy to mention again - and, Steve, you will appreciate this of course - that the funding is not the thing that worries me most. It is practically being able to deliver it on the ground, because most bus routes operate on roads where the local authority is the highway authority, and buses are not the only claim for priority on those roads because there are deliveries, there are frontages, and demands, of course, for more walking, more cycling, all perfectly reasonable things. The money does not worry me as much as the practicality of getting these schemes through.

One of the best things we can do where there is not adequate kerbside space to provide specific bus lanes is to just be able to work using technology to get the traffic signals to give priority to buses. While there is nothing physical on the ground, buses are signalling their priority.

Steve O'Connell AM: All buses have that technology?

Leon Daniels (Managing Director, Surface Transport, TfL): Indeed so. The only conundrum there, of course, is that where there are junctions where there are buses on all arms, then they are all asking for priority and it can be neutralised. We are working with the local authorities for physical improvements and virtual

improvements because what we are determined to do is to make the journeys faster and more attractive. That will give us more ridership and, therefore, more revenue, and we might be able to save some resource because for a job that currently needs 20 buses, we could run the same frequency with 18 if we could just make them go that little bit quicker through the traffic. That is our aim.

Steve O’Connell AM: There need to be ongoing conversations with London Councils on a council-by-council basis to say, “How could we improve the service?”

Leon Daniels (Managing Director, Surface Transport, TfL): Indeed.

Steve O’Connell AM: It is not necessarily putting a fresh service on or indeed extra buses. Is that right, Katharina? Is that how it works?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): Absolutely. We would definitely support any of those conversations because we absolutely recognise that we are having a limited budget. Local authorities certainly know what that means. Increasingly, perhaps we need to look at what resources are available from TfL, from the Greater London Authority (GLA), from the Mayor and from boroughs collectively, and how we use those resources to the best result for Londoners.

In terms of making changes to the bus network, I was a little bit surprised that the central bus network did not seem to have an equalities impact assessment. Just given some of the users of the bus network – some of the passengers are more vulnerable road users, I would say – perhaps we should look a bit more in detail to what an equality impact assessment might bring up in terms of: will this really negatively affect a certain group of people who have been relying on this particular bus network for a long time, and what changes could we make instead?

Steve O’Connell AM: There are a range of measures. In a minute I will ask Tim [Pharoah], who might like to comment on the measures generally, but do you want to just comment, Gareth [Powell] and Leon, on the plans for TCR’s design? I was looking at it. It seemed really interesting and quite expensive.

Leon Daniels (Managing Director, Surface Transport, TfL): Essentially, what has been taking place across London generally over the last few years is, in collaboration with the local authorities, the removal of gyratory systems, the removal of what are effectively urban motorways in our city, and returning them to ordinary two-way traffic. The most obvious example perhaps is St James’s Street in Pall Mall, which has been an urban motorway since the 1960s and is now returning to a more town- or village-like environment with slower traffic speeds, which is easier for pedestrians to navigate and has better air quality and so on. TCR is one of those cases, ever since the big campaign for gyratory road systems in the 1960s, which we are attempting to reverse with local authorities and so on. TCR, which is presently northbound, and Gower Street, which is presently southbound, will be made for buses, two-way in TCR, and the general traffic will be two-way in Gower Street. That will provide a much nicer environment for what otherwise is a multilane highway in the centre of town.

Steve O’Connell AM: Much of its investment would tend to be, by nature, in the central zone because of the large number of buses, shall we say?

Leon Daniels (Managing Director, Surface Transport, TfL): Certainly the traffic management strategy of the 1960s created gyratory systems principally inside the Inner Ring Road and including bits of the Inner Ring Road itself. Those are typically the ones that are trying to be undone.

Steve O'Connell AM: Tim, in your view, do they generally work in the main, these kinds of schemes?

Tim Pharoah (Independent Transport Planning Consultant): On the point of the gyratory schemes that were created by the London Traffic Management Unit back in the 1960s, I am old enough to remember it. The undoing of those has been one of the great joys to me and to see London undoing those mistakes of the past and so that is great.

On the question of bus priority generally, I always feel it is a bit of a misnomer in a way. "Bus priority" tends to encourage the view that perhaps we only need to deal with bus priority where there is a hotspot. It always seems to me that we should instead be regarding bus routes as a whole and treating them as if they were trams so that there is always a focus on removing whatever obstruction there might be to the free passage of the bus in the same way that we have to do when there is a tram.

For example, I came here on the bus from Streatham this morning. There are roadworks in Streatham High Road and around Streatham Hill. Those roadworks, nothing was happening at the weekend. They were just clogging up the traffic, delaying the buses, so a significant proportion of my journey time was spent waiting to get through that roadwork. It is not just a question of bus priority measures. How do you protect the buses from whatever it is that is interfering with the free flow? For a journey like that, an inner London peak-hour journey, you are looking at a stopped time unrelated to bus stops of roundly a quarter of the operating time. That is a huge chunk of time. If you could even halve that, it would make a significant impact on operating costs and operating efficiency.

It seems to me the idea should be bus protection, rather than bus priority. If there is a signal phase which is causing problems, obviously where the network is dense, priority for one means lack of priority for another, but a lot of signal intersections are not with other bus routes.

Steve O'Connell AM: I agree.

Tim Pharoah (Independent Transport Planning Consultant): Yet there is often still a delay. This idea of bus protection, rather than bus priority, should be looked at on a whole-route basis and not just at the hotspots.

Steve O'Connell AM: I get that, particularly when it is a route that has a high dependability at the end of it. If there is a delay because of roadworks, it involves a delay at the end of it when you have people who may be expecting and counting on that one bus route. There is an issue there.

Can we lastly for me touch upon the Cycle Superhighways and the opinions of what their impact is?

Tim Pharoah (Independent Transport Planning Consultant): Shall I start on that since I have been speaking? Shall I start on this one?

Steve O'Connell AM: Please do.

Tim Pharoah (Independent Transport Planning Consultant): I do not know. I am conflicted with this. I am a keen cyclist, but I always felt that central London had a marriage made in heaven between walking and bus. Without cycles, that marriage was a good one. Now I feel the introduction of cycling as a significant mode and as a significant taker of road space has disturbed that marriage. As much as I like to see people

cycling, it has nothing to do in central London with mode split from getting people out of cars. Most of the people on cycles were formerly on public transport.

It does seem to me that we have created a problem for ourselves. I would have much rather seen a cycling strategy which started in outer London where you have more space to provide dedicated cycleways and where the competition with the car is harder through public transport. The cycle is a much easier alternative for people who make habitual car journeys in outer London than it is in central London.

I feel we have headed off in the wrong direction and we are paying the price in terms of reduced bus reliability. We heard about that earlier, perhaps before you arrived. The decline in passenger numbers is particularly where congestion is experienced and significant congestion is being caused by the removal of road space for the provision of cycling.

Here again is another example of where a strategic view needs to be taken to see which mode, where and how we provide for that.

Steve O'Connell AM: Yes, it is an interesting point that you say that the people who will be cycling may be coming away from public transport as opposed to the aspiration or the generally accepted view that it is getting people out of cars on to cycles, particularly in outer London.

Leon Daniels (Managing Director, Surface Transport, TfL): You will understand I am especially conflicted in a non-statutory sense about this because I was responsible for the installation of the Cycle Superhighways. I am also responsible for all sorts of other modes of transport in London as well as the buses.

Just to say in respect of the provision of dedicated space for cyclists, which was a key decision made by the previous administration and the policy for which continues into the current administration, it was the case that there was growing cycling activity taking place in this city anyway. In the free city, in the free country that this is, more people were cycling. They had chosen to cycle and we were getting very much worse. People were being killed and seriously injured in the unequal struggle between the cyclist and motor vehicles and in particular heavy goods vehicles.

The previous administration was very strongly in favour of segregated cycling facilities for a number of reasons. Firstly, it helped enormously with the killed and seriously injured rates for cyclists and last year we had the lowest number of cyclists killed in recent memory. Secondly, it was the fact that with cyclists mixed up with the general traffic, life was getting much worse for everybody. Certainly, it was hindering those people who, like perhaps me, are cautious cyclists who are interested in cycling but frankly, mixed up with the general traffic in the centre of London were dissuaded from doing so.

Finally, there is a compelling case for cycling in terms of both air quality - that is to say vehicles that are not being used - and health. There is a compelling case of the benefit to your own personal health by taking the exercise that cycling gives you.

Steve O'Connell AM: It is not a debate generally about cycling today. It is a debate about impact on the bus network.

Leon Daniels (Managing Director, Surface Transport, TfL): I am outlining as to why we got to where we are.

Steve O'Connell AM: In the first place.

Leon Daniels (Managing Director, Surface Transport, TfL): Taking away that much road space impinges on traffic volumes and the bus network has been caught in that. Here, we are conflicted again. Buses are easily the most efficient user of road space, but on some of our bridges in the morning peak, cyclists are the most numerous vehicles. More than 60% of the traffic on Blackfriars Bridge in the morning is cyclists and we are caught in trying to get a bit of a balance here.

It has had a negative effect on bus speeds and that negativity on bus speeds has been so pronounced that it has caused people to stop travelling by bus. Just repeating something I did say earlier, people who have given up using peak buses and are now walking and cycling is actually quite a good thing. It is the morning peak demand that is the costly bit to provide and that is a good migration. People who were on public transport are now walking and cycling. It is good for them, good for their health, takes the pressure off the system and improves air quality. That is good.

We do not shy away from that. However, it is the case that the bus service has been made more unattractive because of the worsened journey times for a whole raft of reasons of which provisions for urban rail and cycling and so on are a part. The work that we are doing now is to try to redress that balance to make sure that buses play their part and they are neither the most important nor the least important. They are just up there in the top group in the choices that people might make of walking or cycling or of using public transport. That is where we want it to be and the work is to restore the speeds and the reliability. The short answer is yes, it has had a negative effect on traffic speeds and bus ridership.

Steve O'Connell AM: Thank you very much.

Caroline Russell AM: I am just slightly concerned that we are blaming the Cycle Superhighways for all of this downturn in bus ridership.

Leon Daniels (Managing Director, Surface Transport, TfL): That was not the intention, I am sorry.

Caroline Russell AM: We have also heard on this Committee about the massive increase in van use and all sorts of other things. If we are getting 60% of the traffic on Blackfriars Bridge in the morning on bikes, then that is moving an awful lot of people around the city. Do you think that with the schemes like Tottenham Court Road there is a real opportunity to get more people cycling and have the buses working well together? Do you think there is more you can do like that?

Leon Daniels (Managing Director, Surface Transport, TfL): Firstly to clarify, Caroline, absolutely we are not blaming all the bus ridership decline on provisions for cyclists. As the Committee has heard, there is a whole range of reasons why London is more congested. The increase in private hire vehicles and the increase in deliveries from white vans are easily the two biggest increases in demand on the system. The provision that we have given and we have given quite rightly to cyclists has taken some road space away and that is a contributor as well.

Caroline Russell AM: Sorry, could I just pick up on something that Tim said much earlier and also that you said, Leon? Leon, you said there was a direct correlation between the worst congestion and the ridership going down. Tim, you said that perhaps we need a new method of traffic limitation. I am wondering within all these discussions about the physical network whether we need to be thinking about a much more sophisticated way of managing demand. That might be where vehicles on the road are controlled by the time

of day, the distance they travel and perhaps even by the emissions of their engine. Do you think that there needs to be some kind of move to that?

Leon Daniels (Managing Director, Surface Transport, TfL): The answer has to be that if you are scarce of some resource, then pricing it accordingly is usually the significantly successful measure. If you have finite road space and unlimited demand and that unlimited demand is growing by population increase, by economic activity, by people having their Amazon parcels delivered to their offices and so on, then inevitably you reach a point where technology and science and clever tricks get you somewhere. However, eventually you get to a point where some sort of pricing mechanism to ration the demand in a way that the legitimate traffic can get through and do its business and the undesirable traffic is discouraged is the inevitable consequence. I hope that is a yes. It is of course a matter for the Mayor to decide in terms of --

Caroline Russell AM: Of course, but from a TfL perspective it would make practical sense in terms of improving things?

Leon Daniels (Managing Director, Surface Transport, TfL): From a technical point of view, pricing would make a significant improvement in the balance of traffic in London in prioritising the desirable traffic and discouraging the undesirable for sure.

Caroline Russell AM: Thank you.

Joanne McCartney AM: Part of my question has already been answered in part and it was really looking at alternative models of bus provision. We have heard from Dr Liu about feeder models.

I am wondering if I can ask Dr Liu and Mr Pharoah to start with whether there is anything that London can learn from across the world, other cities. We might have briefing talks around bus rapid transit (BRT) systems as a trunk route and shuttle and hub model and then the feeder system. Is there anything that you think could be placed here or is London just a little bit too big to accommodate some of those other systems? I do not know who wants to start.

Tim Pharoah (Independent Transport Planning Consultant): One can always learn from other places, but the thing that one learns most is that solutions are specific to your own city. I have just returned from a tour of China, for example, where I have seen rapid transit systems. They are implemented on a basis of "build another 10 kilometres today and another 10 kilometres tomorrow" on roads which are so wide you could fit half of London within them. It is interesting but not relevant to the space that we have.

London has to recognise that most of our road network is historic network that is very constrained in terms of dimensions and there is a limit to how one can import bus technologies. We have to be much cleverer - and we are much cleverer, I think - at managing this situation.

In terms of areas of new development such as is happening in the Thames Estuary area north and south of the Thames, you have FastTrack south of the Thames and similar systems --

Joanne McCartney AM: Transit systems, yes.

Tim Pharoah (Independent Transport Planning Consultant): -- transit systems being developed north. We can do that and we can certainly reflect practice in other cities in those sorts of areas.

Also, we in London do pretty well in terms of the factors which affect the demand for car travel. Car parking, for example, is relatively limited and in new developments even is reasonably constrained. It needs to be and that is a real factor. The cities which build themselves with 100% car parking provision in their new developments really build themselves into a problem. Certainly, the Chinese cities have had that issue.

More can be done and I have mentioned already in terms of traffic limitation that there are many techniques used around the world. They do not all involve pricing: regulation of various sorts and parking in particular. There was a report produced by Michael Thomson [British economist] back in the mid-1970s that identified 23 traffic limitation measures. There is plenty of scope to explore but a lot of it does go beyond the TfL remit, I would suggest. The GLA can take a broader view perhaps and the boroughs obviously would be just as involved in any measures such as regulation of parking or delivery traffic or whatever it might be. There is much to explore, I suggest, and we should not just imagine that the future is a continuation of what we have done in the past.

Dr Ronghui Liu (Associate Professor, Institute for Transport Studies, Leeds University): With regard to BRT initiatives, a BRT system does require wide road space and they tend to be built with dedicated all-time bus lanes running throughout the whole corridor, which is very difficult to be implemented in cities like London.

A lot can be done and can be learned from other cities and a lot can be done to redesign our existing bus networks, as I mentioned earlier. Perhaps there are is multi-layered public transport with rail and with our main strategic bus routes. It might be some major radial routes and some circular routes as the main bus routes and feeder routes or even circulatory routes serving local communities.

In terms of some of the experience around the world, I take Hong Kong as an example, which is very congested. It has a slightly higher population than London but it has a similar bus fleet of around 9,000 buses. Almost half of that bus fleet in Hong Kong is smaller buses that run more as part of feeder buses or community buses and part of them are operated privately. The characteristics, I would say, are they are smaller buses and so they have a higher penetration rate into the local communities, which is easier.

Another characteristic is that some of them do not have fixed routes. They are very much demand-responsive and so they do not have fixed routes or a published timetable. They can change routes in response to demand much more quickly. Imagine half of that bus fleet, a similar bus fleet as we have in London, and doing that in terms of demand-responsive public transport services. In Hong Kong, 90% or 95% of trips are made by various forms of public transport and there is lots we could learn from looking in detail at how they operate.

Joanne McCartney AM: Could I ask Gareth and Leon? I know you said earlier you want to do things very gently. The introduction of red routes, although controversial at the time, could speed up buses considerably. Is there anything that you are looking at that you think could work in London that would change the nature of bus “protection”, as I suppose you could call it?

Gareth Powell (Director of Strategy and Contracted Services, TfL): The first thing to say is that we, too, look around the world and have regular dialogue with cities because we are as keen as anybody to take good ideas that we think could work in London. There are some challenges that we have. The challenge of our road network is one that is quite difficult and the densification of London is quite difficult. One of the features of Hong Kong is that it is very dense and that lends itself to certain types of transport provision. It is much harder to do in, say, outer London where there are longer distances needed to be travelled and so on.

Nonetheless, we are open to exploring things like demand-responsive travel, different ways of prioritising the movement of buses within the given corridor and so on, ways that technology can support us with that, ways that technology can support customers to have better access to buses or other types of transport and all of those things. If we receive ideas from people on that, then we look at them on their merits.

I would just say on BRT that the point is very well made. In an ideal world, it is a very good thing to do because you can dedicate highway space to buses and provide a very high quality service. Really, it lends itself to being planned into new developments from the start rather than trying to fit around the sort of road network that we have in London. Nonetheless, if there are opportunities to do that in new large-scale developments, then absolutely we would explore those. As was said, we have had some experience in trying to do that with East London Transit (ELT) and the things that we have put in different areas.

The final point I would make is just perhaps to the point of different types of priority. Clearly, going forward there may be opportunities to have bus priority or bus protection but also alongside things like cycling provision, and we have a number of examples of that. There is a bus and cycle lane being put in to Woolwich, for example, that is going to benefit a huge number of bus passengers and also cyclists. There are things we are exploring on a case by case basis where things might be able to be done slightly differently where it is appropriate to that locality.

Joanne McCartney AM: Can I just ask TfL finally about accessibility? I know you have quite ambitious plans to make bus stops accessible. Are you on track with those plans?

I will also say that one of my major postbags on buses is about the lack of countdown signs now at bus stops. Even though I am a smartphone user, coming out of a Tube station, for example, to get the bus, the last thing I want to do is to put my shopping bags down and get on my phone.

Leon Daniels (Managing Director, Surface Transport, TfL): I have a couple of things on that, Joanne. In terms of accessibility, we are very much ahead of the rest of the country. The bus fleet itself has been low-floor and fully accessible, which is not just about wheelchair users; it is about the elderly, arthritic and injured.

That accessibility is only useful if the bus can get to the kerbside. We have spent quite a lot of money over the years and we have continued to spend money in improving the environment of the bus stop itself, kerb heights, access - way in and way out - and so on. We are making sure that the physical infrastructure meets the bus in such a way that the accessible benefits of the bus are not lost.

I have to say that this is a little bit like boiling the ocean. As we go through the programme of making the bus stops more accessible physically, there are places in London with local authorities and frontages who then undo the work by adding litter bins, post boxes, signs, A-boards, advertising boards and so on. We frequently find cases where we have spent the money and physically it was OK, but some of that work has been undone by others, perhaps in ignorance, and some of those are quite close to home. As you will appreciate, with a two-door bus with wheelchair access in the centre, you need to get both doors parallel with the pavement, not just one of them. Otherwise, as I say, all the benefits are lost.

On the question of countdown, I am afraid it is the case that the number of countdown signs that we presently have has been stable for some years but there is no funding for any more. The countdown --

Joanne McCartney AM: You take bus stops or remove bus stops and they tend to not be put back.

Leon Daniels (Managing Director, Surface Transport, TfL): Joanne, there is a website that charts all of this on our website. We never remove a countdown sign permanently. What tends to happen is if a bus stop gets moved, there is a time lag between the moving of the stop and the electrical power supply being reconnected because it does not work without power. On our website, you can see the location of every countdown sign, the reason why it has been removed and what the estimated date of return is. That is always the case.

I am afraid there is no money for more countdown signs and I would mislead you if I suggested that there was. There is a little bit of a conflict because the business case for countdown signs has always been on those stops which have the most passengers. Of course, you might argue - you could easily argue - that the best place for a countdown sign is in a more sparsely trafficked area where there are fewer alternatives, fewer opportunities. Frankly, you can have an argument about whether the countdown signs in the Strand where the buses are one a minute actually add as much value as a countdown sign in an outer London borough where the bus is only every 20 minutes. You could have that argument. However, there is no more money for any new ones. It would be rather difficult to remove existing ones because we have undertaken not to remove existing ones. We very much appreciate that for as long as my mother who is 91 and my aunt who is 94 are alive, they will never have a smartphone. Therefore, the fact that bus information is available on a smartphone on an app, by SMS and on the internet at home is of no value to them whatsoever. We do very much recognise that for some people in the community, especially those who have most need, the lack of information at the stop is an issue and we accept that.

Joanne McCartney AM: You are doing this pilot at Euston on the stations but having something attached to the bus stand itself?

Leon Daniels (Managing Director, Surface Transport, TfL): Yes.

Joanne McCartney AM: Is that something that is more cost-effective?

Leon Daniels (Managing Director, Surface Transport, TfL): Yes, and we are also inviting external parties to fund those. For example, if you were a college or a hospital or a building, to be nice to your users you might fund in effect a screen in the foyer of the building that gave you real-time information for the buses nearby. It is not something we can afford to do but it is the sort of thing that facilities in buildings could.

Joanne McCartney AM: I will ask one more question and that is to Arriva London. I must say I do not get it as much as I used to about bus drivers and attitudes towards people with mobility issues. That is not only about being able to get on board or asking people to move out of those wheelchair spaces, but also if elderly people get on, moving away before they have managed to sit down. Is that something that you think your driver training adequately addresses or do you have any plans to further improve that?

Bob Scowen (Managing Director, Arriva London): TfL has recently introduced a campaign across the whole of London for all bus drivers which has identified some of the requirements which we would all aspire to achieve. That is obviously to address all of the needs of all customers and it has been very successful. Could we do more? We can always do more and there will always be that issue.

The wheelchair conflict issue or the buggy space issue is a real challenge for us not just within London but across the whole of the country. It is very difficult for a bus driver to police societal issues, although they do try their very best in quite difficult circumstances in the main to do that. Sometimes, they do come up against people who act very unreasonably and it is difficult for a bus driver to do that.

Joanne McCartney AM: I appreciate that, yes.

Bob Scowen (Managing Director, Arriva London): More can definitely be done. The more resource we throw at something like that, the more positive the result would be. Going forward, it is something which no doubt we will address with TfL, our end customer, on its aspirations and what we can do best to supply the best service we can for the Londoner. As an operator, only speaking for Arriva – I cannot speak for anybody else – it is something that I would aspire to try to do better.

Joanne McCartney AM: Thank you.

Tom Copley AM: I wanted to ask if there are any merits to bringing back the bendy buses on high-capacity routes although they were very unpopular. I remember when the 29 went from being a bendy bus to being a double-decker and the overcrowding was noticeable on the double-deckers. Do you think there are any merits to doing that on busier routes? For wheelchair users, they are very accessible, yes.

Leon Daniels (Managing Director, Surface Transport, TfL): In the previous Mayor's last few days in office when he speculated whether he might stand again in 2020, I did rather mischievously tell him that on that basis he might be able to get rid of bendy buses for the second time in his career.

There are no intentions to bring back articulated buses presently. However, we do recognise that growing demand on some corridors does push you in the direction of thinking how you might usefully carry more people more efficiently. That is something that is exercising our mind.

In respect of articulated buses, their worst feature was the level of fare evasion, I am afraid. In the current financial situation, that really could not be encouraged.

Tom Copley AM: I note the Mayor's Question Time a couple of times ago saying that now the top ten routes of fare evasion are all served by new Routemasters, I believe.

Leon Daniels (Managing Director, Surface Transport, TfL): The fact is that the more open the boarding, the worse the fare evasion.

Tom Copley AM: Yes, of course that needs to be taken into account.

Leon Daniels (Managing Director, Surface Transport, TfL): That all being said, the level of fare evasion is actually quite low across the whole network and is certainly less than the cost of employing conductors.

Tom Copley AM: Thank you.

Caroline Russell AM: These questions are about the overall thing about making changes to the bus network. We have heard an awful lot this morning about what the bus network is trying to do and the potential big changes if Oxford Street gets pedestrianised. It is rethinking some of the routes through London and the potential for the Hopper ticket, making it easier for people to swap between routes. That makes these very long radial routes through the city from the outside to the very centre maybe not the most fit for purpose for all journeys and getting more people around.

I would like to hear from the bus companies first. First of all, are there any barriers you can see to achieving major changes to the bus network? Also, we have heard that the feasibility of changing the network partway through operator contracts is absolutely doable and gets done all the time. I would be interested if the bus operators have any other views on that about things that might be difficult about making changes to networks during a contract.

Peter Batty (Commercial Director, Arriva London): Again speaking for Arriva London, we have had a history and Leon makes the point. A lot of changes happen mid-contract and so we accept that as the nature of the contracting mechanism that they are not fixed. The stability of the network is very important as well. You want to think that these contracts will last in the long-term planning of the business with assets and resource and that you are not going to have major change.

With enough planning and lead time, we can do anything. For us as an operator, one of the biggest challenges is being able to provide the infrastructure in the right places to run buses and give TfL value for money in bidding for bus routes. You look at somewhere like southeast London where there is going to be growth in bus patronage as a result of the Elizabeth Line. The bus garages which are there now are the ones which are there now. As an operator, we have capacity nearby but we have to think about how we can increase that capacity and so there is quite a considerable lead time.

There are other sites in London where there is growth where we are trying to develop sites and bus garages are not always the most popular development to have. That is a barrier to us: wanting to operate the route but being able to bid competitively and offer value for money doing it from a site that is close enough to the route. That is certainly a barrier and the more information we have, which TfL does share, about where the growth is going to be in the London network, we can look at opportunities for expanding sites and being prepared for growth.

Whilst it can be a barrier, it is for us to plan for that and that is the biggest challenge. We can move resource around, we can move buses around and we can move drivers around so that we can adapt to change. We can understand why there is change and really for us it is the timescale for planning that is so important; that we do not get a major at short notice. We need to be involved from the outset that there is going to be a major change to one of our bus routes and how we plan for that.

Caroline Russell AM: Thank you.

Gareth Powell (Director of Strategy and Contracted Services, TfL): Only to say that absolutely we try to plan changes to try to make sure that resource is available to the operator and it is not straightforward. There are many reasons why what we would aspire to do in terms of a bus route change cannot actually in the end be delivered. Available resource is one of them, but of course where the bus is going to stand, where the facilities are for drivers, how close it is to available garage space so operators can bid in, where the stops are going to be, what the physical geography and geometry of the proposed route is going to be, what the concerns of the residents are who may or may not have buses passing their front door now and may have a view about that, all of things have to come together with the need that we anticipate or observe is happening for that particular change.

That is what we put into the planning process. We try to do all the feasibility and all the thinking upfront and then we get to consultation on a specific proposal, hear back from everybody as to what they think and then make any adjustments. One of the reasons it does take a little bit of time is because there are lots of things that we have to get right to do so. We have to make sure at the end of it that what we set out to do is

something that is well used and well supported. We have been learning over the years how best to do that to make sure that the evolution of the bus network works effectively.

Caroline Russell AM: That leads us neatly on to the next bit, which is thinking about the engagement with the public and with stakeholders. As you were speaking, I just had Archway flashing through my head because Archway incorporates all of those issues, where the buses stand, where the stops are and where the routes are. Also, it has been a situation where it is probably fair to say that the local residents and bus users in the area and bus users who interchange at Archway are feeling as if they were not actually listened to. It was 75% of people who had problems with the layout as has currently been implemented.

Leon said earlier something that gave me great hope, which was, "I do not think we have quite finished at Archway". Is that a fair paraphrase?

Leon Daniels (Managing Director, Surface Transport, TfL): That is absolutely true. In the light of operating experience and the comments we get from all the stakeholders and so on, that gives us the chance to go back and see what else might be done better. It is slightly complicated, as you know, because Upper Holloway Bridge has been closed. We have more buses on other bits of road in the area than we would normally have. The true answer is we are again looking at the stopping arrangements, the standing arrangements and where buses might go in the light of all the experience. That is an absolute yes, Caroline.

Caroline Russell AM: That is a yes? You will look at all those arrangements?

Leon Daniels (Managing Director, Surface Transport, TfL): Yes.

Caroline Russell AM: The residents have come up with some incredibly sensible things which pick up on the issues that Katharina [Winbeck] was raising earlier, access to hospitals. The geography at Archway, being on a steep hill, means that leaving people who are trying to access a hospital that is up the hill from the stops where they are being left is just not very helpful. Do you think we can serve the points of demand, for instance, Whittington Hospital, more effectively at Archway?

Gareth Powell (Director of Strategy and Contracted Services, TfL): We would hope to be able to address as many issues as we can. Of course, the timescale for the implementation of the changes to the bus service was driven by the timescale for the implementation of the changes to the highway layout in this particular case. Leon says it is not finished. That is because the bus network has to change when the road layout changes, but we want to then try to move the bus network to be a better solution to fit the available redesigned carriageway.

Absolutely, we will do our best to find ways of addressing those issues if we can and it is certainly not finished.

Caroline Russell AM: Going forward to all the other changes happening all over London, do you think there are lessons to be learnt from the Archway situation that could bring those user experiences in earlier into the planning process? With the residents at Archway, there are lots of really effective groups which have been trying to engage with the process and I think they feel that they have encountered rather deaf ears as the process has gone forward. Do you think there can be a bit more listening earlier?

Gareth Powell (Director of Strategy and Contracted Services, TfL): Yes and as I said earlier, we are trying to continually improve how we do these major schemes. One of the things that we have benefitted from hugely since the last committee view on this is a better proactive engagement with boroughs and they are very

in tune with the local situation with their residents. We have benefitted from having proactive dialogue there and we would like to do more of that about changes and people's use because we end up with a better solution at the end. We are certainly not saying that we are perfect and our aspiration is to do more of this.

The challenge we always face is we cannot satisfy everybody in all of the decisions that have to be made. We certainly want to get as much input as possible to try to come up with the right answer.

Caroline Russell AM: Great. In terms of engagement with stakeholders again, Katharina raised earlier the issue of people who do not necessarily use buses at the moment and also the people who are absolutely dependent on buses for access to services, access to hospitals. How are you reaching out to the people who are not yet using the bus services?

Gareth Powell (Director of Strategy and Contracted Services, TfL): The consultations that we do are not limited to the users of the bus network and in fact we try to make them as widespread as possible. In some cases, we are doing leaflets through local doors and we are talking with all sorts of different representative groups for particular types of customer with particular needs and so on. We do that in the consultation process. For big, major consultations, we organise local events and we go and do specific discussions with local groups.

We try to do that. We absolutely try to capture everybody, not just those that use the service but those who might use the service or, indeed, those who are merely residents who are impacted by buses travelling past the front of their house or shop owners for their businesses.

We do try to do our best to capture all the views. We bring all those in in a formal consultation response set, look at them, analyse them and then try to adapt where we can our proposals if we have things that we have not picked up that we can adjust. That is the process. There is always more we can do and there is always more we try to do and we have not always, as I say, been able to match what people say all the time. We do try to take as many things into account as possible and if there are specific circumstances or specific groups for a particular change that people think we are not capturing, then we are all ears on that and we welcome input on a specific to say, "Actually, can you make sure you have input from this local community", and so on. We welcome that.

Caroline Russell AM: I was wondering if any of the other panellists have ideas about how consultation could be done better or differently. Is there anyone with anything urgently burning that they want to add?

Katharina Winbeck (Head of Transport, Environment & Infrastructure, London Councils): I would say one thing that I mentioned earlier. An equalities impact assessment is quite a useful tool in bringing out some of those things you may not necessarily think about when you are developing a new route or whatever. It just gives that extra lens. Perhaps use somebody else within TfL to undertake that work just to make sure that there are not any particular groups that will be left behind because of those changes. That might be quite a useful tool to use.

Caroline Russell AM: I gather there was not an equalities impact assessment used for the recent Oxford Street consultation. Is that something you are going to pick up now?

Gareth Powell (Director of Strategy and Contracted Services, Transport for London): We are certainly happy to look at that and other tools. We have been engaging with all sorts of different stakeholder

groups very widely in fact on the Oxford Street areas. That specific, absolutely, we are happy to take away and have a look at as part of our processes.

Caroline Russell AM: Finally, do we have any early messages from the consultation on the changes to the buses around Oxford Street in terms of what the early indications from the consultation might show?

Leon Daniels (Managing Director, Surface Transport, Transport for London): Since it is open until 29 January [2017], it would be improper to say anything we might know about the tenor of it so far, Caroline, other than to say that we would very much like the most possible responses for this and all consultations that we do. Consultation very rarely has a value if people have views but do not express them and we would very much like to encourage people if they would to respond by 29 January on that and on any other consultation that is running.

Caroline Russell AM: Thank you.

Keith Prince AM (Deputy Chairman in the Chair): It can all be found on your website, can it?

Leon Daniels (Managing Director, Surface Transport, TfL): Yes, it is on the consultation hub. Every single consultation is available online.

Keith Prince AM (Deputy Chairman in the Chair): Thank you. That brings us to the end. I would like to thank our guests very much for their time.

Leon Daniels (Managing Director, Surface Transport, TfL): Thank you very much for inviting a wide range of people on this side of the table from colleagues on both sides, including Arriva London.

This page is intentionally left blank

Subject: Summary List of Actions

Report to: Transport Committee

Report of: Executive Director Secretariat

Date: 2 February 2017

This report will be considered in public

1. Summary

- 1.1 This report sets out the actions arising from previous meetings of the Transport Committee.

2. Recommendation

- 2.1 **That the Committee notes the completed and outstanding actions arising from previous meetings of the Committee.**

Actions arising from the Committee meeting on 11 January 2017

Item	Topic	Status	For Action by
6.	<p>Bus Network</p> <p>During the course of the discussion, the Committee requested the following further information, in writing, from Leon Daniels, Transport for London (TfL):</p> <ul style="list-style-type: none"> • A breakdown of the bus routes which had seen the biggest fall in passenger numbers; • Details of the arrangements being investigated and proposed improvements to the plans at Archway; and • A breakdown of the figures for bus passenger numbers for outer, central and inner London. 	Ongoing. The Chair has written to TfL to request the additional information.	TfL

Actions arising from the Committee meeting on 8 December 2016

Item	Topic	Status	For Action by
7.	Transport Committee Work Programme The Committee delegated authority to the Chair, in consultation with party Group Lead Members, to agree the report from the investigation into traffic congestion.	Ongoing. The report is due for publication during January.	Scrutiny Manager

Actions arising from the Committee meeting on 9 November 2016

Item	Topic	Status	For Action by
6.	London Underground's Major Projects The Committee requested the following information in writing from TfL: <ul style="list-style-type: none"> • A breakdown of how many Night Tube passengers were buying a ticket specifically to travel at night, compared to how many already had daytime tickets or travelcards; • A breakdown of how many Night Tube noise complaints related to surface and sub-surface tube stations; • A list of all the stations that have been subject to a Night Tube noise complaint (and how many at each); • The number of Night Tube noise complaints from individuals and the number sent on behalf of a group of people; • A follow-up to the suggestion that users of the Night Tube be actively encouraged to reduce noise disturbance for people living around Tube stations; • Data on trends in (i) Night Bus usage, including supplementary routes, and (ii) taxi and private hire usage (by Night Tube station taxi rank), since the Night Tube was introduced; • Information on TfL's plans to increase the number of manual boarding ramps at tube stations; • Information on the maintenance cycle of Tube station lifts, including duration of maintenance, when and where the work is carried out; 	Ongoing. The Chair has written to TfL to request the additional information.	TfL

Item	Topic	Status	For Action by
	<ul style="list-style-type: none"> • An estimate of how many Tube station lifts were out of service at any given time; • Details of lifts currently scheduled for renewal; • A follow-up to the suggestion that passengers be given clearer advice that they must touch out when gates are left open, both during major events and when the gates were not staffed; • The amount of space at Tube stations currently used for retail in Zone 1, and how much space would be used for retail by 2020; • The level of income TfL receives from retail outlets at tube stations, and how much it would receive by 2020; • Information on any remedial measures being implemented to tackle persistent flooding at Hyde Park station; and • Further detail on the phasing of the New Tube for London and Four Lines Modernisation programmes, including the target dates for capacity upgrades on each of the lines. 		
8.	<p>Transport Committee Work Programme</p> <p>The Committee delegated authority to the Chair in consultation with party Group Lead Members to produce a written submission to the House of Commons Transport Committee inquiry on urban congestion.</p>	Ongoing. The submission is likely to be made following publication of the Committee's report on congestion in the New Year.	Scrutiny Manager

Actions arising from the Committee meeting on 11 October 2016

Item	Topic	Status	For Action by
6.	<p>Traffic Congestion</p> <p>The Committee also noted the undertaking by Cllr Feryal Demirci to provide a written update to the Committee on the London Councils Transport and Environment Committee review of the London Lorry Control Scheme.</p>	Ongoing. The Chair has written to Cllr Demirci to request the additional information.	Cllr Demirci

Actions arising from the Committee meeting on 15 June 2016

Item	Topic	Status	For Action by
5.	Pedestrianisation of Oxford Street The Committee requested the following further information in writing from TfL: <ul style="list-style-type: none"> Detailed data on incidents on Oxford Street and their causes; and A follow-up to the suggestion that bus drivers' views be canvassed on the safety of driving on Oxford Street. 	Ongoing. The Chair has written to TfL to request the additional information.	Managing Director, Planning, TfL
	Authority was delegated to the Chair, in consultation with party Group Lead Members, to agree a response to a forthcoming TfL consultation on Oxford Street pedestrianisation.	Ongoing. Awaiting formal consultation.	Chair

3. Legal Implications

3.1 The Committee has the power to do what is recommended in this report

4. Financial Implications

4.1 There are no financial implications to the Greater London Authority arising from this report.

List of appendices to this report: None.

Local Government (Access to Information) Act 1985

List of Background Papers: None

Contact Officer: Vishal Seegoolam, Principal Committee Manager

Telephone: 020 7983 4425

E-mail: vishal.seegoolam@london.gov.uk

Subject: Action Taken Under Delegated Authority

Report to: Transport Committee

Report of: Executive Director of Secretariat

Date: 2 February 2017

This report will be considered in public

1. Summary

- 1.1 This report sets out recent action taken by the Chair under delegated authority.

2. Recommendations

- 2.1 **That the Committee note the action taken by the Chair under delegated authority, namely to agree a letter to the Department for Transport about surface transport access to Heathrow Airport.**

3. Background

- 3.1 Under Standing Orders and the Assembly's Scheme of Delegation, certain decisions by Members can be taken under delegated authority. This report details those actions.

4. Issues for Consideration

- 4.1 At its meeting on 11 January 2017, the Transport Committee resolved:

That authority be delegated to the Chair, in consultation with party Group Lead Members, to write to the Department for Transport about surface transport access to Heathrow Airport.

- 4.2 Following consultation with party Group Lead Members the Chair agreed a letter to the Secretary of State for Transport about surface transport access to Heathrow Airport, as attached at **Appendix 1**.

5. Legal Implications

- 5.1 The Committee has the power to do what is recommended in the report.
- 5.2 Officers confirm that the scope of this investigation falls within the Committee's terms of reference.

6. Financial Implications

6.1 There are no direct financial implications to the GLA arising from this report.

List of appendices to this report:

Appendix 1: Letter to the Secretary for State for Transport re surface transport access to Heathrow Airport

Local Government (Access to Information) Act 1985
List of Background Papers: None
Contact Officer: Vishal Seegoolam, Principal Committee Manager Telephone: 020 7983 4425 E-mail: vishal.seegoolam@london.gov.uk

Caroline Pidgeon MBE AM, Chair of the Transport Committee

Rt Hon Chris Grayling MP
Secretary of State for Transport
Department for Transport
Great Minster House
33 Horseferry Road
London SW1P 4DR

London Assembly
City Hall
The Queen's Walk
London SE1 2AA

13 January 2017

Dear Secretary of State,

Surface transport access to Heathrow Airport

I am writing to express the serious concerns of the London Assembly Transport Committee about the lack of planning for improving surface access to Heathrow Airport. If the expansion of the airport goes ahead as the Government has proposed, there would need to be significant capacity upgrades on routes to the airport. However, the Government has given little if any commitment that the necessary transport schemes will go ahead. This risks creating severe overcrowding on London's transport network, and undermining efforts to encourage modal shift to sustainable transport modes. Before Parliament makes its final decision on the expansion of Heathrow it is imperative that decisions are made on precisely what surface access is required, how much it would cost and who would be expected to pay for it.

The Airports Commission projected a rise in the number of passengers using Heathrow from around 73 million per year currently, to 148 million per year by 2050 if a third runway is built. This doubling of passenger numbers will require a corresponding increase in the capacity of the surrounding transport network, as well as measures to make it easier for passengers and staff to cycle to the airport. Despite choosing Heathrow as its preferred option for airport expansion, the Government has no detailed plan for delivering the surface transport upgrades that would be required to support the forecast increase in passenger numbers.

As well as additional passengers, the expansion of Heathrow would also be likely to significantly increase freight traffic. We heard from Heathrow Airport that, without mitigation, the number of freight trips to the airport is projected to grow by 80 per cent from its current level of 10,000-15,000 per day. The additional business activity around the airport will also create more freight traffic, as the Airports Commission accepted. This increase will have a significant impact on air quality in an area already experiencing high levels of pollution. It also risks negatively affecting local communities as freight traffic increases on the road network.

Heathrow told the Committee it is looking to minimise the increase in freight traffic and is talking to freight operators, but unlike in other areas (such as staff travel) it does not have any specific targets. Clearly, shifting more freight to the rail network is unlikely to be feasible unless the Government acts decisively to relieve capacity constraints. Other measures such as using

consolidation centres to reduce the number of freight vehicles travelling to and from the airport may be effective, but there appears to be no detailed planning for this. The Government needs to take a lead in this area, working with TfL, boroughs, industry and the airport.

The Airports Commission has already set out the surface transport schemes that are necessary in order to facilitate an expanded Heathrow. The following schemes would represent a minimum requirement:

- Southern Rail Access connecting London Waterloo to Heathrow.
- Western Rail Access connecting Heathrow to the Great Western Main Line.
- Completing the planned upgrades of the Piccadilly line.
- Elizabeth line spur to Heathrow.
- Tunnel or ramp to separate the M25 and the third runway, south of junction 15.
- Widening of the M4 between Junctions 2 and 4b and on the airport link road.
- Other local road improvements, including on the A4 and A3044.

Prior to the Government's announcement we urged you to ensure that there is a clear plan in place to fund and deliver these schemes. Unfortunately this has not happened. The details of new surface transport schemes shared by the Department remain vague and unconfirmed. Only the Piccadilly line and the Elizabeth line, which TfL is responsible for, have confirmed plans in place.

The Southern Rail Access scheme linking London Waterloo to Heathrow was presented as an essential scheme by the Airports Commission. We have since seen the publication of a feasibility study from Network Rail. However the range of options for how this proposed scheme could be implemented are wide. To ensure this schemes provides additional public transport capacity, the Government would need to invest in new track and station infrastructure. If the service is delivered mainly using existing infrastructure, this would disadvantage passengers using existing services. In any case, we have not seen any commitment from the Government that it will deliver this scheme in any form.

We understand that you do not agree with the estimate from Transport for London that the cost of delivering the necessary surface transport upgrades for an expanded Heathrow would be around £15 billion. So far, however, we have not seen any alternative estimate from the Government. Highways England has already set out its assessment that road upgrades may be up to £700 million more expensive than the Airports Commission projected, for instance.

Furthermore, it is not yet clear exactly who will pay for the necessary transport infrastructure. We note the Government has said that Heathrow Airport will pay for some of the road improvements, and make a contribution to rail schemes. It is imperative that the Government sets out what these upgrades will cost and where the money will come from.

We recommend that the Government gives urgent consideration to the surface transport implications of its decision on Heathrow expansion. A costed plan to deliver the required capacity upgrades needs to be produced long before work on the third runway begins.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Caroline Pidgeon', with a stylized flourish at the end.

Caroline Pidgeon MBE AM
Chair, Transport Committee

This page is intentionally left blank

Subject: Bus Safety

Report to: Transport Committee

Report of: Executive Director of Secretariat

Date: 2 February 2017

This report will be considered in public

1. Summary

- 1.1 This report sets out the background to a discussion with guests on the safety of London's bus network.

2. Recommendation

- 2.1 **That the Committee notes the report, puts questions on bus safety to the invited guests and notes the discussion.**

3. Background

- 3.1 The Transport Committee has decided to investigate bus safety. The scope and terms of reference for this investigation have been agreed by the Chair under delegated authority in consultation with party Group Lead Members. The terms of reference for the investigation are:
- To examine recent trends in the performance of London's bus network;
 - To assess progress to date of Transport for London's (TfL) bus safety programme; and
 - To identify further measures to reduce road collisions and other incidents involving buses.
- 3.2 Buses are the busiest form of public transport in London, with around 2.5 billion passenger trips made each year (around double that of the Underground). TfL commissions private operators to run bus services in London, awarding seven-year contracts to operate bus routes. Although bus safety (in terms of casualty numbers) has improved over recent years, there was a spike in bus collision fatalities in 2015.
- 3.3 While London's bus fleet is arguably one of the safest in the world, the number of collisions involving buses has increased in recent years. There were 4,297 injuries by the end of Q3 2014/15, compared with 4,196 over the same period the year before (and increase of 2.5 per cent). The number of casualties being taken to hospital decreased by 4.2 per cent, suggesting that the increase was driven by a rise in minor injuries.¹

¹ <http://content.tfl.gov.uk/sasp-20160310-p1-item08-bus-safety-programme.pdf>

- 3.4 This investigation will review how TfL is trying to improve bus safety, in part by assessing the first year of TfL's Bus Safety Programme (which was launched in February 2016). The investigation will also consider other factors that are likely to influence bus safety, such as speed and lateness targets set by TfL, bus driver training, plans for new safety technologies and the influence of road design on safety.

Bus Safety Programme

- 3.5 The previous Mayor and TfL launched the Bus Safety Programme as part of work to reduce the number of people killed or seriously injured on the capital's roads by 50 per cent by 2020.² It includes:
- Providing new, centralised TfL safety training to all bus drivers;
 - Publishing more bus collision data;
 - Putting more safety incentives in operator contracts; and
 - Trialling and introducing more on-board safety technology.
- 3.6 The Mayor, Sadiq Khan, has since committed to a Vision Zero policy approach to road safety.³ This meeting is an opportunity to consider how TfL plans to reduce incidents involving buses and whether the Bus Safety Programme is fit for purpose.

4. Issues for Consideration

The following guests have been invited to participate in the discussion:

- Gareth Powell, Director of Strategy and Service Development, TfL;
- Jane Lupson, Bus Collision Reduction Programme Manager, TfL;
- Amy Aeron-Thomas, Road Peace;
- Wayne King, Regional Coordinating Officer, Unite;
- Paul Russell, Chief Executive Officer, Ciras;
- Tony Wilson, Managing Director London and Surrey, Abellio; and
- Sarah Hope, a passenger representative.

5. Legal Implications

- 5.1 The Committee has the power to do what is recommended in this report.

6. Financial Implications

- 6.1 There are no financial implications arising from this report.

² <https://tfl.gov.uk/info-for/media/press-releases/2016/february/mayor-launches-world-leading-bus-safety-program>

³ https://www.london.gov.uk/sites/default/files/city_for_all_londoners_nov_2016.pdf

List of appendices to this report:

None.

Local Government (Access to Information) Act 1985
--

List of Background Papers: None

Contact Officer:	Georgie Wells, Assistant Scrutiny Manager
------------------	---

Telephone:	020 7983 4000
------------	---------------

E-mail:	scrutiny@london.gov.uk
---------	--

This page is intentionally left blank

Subject: Traffic congestion

Report to: Transport Committee

Report of: Executive Director of Secretariat

Date: 2 February 2017

This report will be considered in public

1. Summary

- 1.1 This paper provides details of the Committee's recent report on traffic congestion.

2. Recommendations

- 2.1 **That the Committee notes its report, *London stalling: Reducing traffic congestion in London*, as agreed by the Chair under delegated authority in consultation with party Group Lead Members.**

3. Background

- 3.1 The Committee has been investigating traffic congestion in London during 2016/17. The terms of reference for were:
- To identify the reasons behind recent trends in traffic congestion in London;
 - To examine the impact of traffic congestion on London;
 - To consider the effectiveness of existing initiatives aimed at managing congestion, including national and international good practice; and
 - To explore proposals for new interventions to tackle congestion and reduce traffic, and make recommendations to the Mayor and Transport for London.
- 3.2 Meetings in September and October 2016 were used to discuss this topic, with a range of experts and stakeholders including representatives of Transport for London (TfL), the AA, National Joint Utilities Group, London Cab Drivers Club, the Campaign for Better Transport and London First. Members also held informal meetings with other organisations and conducted site visits. A large number of written submissions were received by the Committee.

4. Issues for Consideration

- 4.1 The report, *London stalling: Reducing traffic congestion in London*, was published by the Committee on 19 January 2017.¹ The report was agreed under delegated authority by the Chair in consultation with party Group Lead Members.
- 4.2 Two Members of the Committee made objections to recommendations in the report, which have been published:
- David Kurten AM, UKIP Group Lead on the Committee, agrees with Recommendations 4, 5, 6, 7, 8, 9 and 11 of the report. He disagrees with Recommendations 2 and 3, and partially disagrees with Recommendations 1 and 10. The full text of David Kurten AM's statement can be found in Appendix 1 of the report.
 - Steve O'Connell AM, GLA Conservatives Group Member, has provided an addendum to the report clarifying his views on Recommendation 1 of the report. This addendum has been published on the London Assembly website.²
- 4.3 The recommendations of the report are:

Recommendation 1

In the short-term, the Congestion Charge should be reformed, so the payments levied better reflect the impact of vehicles on congestion. The daily flat rate should be replaced with a charging structure that ensures vehicles in the zone at peak times, and spending longer in the zone, face the highest charges.

For the longer-term, the Mayor needs to start to develop proposals now for replacing the Congestion Charge with a new citywide road pricing scheme, which charges vehicles according to the extent, location and timing of their road usage. Road pricing could also replace Vehicle Excise Duty, which should be devolved by the Government to the Mayor. There may be a case for the scheme to be wider than the existing Congestion Charge zone; discussions with all boroughs should take place to determine whether and how road pricing should cover their local road network.

The Mayor's forthcoming Transport Strategy should set out plans for both Congestion Charge reform and for the potential introduction of road pricing. The Mayor should also update the committee by the end of April 2017 about discussions with the government on the devolution of Vehicle Excise Duty.

Recommendation 2

TfL should ensure that new monitoring technology introduced to identify vehicles in the proposed Ultra Low Emissions Zone should be compatible with the future requirements of a road pricing scheme. TfL should confirm it will do this when responding to the recent consultation on ULEZ proposals.

Recommendation 3

TfL should take steps to encourage bids from boroughs interested in piloting a local Workplace Parking Levy (WPL). Provided the plans fit with any wider road pricing scheme, TfL should offer

¹ The report is available on our website at: <https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/london-stalling-reducing-traffic-congestion>

² Please see: https://www.london.gov.uk/sites/default/files/addendum_to_london_assembly_transport_committee_report.pdf

support to a WPL pilot programme if proposed by a borough. This should include offering additional funding to the borough(s) to initiate the scheme.

Recommendation 4

The Mayor and TfL should take steps to encourage more delivery consolidation. This will involve working with those running large construction schemes and retailers, potentially through Business Improvement Districts. The new London Plan should promote consolidation for new developments. TfL should also work with London Councils to reduce restrictions on night-time deliveries. The Mayor and TfL should write to the committee by the end of April 2017 setting out their plans to reduce commercial traffic in these ways.

Recommendation 5

TfL should pilot a ban on personal deliveries for staff. Based on the findings, the Mayor should consider extending this to all GLA Group premises, and promote this change in practice to other large employers in London. We ask that TfL write to the committee setting out plans for a pilot by the end of April 2017.

Recommendation 6

TfL should reconsider its approach to 'click and collect' at Tube and rail stations. Stations should be identified for a pilot programme in which multiple retailers and/or freight operators can deliver packages to a station for collection. We ask that TfL write to the Committee confirming plans to seek partnerships of this type by the end of April 2017.

Recommendation 7

The Mayor should set out how his new regulations for the private hire industry and the legislative changes he is advocating will affect congestion levels in London. He should also commit to assessing the impact of making private hire vehicles subject to a new road pricing regime, and different options for implementing this proposal. The Mayor should write to the Committee by the end of April 2017 confirming these plans.

Recommendation 8

TfL should conduct and publish an analysis of the impact of the Road and Transport Enforcement Team and, if it is proven to be cost-effective, set out plans to expand the size and coverage of the team. We ask that TfL writes to the Committee by the end of April 2017 with an update.

Recommendation 9

The Mayor and TfL should carry out an assessment of the effectiveness of the London Permit and Lane Rental schemes for roadworks. This should be aimed at ensuring the cost of delayed roadworks on London's road users is reflected in the amount companies must pay. We ask that TfL write to the Committee by the end of April 2017 with an update.

Recommendation 10

TfL should continue to implement its Road Modernisation Plan schemes including the proposed network of safer cycling routes such as Cycle Superhighways and Quietways. It should report back to the Committee by the end of April 2017 on how the construction of additional Superhighways and other major projects will be planned more effectively to minimise traffic congestion.

Recommendation 11

TfL should conduct and publish an analysis of the impact of the pilot scheme displaying traffic notices on buses and, if it is proven to be cost-effective, set out plans to roll out the programme more widely. We ask that TfL writes to the Committee by the end of April 2017 with an update.

5. Legal Implications

5.1 The Committee has the power to do what is recommended in this report.

6. Financial Implications

6.1 There are no financial implications arising from this report.

List of appendices to this report:

1. London stalling: reducing traffic congestion in London

Local Government (Access to Information) Act 1985
List of Background Papers: None
Contact Officer: Richard Berry, Scrutiny Manager Telephone: 020 7983 4000 E-mail: scrutiny@london.gov.uk

LONDON ASSEMBLY

London stalling

Reducing traffic congestion in London



Transport Committee
January 2017

Holding the Mayor to
account and
investigating issues that
matter to Londoners

LONDONASSEMBLY

Transport Committee Members



Caroline Pidgeon MBE
AM (Chair)
Liberal Democrat



David Kurten AM
UK Independence
Party



Keith Prince AM
(Deputy Chair)
Conservative



Joanne McCartney
AM
Labour



Kemi Badenoch AM
Conservative



Steve O'Connell AM
Conservative



Tom Copley AM
Labour



Caroline Russell AM
Green



Florence Eshalomi
AM
Labour



Navin Shah AM
Labour

The Transport Committee holds the Mayor and Transport for London to account for their work delivering the capital's transport network. The committee examines all aspects of the transport network and presses for improvements on behalf of Londoners.

Contact

Richard Berry, Scrutiny Manager
TransportCommittee@london.gov.uk
0207 983 4000

Follow us

@LondonAssembly
#AssemblyTransport
facebook.com/london.assembly

Contents

Summary	7
Recommendations	10
1. Introduction	13
2. Congestion trends.....	16
3. Charging for road usage	21
4. Commercial traffic and private hire services.....	33
5. Encouraging modal shift	41
6. Managing the road network.....	45
Appendix 1: Views of David Kurten AM.....	53
Appendix 2: Views and information	56
References	59
Other formats and languages	63

Caroline Pidgeon MBE AM

Chair of the Transport Committee



Over a decade ago, London led the world by introducing a Congestion Charge in the centre of the city. The scheme has proven successful, keeping a lid on private motor traffic and creating new space for buses, cyclists and pedestrians on the busiest part of our road network. Congested cities around the globe looked to London as they considered how to tackle the gridlock on their own streets.

However, congestion has begun to increase sharply again, and not just in central London but across the capital. Traffic has slowed down and road users are spending longer stuck in delays. Buses have become so unreliable that usage has begun to fall, after many years of growth. The causes of this change are complex and multiple, as our investigation has identified.

What is clear is that the current Congestion Charge is no longer fit for purpose – it is a blunt instrument using old technology that covers a tiny part of London. Fundamentally, vehicles should be charged according to their impact on congestion. Charging a daily flat rate to enter a zone may discourage some people from using part of the road network, but this approach is failing to target vehicles spending longer on the roads, at the most congested times, and travelling in other areas where congestion is high.

“The current Congestion Charge is no longer fit for purpose.”

We recommend in this report that the Mayor should make plans now to introduce road pricing in London. This idea has long been discussed, but until now the political will to make it happen has been lacking. Delaying further is not an option. There are a number of options for how this happens, which TfL will need to work out, including the geographical scope, monitoring technology and integration with Vehicle Excise Duty and the Mayor’s emissions charges. In the interim, immediate reform of the existing Congestion Charge to target it at journeys causing congestion would be worthwhile.

There is a range of other measures that could also help to tackle congestion. The Mayor could do more to reduce the impact of roadworks, strengthen the on-street response to major traffic incidents, and encourage Londoners to receive personal deliveries in more sustainable ways. However these measures alone will not be enough to tackle London’s congestion problem.

Road pricing is supported by business groups, local authorities and transport experts. Of course there is likely to be a vocal minority opposed to its introduction. But we agree the time has come for the Mayor to take a look at road pricing before things get any worse.

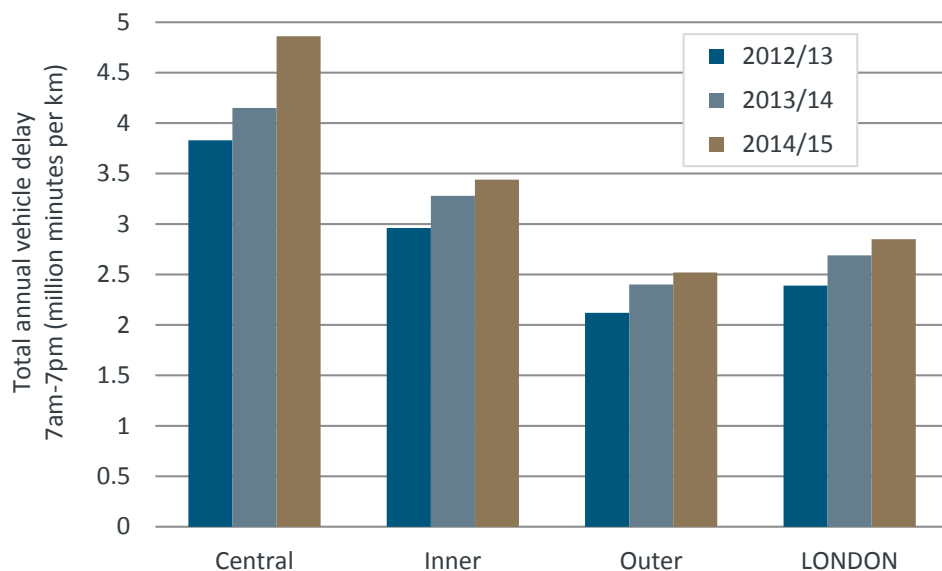
I would like to thank all those who have contributed to our investigation. I was encouraged to see a high degree of consensus about the changes needed to relieve the gridlock on our roads, and we now call on the Mayor to implement them.

Summary

Congestion is a source of huge frustration to road users. It reduces the functionality of the road network, meaning journeys take longer at huge cost to the city's economy. Not only this, it contributes to London's air pollution problem.

Traffic congestion in London is getting worse. Since 2012/13, vehicle speeds on major roads have gone down and journey time reliability has got worse. Time lost to traffic delay has gone up, as have excess waiting times for buses. This is occurring in all parts of the city – central, inner and outer London.

Minutes lost to traffic delays have increased across London



Source: *Total vehicle delay for London 2014-15*, Transport for London, 2016

The causes behind this trend are complex. Fundamentally, London's road network is increasingly hosting more traffic than it has the capacity to cope with. This is not primarily because of an increase in private car usage, which has fallen. Rather, other types of traffic have increased, particularly delivery vehicles and private hire vehicles. At the same time, road space has been re-allocated away from private motorised vehicles to help improve the provision of bus services and encourage cycling and walking.

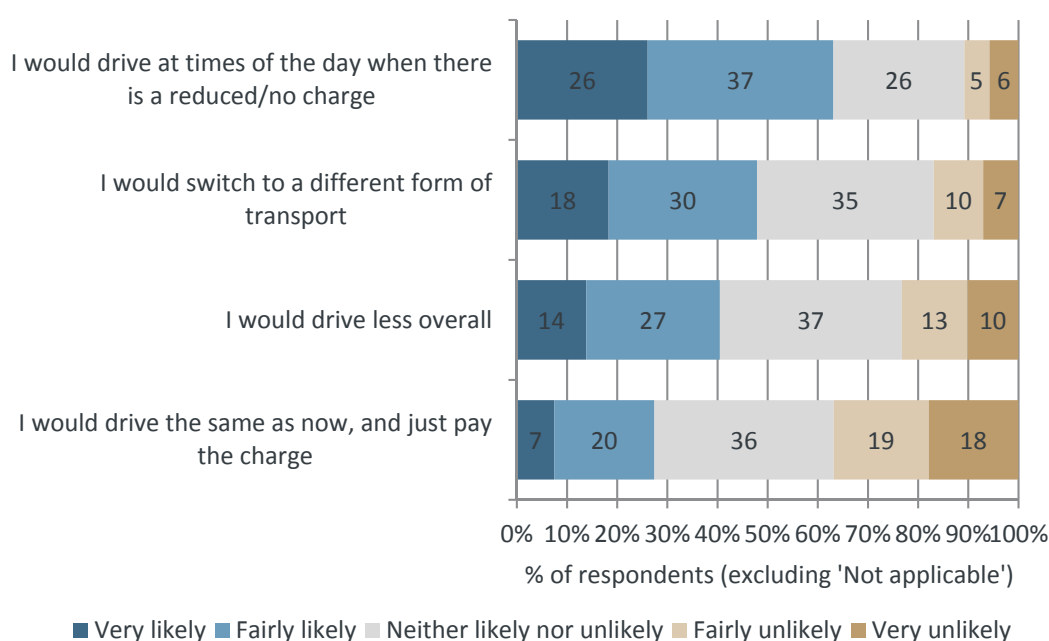
Transport for London (TfL) is doing a lot to tackle congestion, but not enough. It already uses a range of interventions, including the Central London Congestion Charge, bus priority measures, financial incentives to reduce roadworks, controlling traffic signals to respond to road incidents, and encouraging modal shift to public transport or active travel. These

interventions, while arguably effective in themselves, are no longer having the desired effect on congestion overall.

For congestion charging to work, London needs a way of charging people for road usage that is targeted at areas of congestion, at the times congestion occurs. We now therefore call on the Mayor to reform the Congestion Charge, which has been successful but is far too blunt an instrument and too narrow in scope. He should also begin developing proposals for a wider road pricing scheme for London. This would enable a more detailed consideration of how and whether road pricing would ultimately replace the Congestion Charge and other charges levied on drivers, including Vehicle Excise Duty.

Road pricing would be a fairer approach, as road users would pay according to how much they contribute to congestion. This is popular with Londoners, with half of road users responding to our survey saying they support road pricing and only a fifth opposed. As our survey confirms, road pricing has the potential to shift driver behaviour by encouraging them to drive at less congested times and/or switch to more sustainable modes.

Drivers would change their behaviour if road pricing was introduced



Source: Transport Committee survey, September 2016

Our preferred system of road pricing would include private hire vehicles, which have increased significantly in recent years but remain exempt from the Congestion Charge.

To be most effective, road pricing should be integrated with other charges drivers pay. This should include Vehicle Excise Duty, which we ask the government to devolve to TfL so it can be replaced with a system fairer to

motorists. The emissions charges being introduced by the Mayor – which will have little impact on congestion – and any proposed road tolls should all ultimately be integrated with a single, simple road pricing scheme.

A range of other measures need to be implemented by the Mayor to tackle congestion. Tackling the growth of commercial traffic should be a priority. Consolidation centres could help take vehicles off London's roads. While London already has a number of these, there is potential to introduce more. TfL could also address the increasing number of delivery vans making internet shopping deliveries, which is contributing to congestion, by taking steps to ensure people collect packages in more sustainable ways.

The day-to-day management of disruptions on the road could also be enhanced in several ways. TfL deploys sophisticated technology to respond to congestion-causing incidents remotely, but its on-street presence is relatively small. The new team of enforcement officers introduced to tackle congestion should be expanded.

More could be done to reduce the impact of roadworks, which are increasingly contributing to congestion. Despite the Mayor's recent action plan on congestion promising more coordination between utilities companies and others conducting works, we are not convinced TfL is using the right financial incentives to limit roadworks. TfL has also been responsible for much of the disruption during the implementation of Road Modernisation Plan schemes. While we strongly believe these should continue, they should be better planned to limit the congestion impacts.

Sadiq Khan will shortly be producing his first Mayor's Transport Strategy, defining the way he and TfL will respond to one of the biggest transport challenges facing London. The findings of our investigation show clearly that London needs bold action, with road pricing representing the best option the Mayor has to make a significant difference to congestion levels in London.

Recommendations

Recommendation 1

In the short-term, the Congestion Charge should be reformed, so the payments levied better reflect the impact of vehicles on congestion. The daily flat rate should be replaced with a charging structure that ensures vehicles in the zone at peak times, and spending longer in the zone, face the highest charges.

For the longer-term, the Mayor needs to start to develop proposals now for replacing the Congestion Charge with a new citywide road pricing scheme, which charges vehicles according to the extent, location and timing of their road usage. Road pricing could also replace Vehicle Excise Duty, which should be devolved by the Government to the Mayor. There may be a case for the scheme to be wider than the existing Congestion Charge zone; discussions with all boroughs should take place to determine whether and how road pricing should cover their local road network.

The Mayor's forthcoming Transport Strategy should set out plans for both Congestion Charge reform and for the potential introduction of road pricing. The Mayor should also update the committee by the end of April 2017 about discussions with the government on the devolution of Vehicle Excise Duty.

Recommendation 2

TfL should ensure that new monitoring technology introduced to identify vehicles in the proposed Ultra Low Emissions Zone should be compatible with the future requirements of a road pricing scheme. TfL should confirm it will do this when responding to the recent consultation on ULEZ proposals.

Recommendation 3

TfL should take steps to encourage bids from boroughs interested in piloting a local Workplace Parking Levy. Provided the plans fit with any wider road pricing scheme, TfL should offer support to a WPL pilot programme if proposed by a borough. This should include offering additional funding to the borough(s) to initiate the scheme.

Recommendation 4

The Mayor and TfL should take steps to encourage more delivery consolidation. This will involve working with those running large construction schemes and retailers, potentially through Business Improvement Districts. The new London Plan should promote consolidation for new developments. TfL should also work with London Councils to reduce restrictions on night-time deliveries. The Mayor and TfL should write to the committee by the end of April 2017 setting out their plans to reduce commercial traffic in these ways.

Recommendation 5

TfL should pilot a ban on personal deliveries for staff. Based on the findings, the Mayor should consider extending this to all GLA Group premises, and promote this change in practice to other large employers in London. We ask that TfL write to the committee setting out plans for a pilot by the end of April 2017.

Recommendation 6

TfL should reconsider its approach to 'click and collect' at Tube and rail stations. Stations should be identified for a pilot programme in which multiple retailers and/or freight operators can deliver packages to a station for collection. We ask that TfL write to the committee confirming plans to seek partnerships of this type by the end of April 2017.

Recommendation 7

The Mayor should set out how his new regulations for the private hire industry and the legislative changes he is advocating will affect congestion levels in London. He should also commit to assessing the impact of making private hire vehicles subject to a new road pricing regime, and different options for implementing this proposal. The Mayor should write to the committee by the end of April 2017 confirming these plans.

Recommendation 8

TfL should conduct and publish an analysis of the impact of the Road and Transport Enforcement Team and, if it is proven to be cost-effective, set out plans to expand the size and coverage of the team. We ask that TfL writes to the committee by the end of April 2017 with an update.

Recommendation 9

The Mayor and TfL should carry out an assessment of the effectiveness of the London Permit and Lane Rental schemes for roadworks. This should be aimed at ensuring the cost of delayed roadworks on London's road users is reflected in the amount companies must pay. We ask that TfL write to the committee by the end of April 2017 with an update.

Recommendation 10

TfL should continue to implement its Road Modernisation Plan schemes including the proposed network of safer cycling routes such as Cycle Superhighways and Quietways. It should report back to the committee by the end of April 2017 on how the construction of additional Superhighways and other major projects will be planned more effectively to minimise traffic congestion.

Recommendation 11

TfL should conduct and publish an analysis of the impact of the pilot scheme displaying traffic notices on buses and, if it is proven to be cost-effective, set out plans to roll out the programme more widely. We ask that TfL writes to the committee by the end of April 2017 with an update.

David Kurten AM, UKIP Group Lead on the Committee, agrees with Recommendations 4, 5, 6, 7, 8, 9 and 11 of the report. He disagrees with Recommendations 2 and 3, and partially disagrees with Recommendations 1 and 10.

1. Introduction

Key points

- Traffic congestion in London is getting worse. As well as being a source of huge frustration to road users, congestion costs London's economy billions of pounds every year and is damaging to Londoners' health.
- TfL already deploys a wide range of measures aimed at managing congestion. Our investigation has examined the effectiveness of these and explored possible new interventions.
- Evidence gathered for our investigation has included analysis of traffic data, our road user survey, site visits and contributions from a large number of experts and stakeholders.

- 1.1 London's road network is extremely busy, across almost all parts of the city. Traffic is not simply a result of people driving their own cars, as private car usage has been decreasing. London's road network also hosts buses – London's most used form of public transport – as well as emergency service vehicles, taxis, minicabs, delivery vehicles, and cyclists, motorcyclists and pedestrians.
- 1.2 While a busy road network is to be expected in a global city with a prospering economy and millions of people moving around for work and leisure, the latest evidence suggests that traffic congestion has been getting significantly worse in recent years. Traffic speeds have fallen, more time is lost to delays, and passengers are waiting longer for buses. Londoners confirmed these trends in our survey, where a large majority of respondents reported that congestion has worsened in the past two years.
- 1.3 As well as its effects on individuals' wellbeing and quality of life, congestion has a detrimental impact on London's economy. Transport for London (TfL) has calculated that traffic delays cost London £5.5 billion in 2014/15.¹ This figure represents a huge 30 per cent increase in just two years (£4.2 billion in 2012/13). Of the £5.5 billion total, £3.6 billion falls in outer London, £1.3 billion in inner London and £0.6 billion in central London. Congestion is a London-wide problem.
- 1.4 TfL is attempting to manage congestion using a number of methods. Most prominent is the Central London Congestion Charge, which was introduced in 2003. TfL also monitors traffic across the road network and can use signalling at junctions to respond to instances of heavy congestion, supplemented by on-street enforcement in some areas. Working with London boroughs, TfL operates measures to control commercial traffic, particularly Heavy Goods Vehicles, and to minimise the impact of roadworks. To help reduce the impact of congestion on buses, TfL has introduced bus priority measures, such as bus lanes.² In a more general sense, TfL promotes more sustainable modes of travel, particularly walking and cycling, encouraging a shift away from motorised vehicles where possible.

Our investigation

- 1.5 In this investigation we set out to assess how effective TfL's existing interventions are, noting that the recent increase in congestion suggests that they may need to be enhanced or modified.
- 1.6 We have gathered evidence through a range of methods. Our call for written views and information attracted almost 250 submissions from Londoners, transport experts and stakeholder organisations. We have analysed available data on congestion and its causes from a variety of sources. At two committee hearings on this topic, we heard from a range of guests including TfL, London boroughs, academics, and representatives of London businesses, motorists, cyclists, taxi drivers and utility companies. Committee Members have been on

site visits, including to TfL's Surface Transport and Traffic Operations Centre, the central hub from where TfL monitors and manages traffic.

- 1.7 We also conducted a survey of Londoners to inform our investigation. This was carried out on behalf of the committee by Populus, who surveyed a representative sample of over 1,000 people.³ The road usage of our sample broadly reflected transport mode shares in London, with 64 per cent of respondents regularly travelling by bus, 57 per cent by car or van, 18 per cent by cycle, and 13 per cent by taxi or minicab.ⁱ
- 1.8 In this report we set out the conclusions of our investigation and make a series of recommendations to the Mayor and TfL about how they can reduce traffic congestion on London's roads.

ⁱ Full survey findings are published alongside this report. For the question on mode usage, respondents were asked to select all modes they use at least once per week.

2. Congestion trends

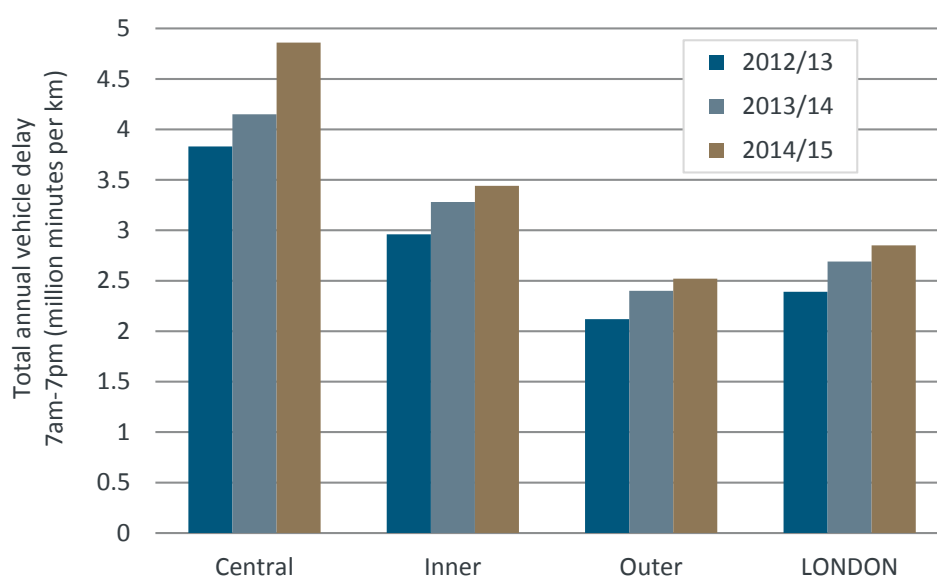
Key points

- All the evidence shows a significant worsening in traffic congestion in the past few years. Traffic speeds have gone down, journey times have increased. Excess bus waiting times have gone up, leading to a fall in ridership.
- Londoners confirm these trends. A large majority of respondents to our survey say congestion is getting worse, and many say it is affecting their employment and their health.
- The causes of rising congestion include an increase in certain types of vehicle, particularly delivery vans and minicabs, and a reallocation of road space away from private motor traffic.

Traffic data

- 2.1 By any measure, congestion has been increasing across London in recent years. For instance, Figure 1 below shows how the estimated number of minutes of delay for vehicles travelling on London's roads has increased since 2012/13, in central, inner and outer London. Across London as a whole, the number of minutes lost to delay increased by 14 per cent in the two years to 2014/15.

Figure 1: Minutes lost to traffic delays have increased across London



Source: *Total vehicle delay for London 2014-15*, Transport for London, 2016

- 2.2 Other congestion measures tell a similar story:

- The average vehicle speed on major roads has fallen significantly, from 19.9 miles per hour (mph) in the fourth quarter of 2012/13, to 17.7 mph in the same period of 2015/16, a drop of 11 per cent.⁴
- Journey time reliabilityⁱⁱ on the TfL Road Network (TLRN) – the network of major roads managed by TfL – has fallen from 89.2 per cent in 2012/13 to 87.8 per cent in 2015/16.⁵
- Excess wait time for busesⁱⁱⁱ has increased from 1.0 minutes in 2012/13, to 1.2 minutes in 2015/16, a rise of 20 per cent, with ridership falling as a consequence.⁶

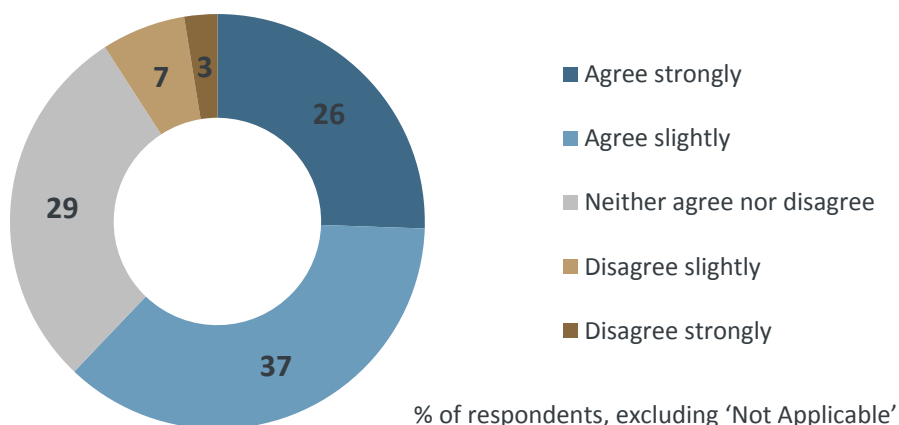
ⁱⁱ 'Journey time reliability' is the percentage of journeys completed within an allowable excess of 5 minutes for a standard 30 minute journey during the morning peak.

ⁱⁱⁱ 'Excess wait time' is the number of minutes that a passenger has had to wait in excess of the time that they should expect to wait if buses ran as scheduled.

Experience of Londoners

- 2.3 Londoners agree that congestion is getting worse. As Figure 2 shows, 62 per cent agreed that congestion had got worse in the last two years, with only 9 per cent disagreeing.⁷

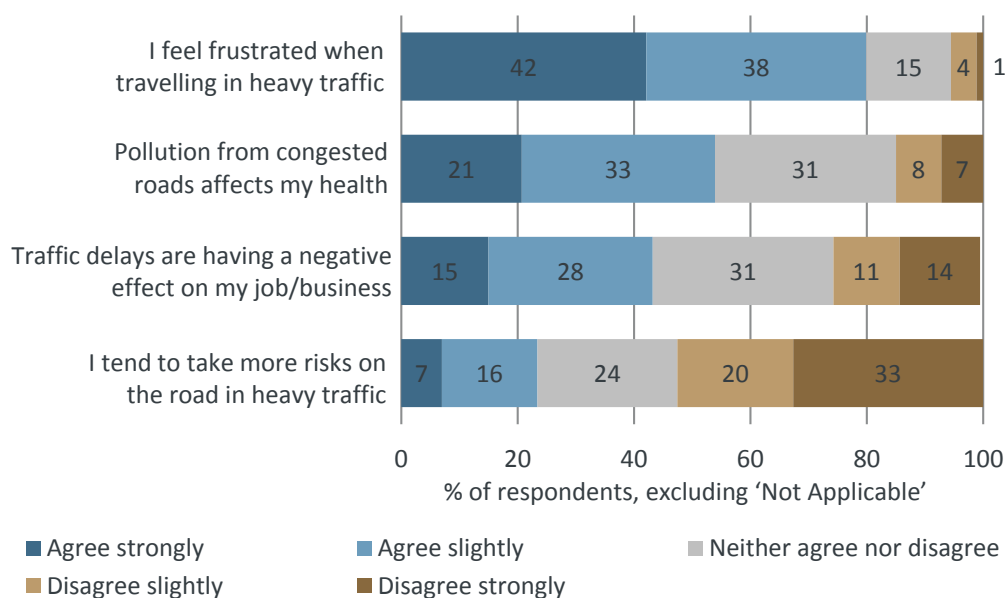
Figure 2: Most Londoners say congestion has got worse in the past two years



Source: Transport Committee survey, September 2016

- 2.4 We also heard about some of the effects that congestion has on the lives of Londoners. 80 per cent of our survey respondents said congestion was a source of frustration, with a majority also saying it affected their health. Many also said congestion had a negative impact on their job or business.

Figure 3: Impacts of traffic congestion on Londoners



Source: Transport Committee survey, September 2016

Causes of increases in congestion

- 2.5 The fundamental cause of congestion is the road network having more traffic than it has capacity to manage efficiently. In recent years, London's roads have seen significant changes with both sides of this equation: increases in certain types of vehicle traffic, and a reduction in the road space available for the traffic to use.
- 2.6 In London, congestion isn't getting worse because more people are driving their own cars. Londoners' usage of cars has been falling for at least ten years. Between 2005 and 2014, all the key measures of car use – trips taken by Londoners as a car driver, the distance travelled and time spent driving – all fell by around 25 per cent.⁸
- 2.7 Many Londoners have switched to public transport. The mode share of private vehicle transport has fallen in recent years, from 41 per cent in 2003 to 32 per cent in 2014. This has corresponded with significant investment in London's public transport network, with the mode share of public transport going up from 37 to 45 per cent in the same period.⁹
- 2.8 Despite this success, there are more private motor vehicles on London's roads. Our investigation has identified significant increases in the use of two types of vehicle:
- Delivery van traffic has increased. In 2012, vans drove 3.8 billion kilometres on London's roads. In 2015 this had increased to 4.2 billion kilometres, a rise of 11 per cent.¹⁰
 - The number of private hire vehicles and drivers has increased. Licensed vehicles rose from 49,854 in March 2013 to 84,886 in November 2016 – an increase of 70 per cent in less than four years. The number of licensed drivers rose by 72 per cent over the same period, from 66,975 to 115,513.¹¹
- 2.9 Alongside this, in some areas, road space has been reduced both as a result of temporary construction work, and because of decisions by TfL and others to permanently reallocate space away from private motor traffic. As set out in TfL's submission to the committee:¹²
- “We, and other London highway authorities, have reallocated road space away from private vehicles particularly in inner London to improve road safety, increase bus service reliability, and to improve facilities for pedestrians, cyclists and taxis. This includes segregated bus and cycle lanes...
- Road space reallocation and the scale of development in London have resulted in reducing the road capacity available for car users in certain areas. This has led to a reduction in traffic volumes, but static (and more recently, rising) levels of congestion.”
- 2.10 The latest traffic data indicates clearly that congestion is increasing in London, with our survey of Londoners supporting this finding. Although**

private car usage does not appear to have increased in London, the changes in network capacity may mean that it needs to be reduced further in order to alleviate congestion.

- 2.11 In the next chapter, we will consider the most prominent method TfL has for managing congestion, the Congestion Charge, and examine how it may be reformed to enhance its effectiveness. Chapter 4 will then consider wider efforts to encourage modal shift among Londoners.
- 2.12 Given the increasing road usage in the freight and private hire sectors, further specific measures need to be considered to address this, as will be discussed in Chapter 5. In Chapter 6 we will consider the ways in which TfL manages disruption and change on the road network.

3. Charging for road usage

Key points

- The Central London Congestion Charge has proven successful since its introduction in 2003, but with congestion rising the Mayor needs to consider whether there are more effective ways to manage traffic levels through user charging.
- There is widespread support for a reformed road pricing regime in London, which would better target vehicles using the most congested parts of the road network at peak times. Londoners supported this idea in our congestion survey, with most saying this would be a fairer system than the Congestion Charge.
- To be most effective, road pricing should be integrated with other forms of paying for roads, including Vehicle Excise Duty and the Mayor's proposed emissions charges.

Congestion Charge

- 3.1 The Congestion Charge was introduced in London in 2003. It is considered to have been successful in relieving congestion in central London. TfL data shows that car traffic entering central London fell by 39 per cent between 2002 and 2014. The Congestion Charge is not necessarily the only reason for this shift, with car traffic already falling prior to its introduction, and improvements in public transport giving Londoners better alternatives to car travel.

The Congestion Charge

The Congestion Charge was introduced in central London in 2003, covering 21 square kilometres. The charging zone was extended to the west in 2007, but this extension was reversed by the previous Mayor in 2010. Drivers not exempt from the charge must pay a flat daily fee of £11.50 to enter the zone between the hours of 07:00 and 18:00, or £10.50 with automatic payment. Exempt vehicles include taxis and private hire vehicles, emergency service vehicles, motorcycles, and those used by disabled people, with residents in the zone also eligible for a discount.

- 3.2 Dr Rachel Aldred of the University of Westminster gave us an overview of the positive impact of the Congestion Charge:

“Congestion charging in the early years was very effective in enabling capacity previously allocated to private motor vehicles to be reallocated largely to bus lanes and pedestrian space because it reduced demand and because it allowed us to use our public space more efficiently, more pleasantly and so on. Also, the research suggested that there was a road safety benefit as well both through fewer car trips and through car trips causing fewer injuries.”¹³

- 3.3 The Congestion Charge has almost certainly discouraged many people from driving in central London, and has also raised revenue for transport improvements. TfL raised £168 million from the charge in 2015/16 (net), representing five per cent of TfL’s income, and has raised over £1.7 billion in total from the scheme since 2003/04.¹⁴

- 3.4 TfL accepts, however, that congestion within the zone has returned to its previous level. As set out in its submission:

“As a result of providing more road space for walking and cycling, and improvements to public transport, urban realm and road safety, congestion levels in the Congestion Charging Zone returned to similar levels seen before the scheme five years after its introduction, despite there continuing to be less traffic. However, without the Congestion Charge, congestion in central London would be worse.”

- 3.5 Our survey results indicate that the Congestion Charge is supported by Londoners, although many think the £11.50 daily charge is too high:
- 48 per cent of respondents said they support the charge (24 per cent strongly), while 27 per cent oppose it (10 per cent strongly).
 - 54 per cent of respondents said the charge is too high, 27 per cent said it is about right, and 11 per cent said it should be higher.
 - For both of these questions, respondents from lower income groups were more likely to oppose the charge and to say it was too high.
- 3.6 Considering the objective to reduce congestion, the current Congestion Charge appears to have significant flaws. It is restricted to a relatively small area, and charges all drivers the same regardless of whether they drive in the zone all day long or just for a short time. As Dr Steve Melia of the University of the West of England told us:
- “One of the reasons for the limited impact of the Congestion Charge is its flat-rate charging structure. Once you have paid for the day, there is no financial disincentive, and there is possibly a psychological incentive, to drive more. An appropriately-constructed Congestion Charge could have a much bigger impact on congestion.”¹⁵
- 3.7 David Leam of the business group London First also highlighted the lack of targeting in the current Congestion Charge regime:
- “The occurrence of congestion at the moment is wider than the current scheme, but also trying to have a bit more variance in it. The fact that we have a flat charge to cross a cordon and that there is not then at least some variability of price taking into account the fact that congestion varies over the course of the day... Just some element of variance will help sharpen the incentives for people.”¹⁶
- 3.8 Traffic congestion in central London would be much worse without the Congestion Charge. Despite this, the recent increase in congestion should lead to a reassessment of whether the policy is achieving key objectives, and how it may be modified or replaced. In the short-term, the Congestion Charge should be reformed in order to ensure it better targets congestion. We have also examined whether a new form of charging for road usage could target congestion in a more sophisticated way.**

Road pricing

- 3.9 ‘Road pricing’ is a term used to describe another way of paying for road usage. Although the Congestion Charge might be considered a form of road pricing, generally this term indicates a broader form of charging regime. Under most road pricing models, drivers incur charges based on how much they drive, rather than paying a pre-determined fee to enter a single zone. They also pay

more to drive at times of the day when congestion is high, and/or on the most congested roads.

- 3.10 The existing Mayor's Transport Strategy, published by Boris Johnson in 2010, allows for road pricing to be introduced in London if other congestion measures are unsuccessful:

"The Mayor, through TfL, and working with the London boroughs and other stakeholders, if other measures are deemed insufficient to meet the strategy's goals, may consider managing the demand for travel through pricing incentives (such as parking charges or road user charging schemes). This would depend upon there being a reasonable balance between the objectives of any scheme and its costs and other impacts. Any scheme would need to take account of local conditions, as well as the impact on surrounding regions, and to be fair and flexible relating charges to the external costs of travel with sensitivity to time of day, and with scope for discounts or exemptions for specific user groups."¹⁷

- 3.11 This form of road pricing has been introduced in a number of cities across the world, notably in Singapore and Stockholm, as described below. The UK Government proposed a national road pricing scheme in 2005, although ultimately it was not implemented.

Road pricing in Stockholm

Stockholm introduced a differential 'congestion tax' in 2006.¹⁸ Although superficially similar to London's Congestion Charge scheme, the wider scope and differential charging structure means it is effectively much closer to a road pricing scheme.

As in London, there is a cordon around the central part of the city. At 35 square kilometres, the charging zone is significantly larger than London's. Around two-thirds of the population of the City of Stockholm lives within the zone, or one-third of the wider metropolitan area.

Automatic Number Plate Recognition (ANPR) is used to detect vehicles entering and leaving the zone, with charges levied for both entering and leaving. There are higher charges for those crossing the cordon at the morning and evening peaks. There are four charging levels, ranging from around £1 to £3 for each crossing, depending on the time of day, with no charge at night.^{iv}

Despite initial opposition to the scheme, two-thirds of residents voted in favour of the scheme following a seven-month trial before it became permanent. Car traffic entering the charging zone fell by 22 per cent shortly after charging began, and has remained stable at that level.

^{iv} In Singapore's road pricing scheme, the price structure is reviewed quarterly and amended to reflect changes in the severity and timing of congestion.

Potential benefits

- 3.12 Most experts and stakeholders we have heard from in our investigation expressed support for road pricing. Professor Stephen Glaister of Imperial College, told us some form of road pricing was necessary to control demand:

“The demand on the road networks is going to go on and on. We could do things in outer London to increase the capacity... but we are not going to be able to deal with this in any other way than mitigating the growth in demand on the network through some kind of price incentive. It would not necessarily be Congestion Charge with a capital C as we know and understand it, but some way of giving incentive to use the road space more effectively and generate lots of revenue.”¹⁹

- 3.13 The Institution of Civil Engineers argued that the charges drivers pay should reflect road capacity:

“A move to a usage charge could more closely align costs to the user to the capacity of the road – for example, a charge based on time spent within the congestion zone would make drivers consider the amount of time spent on the road. Equally a differential pricing mechanism could be used as a means of more closely matching demand and capacity.”²⁰

- 3.14 Dr Aruna Sivakumar, also of Imperial College, said road pricing could help shift traffic to less congested times of the day:

“The important thing perhaps in the next stage is really a variance [in pricing]. For instance, trying to spread the peak because, at the end of the day, it is about whether we have capacity in the off peak or on the shoulders of the peak that in many cases we do. Admittedly, there are some routes that will struggle to find that capacity but many routes can afford to have a spreading of peaks. Peak pricing or pricing that helps spread the peak would be a big part of that picture.”²¹

- 3.15 TfL listed the potential benefits of road pricing in its submission:

“Usage-based charging offers more flexibility to target specific types of trips and/or vehicles and could take account of time, location, distance and vehicle type.

Longer trips place greater demand on road space, so it seems appropriate to charge drivers more at congested times, proportionate to the distance driven.

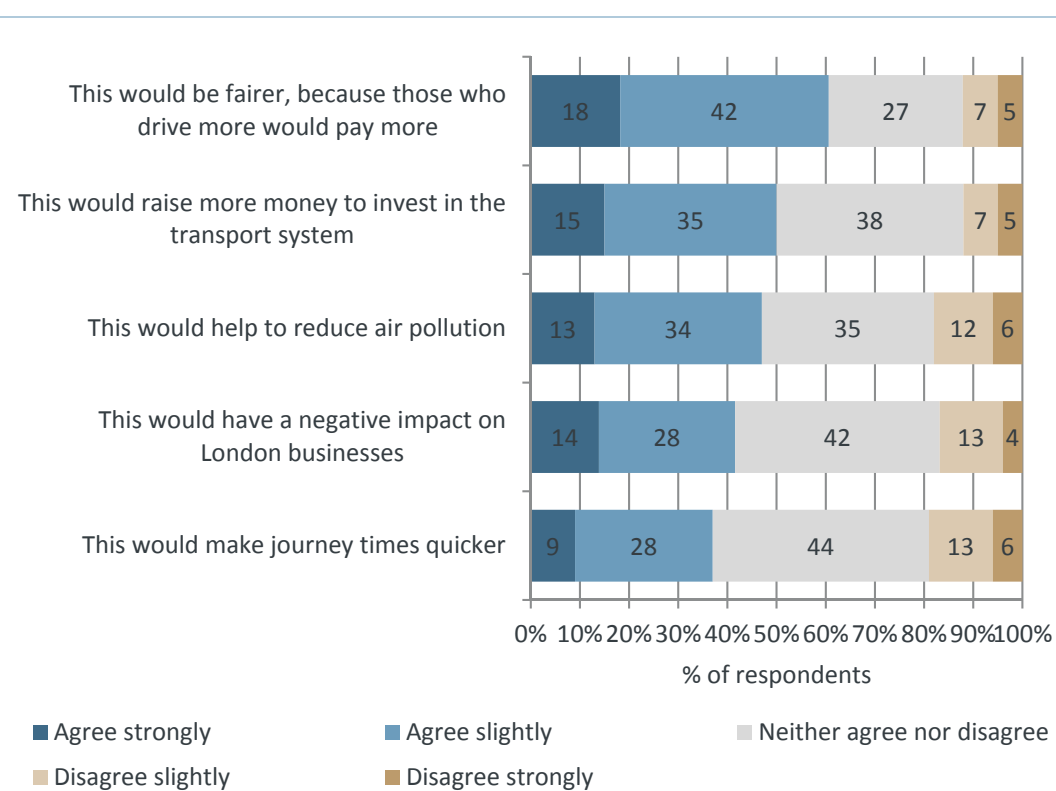
Charging levels could be set to reflect the value of the road space. For instance, higher rates could be set in central London in the peak and lower rates in outer London outside of peak periods.

It offers the opportunity for a holistic approach to road user charging and to integrate other charging mechanisms that already exist.”²²

Public views and behaviour

- 3.16 When we surveyed a thousand Londoners, we found strong support for the principles behind road pricing. We asked people if they thought charging drivers for how much they drive (for example, per mile or per hour) was preferable to charging a single flat rate: 50 per cent of respondents agreed with this proposal, while only 20 per cent opposed, with 30 per cent undecided.
- 3.17 To further explore Londoners' views, we asked about some of the possible benefits and disbenefits of road pricing. Responses showed that people think fairness is the most appealing aspect of road pricing, as shown in Figure 4.

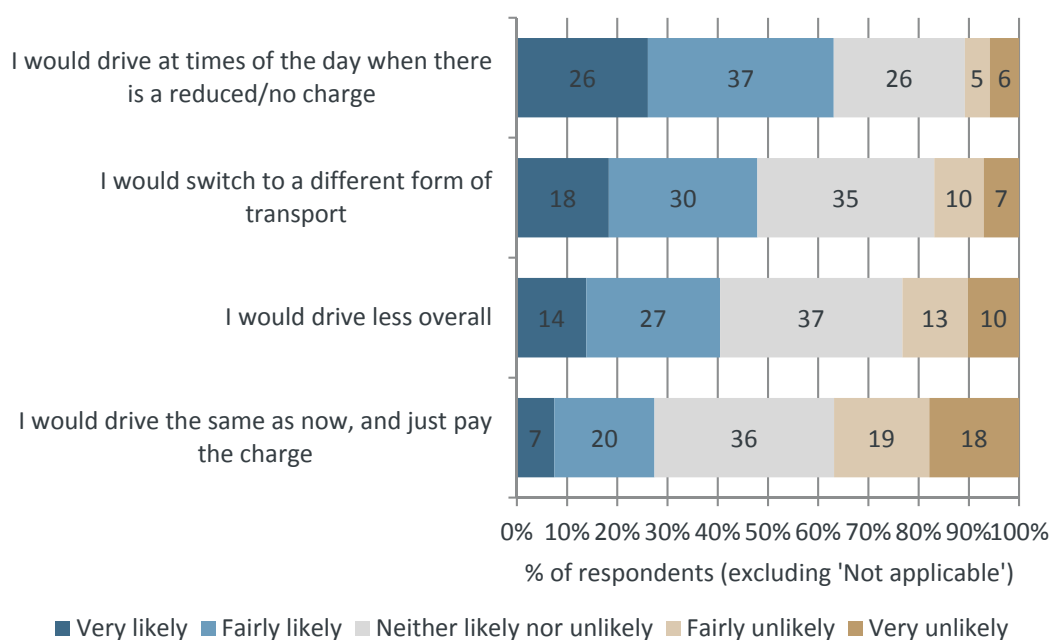
Figure 4: Most Londoners believe road pricing would be fairer than the Congestion Charge



Source: Transport Committee survey, September 2016

- 3.18 We also asked how road pricing would influence drivers' behaviour. Responses indicated that road pricing would encourage people to drive at less congested times and to switch to other transport modes. This is exactly what road pricing is supposed to achieve. This data is displayed in Figure 5.

Figure 5: Drivers would change their behaviour if road pricing was introduced



Source: Transport Committee survey, September 2016

Implementation

3.19 Under the Greater London Authority Act, TfL has the power to introduce road pricing. The Act states that TfL may introduce road charges anywhere in Greater London, with different price levels depending on the time of day, area, distances travelled and type of vehicle.²³ Implementation of road pricing would present challenges, however. As TfL stated in its submission:

“The effectiveness of any usage-based road pricing scheme in reducing traffic volumes is dependent on the charge level and the spatial and temporal structure of the charge. However, the impacts of usage-based charging are largely untested, the technology requirements are complex and there are significant potential social and economic impacts which would need to be better understood.”

3.20 There are a range of different options for how road pricing could operate, for instance the level of charges and timings. It would be important for the scheme to be designed with the right mix of incentives and disincentives to target congestion effectively. Before implementing any scheme, TfL would need to rigorously assess the impact of its proposals, including equalities and environmental impacts.

3.21 TfL would need to determine the geographical scope of road pricing. With congestion high and rising across London, the existing Congestion Charge zone is focused on only one small part of the problem. Road pricing could be

extended as far as the whole of Greater London, although even if this were the case it does not necessarily mean that every journey would be subject to a charge. While some boroughs submitting evidence to this investigation have expressed support for road pricing, some in outer London – Richmond and Kingston upon Thames in particular – have concerns that charging for local roads would make their town centres less competitive than other centres just outside Greater London.²⁴

- 3.22 The technology used to implement road charging would depend on the exact scope and nature of the scheme. Vehicles entering the current Congestion Charge zone are identified by TfL cameras around the boundary of the zone using Automatic Number Plate Recognition (ANPR). Alex Williams, managing director of planning at TfL, told us that such a system is now dated, and more advanced technology would be used if the scheme were being introduced today. It is likely that road pricing would require a larger and more sophisticated system of tracking vehicle movements to calculate their road usage. As discussed below, this may also be the case for the Ultra Low Emission Zone scheme being introduced by TfL. Such a system would have implications in terms of privacy and civil liberties and would therefore need to be very carefully designed and managed.

Integration with other charges

- 3.23 One of the key implementation challenges for TfL would be determining how road pricing corresponds to other charges levied for road usage, or proposed charges. Most charges paid by drivers at present are set and collected by central government, but TfL has active proposals for new charges it would administer itself.
- 3.24 Vehicle Excise Duty (VED), commonly known as car tax or road tax, is a national charge payable for each licensed vehicle. The rate is fixed and does not depend on how often, where or how much the vehicle is used. During our investigation a range of stakeholders and TfL have called for VED to be devolved to London. This was also a conclusion of the London Finance Commission, which concluded yields from VED should be retained locally.²⁵
- 3.25 Although devolving VED on its own would not have a direct impact on congestion, it would provide TfL with a revenue stream for investments in the transport network to help alleviate congestion. Furthermore, VED could be integrated by TfL into a road pricing scheme in a way that helps create the appropriate incentives and disincentives, by charging people according to their road usage instead of the flat, annual rate currently charged. In theory, some car owners could pay *less* under a new system, particularly if they drove infrequently and away from congested roads.
- 3.26 The Mayor is currently consulting on proposals for two new types of road charge aimed at improving air quality, the Ultra Low Emissions Zone (ULEZ) and the Emissions Surcharge (ES, also commonly known as the T-Charge). The ES would be a further charge for the oldest vehicles entering the Congestion

Charge zone from 2017. Under ULEZ proposals, the most polluting vehicles would pay to enter a new geographical zone, which may extend as far as the North and South Circular roads, from 2019. The Environment Committee has responded to the Mayor on these proposals on behalf of the London Assembly.²⁶

- 3.27 The ULEZ and ES will not have a significant impact on traffic congestion, as they would target only a small minority of vehicles, although the coverage may increase over time. If road pricing is introduced in London, it would be possible to integrate these charges into the new regime, which could include differential charges based on the emissions standards of vehicles. On a practical level TfL is currently devising a new system of monitoring vehicles over a relatively wide area for ULEZ, so this system could be adapted for the purposes of road pricing in the future.
- 3.28 Finally, the Mayor is also proposing two new tolls for river crossings in east London. The Silvertown Tunnel is a new proposed road crossing, which drivers would have to pay a toll to use. In addition, a new toll would be levied for drivers using the existing Blackwall Tunnel. These charges would help pay for the new infrastructure and may help restrict demand. However, there are concerns about the fairness of charging east London road users for river crossings while those in central and west London – or indeed any other roads outside the Congestion Charge zone – are not tolled.
- 3.29 We believe that a comprehensive road pricing scheme is the best way forward for London, based on charging vehicles according to when, where and how much they are driven. This does not necessarily mean every driver should start paying more than they already do, but every journey should be charged according to its true cost to London in terms of congestion, pollution and public health. We recognise, of course, that some journeys made by motor vehicles can be considered necessary, and we are not looking to punish individuals or businesses for making use of London's road network. The key objective of a road pricing scheme should be to reduce the number of motor vehicles making journeys on London's road network, in order to reduce congestion, improve health and make the city work better for all residents.**
- 3.30 There is an opportunity for London to show leadership on this issue. The Mayor already has the power to introduce road pricing, and must show the political will to make it happen. We know it will not be universally popular but our research shows most Londoners are already in favour of this approach, and we would expect a further shift in opinion as congestion eases and drivers get used to the new system.
- 3.31 The precise arrangements for road pricing will depend on a number of factors, and the findings of TfL's assessments of the possible impacts of the scheme. There are technical challenges, but none is insurmountable. Road pricing will clearly take a number of years to devise and implement, so it is

important that the Mayor sets TfL to work on this as soon as possible. London can't afford to wait any longer.

- 3.32** Discussions with boroughs will need to take place in order to determine the geography of road pricing, and how it could be used to tackle local congestion problems. We would also expect that other road charges levied by TfL – including emissions charges and any river crossing tolls – would be integrated with road pricing rather than operating separately. If Vehicle Excise Duty is devolved to London, this would allow TfL to implement a more comprehensive scheme, potentially abolishing this charge altogether and integrating it with road pricing.

Recommendation 1

In the short-term, the Congestion Charge should be reformed, so the payments levied better reflect the impact of vehicles on congestion. The daily flat rate should be replaced with a charging structure that ensures vehicles in the zone at peak times, and spending longer in the zone, face the highest charges.

For the longer-term, the Mayor needs to start to develop proposals now for replacing the Congestion Charge with a new citywide road pricing scheme, which charges vehicles according to the extent, location and timing of their road usage. Road pricing could also replace Vehicle Excise Duty, which should be devolved by the Government to the Mayor. There may be a case for the scheme to be wider than the existing Congestion Charge zone; discussions with all boroughs should take place to determine whether and how road pricing should cover their local road network.

The Mayor's forthcoming Transport Strategy should set out plans for both Congestion Charge reform and for the potential introduction of road pricing. The Mayor should also update the committee by the end of April 2017 about discussions with the government on the devolution of Vehicle Excise Duty.

Recommendation 2

TfL should ensure that new monitoring technology introduced to identify vehicles in the proposed Ultra Low Emissions Zone should be compatible with the future requirements of a road pricing scheme. TfL should confirm it will do this when responding to the recent consultation on ULEZ proposals.

Workplace parking

- 3.33 Another form of road charging we have considered in this investigation is the Workplace Parking Levy (WPL). Introducing WPL would mean that employers offering parking spaces to their employees would need to pay a fee for each space. The cost of this may be passed on to employees, to customers, or absorbed by the business.
- 3.34 TfL has the power to introduce a WPL anywhere in London, while individual boroughs can also do so in their areas. To date the only city in the UK to have introduced a WPL is Nottingham, as described below.

Nottingham's Workplace Parking Levy

Nottingham introduced a WPL in October 2011.²⁷ All employers in the city offering over 10 parking spaces must pay a fee of £375 per year, per space. Around 25,000 spaces are subject to this charge.

The WPL raised £25 million in its first three years of operation, which is ring-fenced for local transport improvements. This contributed, for instance, to an extension of Nottingham's tram network, although this provided only a small proportion of the overall £570 million cost of the extension.

The city council reports that there has been a significant increase in public transport usage since the WPL was introduced, while road traffic has not increased and it has not led to businesses leaving the city, as had been feared.

- 3.35 A number of experts and stakeholders have advocated the introduction of a WPL in London to help tackle congestion, although for some this is a scheme to be pursued only if a wider road pricing scheme is not introduced.²⁸
- 3.36 TfL and London First both told us that introducing a WPL in central London was unlikely to be worthwhile, given relatively few people commute to central London by car and park at their workplace. The Campaign for Better Transport argued that the scheme would be most effective in areas outside central London:

“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.”

- 3.37 A WPL would therefore seem more suited to outer London, where commuting by car is more common. However, given travel-to-work patterns do not fit

neatly within borough boundaries, a sub-regional or even London-wide approach may be most effective. Furthermore, it is unlikely that any borough would implement a WPL without support from TfL. Using the WPL to achieve modal shift would depend on investment in other modes, especially in parts of London where public transport provision is relatively limited. TfL would need to offer this financial incentive to make a scheme viable.

- 3.38 Although we believe a new road pricing scheme should be TfL's preferred option for managing congestion through charging, a Workplace Parking Levy is a tool that could be effective. We agree that it would be most appropriate to implement a WPL in outer London. TfL should support boroughs in developing proposals where they think a WPL scheme could cut congestion. It is important that drivers have viable alternatives to the car if a WPL is introduced, whether public transport or active travel options. Revenue from a WPL should therefore be redirected towards local transport improvements.**

Recommendation 3

TfL should take steps to encourage bids from boroughs interested in piloting a local Workplace Parking Levy. Provided the plans fit with any wider road pricing scheme, TfL should offer support to a WPL pilot programme if proposed by a borough. This should include offering additional funding to the borough(s) to initiate the scheme.

4. Commercial traffic and private hire services

Key points

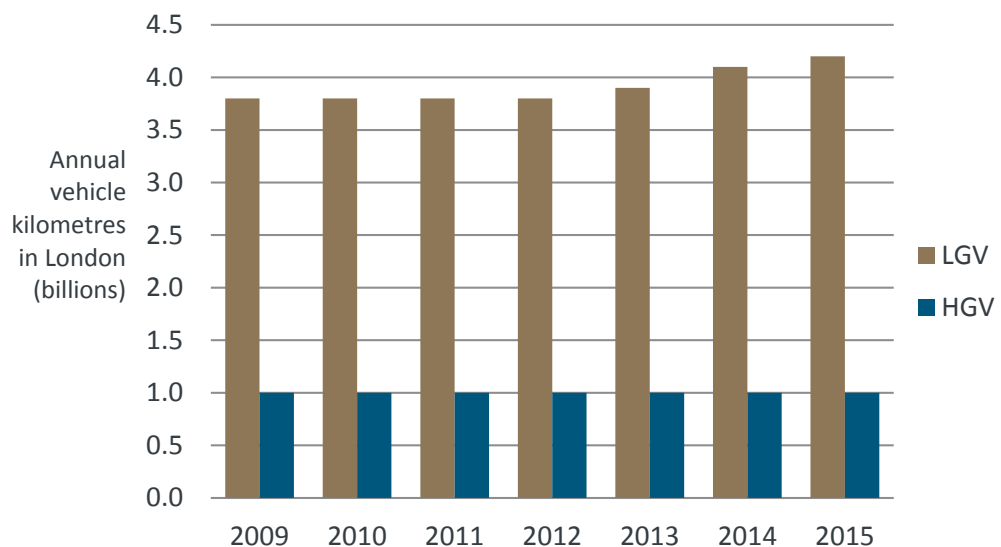
- Commercial traffic is increasing in London, as a result of trends such as the boom in internet shopping and construction activity in the city. TfL should take steps to encourage more consolidation of freight traffic, and to ensure that Londoners can receive personal deliveries in more sustainable ways.
- The number of licensed private hire drivers and vehicles has increased dramatically in London in recent years, in large part as a result of operators exploiting new technology. There is evidence that this trend is contributing to London's congestion problem, although it is not clear how the changes being pursued by the Mayor will address this issue.
- Congestion from both commercial traffic and private hire traffic could be reduced through a new road pricing scheme.

- 4.1 This chapter considers two major sources of traffic on London's roads, commercial traffic and the private hire trade. Both of these appear to have significantly increased their traffic volumes in recent years, with TfL pursuing measures to control this growth.

Commercial traffic

- 4.2 'Commercial traffic' refers in general to the movement of goods and services on the road network. The most prominent form of commercial traffic is the delivery of goods, also known as freight. This includes deliveries to individuals, businesses, and the distribution of construction material. Commercial traffic is categorised according to vehicle type. Heavy goods vehicles (HGVs) are lorries weighing 3.5 tonnes or more. Light goods vehicles (LGVs) are vans beneath that weight threshold.
- 4.3 Vans make up around 80 per cent of commercial traffic in London, and are responsible for almost all the recent growth. After a period of stability, LGV traffic has increased from 3.8 to 4.2 billion kilometres per year since 2012 (11 per cent) while HGV traffic has remained stable at 1.0 billion kilometres per year.²⁹ Trends are displayed in Figure 6 below.

Figure 6: Van traffic has increased while lorry traffic has remained stable



Source: Road traffic statistics, Department for Transport, 2016

Reasons for growth

- 4.4 The growth in commercial traffic is a reflection, generally, of the growth of London's population and economy. But the fact that van traffic has outstripped lorry traffic suggests other changes are contributing to the trend, including the restrictions placed on lorries, and the increasing popularity of internet shopping.

- 4.5 Internet shopping has increased significantly in recent years. In October 2011, 9.4 per cent of all retail spending was online. In October 2016 this had increased to 15.2 per cent.³⁰ This changes traffic patterns as more vans are deployed, visiting more locations as they deliver packages to consumers and businesses. Traffic is also created by people returning items they have bought online.
- 4.6 A range of measures have been introduced in recent years to improve the safety record of lorries, and reduce the number of collisions between lorries and other road users. For instance, TfL has recently launched a 'Direct Vision Standard' for lorries using London's roads. Under this scheme, lorries that provide low levels of visibility from drivers' cabs will be banned from 2024. Although this and similar schemes are vital for improving road safety in London, the Freight Transport Association has suggested these requirements may inadvertently increase traffic levels. This is because delivery firms may be shifting from using a single lorry to multiple vans, which is less efficient:
- "HGVs are also subject to many detailed operating requirements regarding the vehicle itself that must be complied with. In combination, the costs of complying with these regulations have, it is believed, encouraged some to utilise vans to do deliveries that could be done by HGV. If the regulatory burden on HGVs increases over time, this unintended consequence would grow."³¹
- 4.7 **While we appreciate the potential unintended consequence of HGV regulations on freight patterns, this cannot be a reason to reduce the safety requirements for these vehicles. The growth in commercial traffic has other causes, and there are alternative measures the Mayor should consider in order to address this issue, rather than put the safety of other road users at risk.**

Reducing commercial traffic

- 4.8 Delivery vehicles are already subject to the Congestion Charge, and we would expect that they would also be subject to any new road pricing scheme TfL introduces. A usage-based charge may be particularly beneficial for controlling commercial traffic, if delivery vehicles are travelling on busy roads for much of the day. At present the Congestion Charge scheme would charge these vehicles the same amount as those contributing much less to congestion, and would charge nothing for delivery vehicles outside the central zone. Road pricing may encourage firms to use vehicles more efficiently, or switch some deliveries to modes that cause less congestion, including rail, waterways, bicycles and motorcycles.
- 4.9 Other measures to reduce commercial traffic considered during our investigation include establishing more consolidation centres, modifying restrictions on night-time deliveries, and changing the way personal deliveries are received. More generally, there is potential to increase the use of bicycles in freight, particularly in the last mile of the delivery chain.

- 4.10 Consolidation centres are used in the freight industry to reduce delivery traffic. They allow for deliveries from multiple sources to be combined into fewer vehicles before entering congested parts of the road network. A number of inner London boroughs have introduced schemes to consolidate their deliveries, which reduce the number of vehicles travelling to council premises, and some Business Improvement Districts have done the same for business premises in their areas.³² A consolidation centre used by businesses on Regent Street has also proven to be successful, as Dr Steve Melia told us:

“There is a great need for freight and servicing to become more efficient... along Regent Street, there is an 80 per cent reduction in lorry movements associated with a delivery consolidation scheme.”³³

- 4.11 Consolidation is also used in the construction industry, although despite extensive construction activity there are only 12 consolidation centres for the sector in London.³⁴ During this investigation we met with High Speed 2 (HS2), which is an example of a major construction project with significant traffic movements. Along the A41, for instance, HS2 is projecting there will be 262 construction vehicles per day, with a peak of 25 per hour in both directions.³⁵ The Mayor has some powers to influence the construction sector; he could, for instance, promote consolidation centres in the London Plan and make their use a requirement of planning permissions he grants, to help ensure this approach is used for new developments. Another suggestion made by the Institution of Civil Engineers is that vehicles from consolidation centres could receive a rebate on Congestion Charge payments.
- 4.12 Another potential change to delivery patterns could be brought about by encouraging more deliveries in the evening. London boroughs operate restrictions on night-time deliveries in certain areas as part of the London Lorry Control Scheme (LLCS). These restrictions were relaxed during the 2012 Olympic and Paralympic Games because of the need to ensure athletes and officials could travel around the city as quickly as possible, and TfL has sought to implement lessons learned during the Games. The challenges of doing this include the preference of many businesses for day-time deliveries, and the risk that night-time deliveries will also create noise disturbances for residents. London Councils has recently initiated a review of the LLCS.
- 4.13 The Mayor and TfL face challenges in changing commercial traffic patterns in London. Introducing road pricing would give TfL an additional tool to shift incentives for the industry in a way that reduces traffic at congested times. Establishing more consolidation centres should also be a priority for the Mayor and TfL, including those facilitating more deliveries to be made by bicycle. TfL should also engage fully with the London Lorry Control Scheme review and align their objectives with those of the boroughs.**

Recommendation 4

The Mayor and TfL should take steps to encourage more delivery consolidation. This will involve working with those running large construction schemes and retailers, potentially through Business Improvement Districts. The new London Plan should promote consolidation for new developments. TfL should also work with London Councils to reduce restrictions on night-time deliveries. The Mayor and TfL should write to the committee by the end of April 2017 setting out their plans to reduce commercial traffic in these ways.

Personal deliveries

- 4.14 Changing the way personal deliveries are made could also reduce traffic. We have heard that internet shopping deliveries to workplaces are contributing to congestion in central London. As Edmund King of the AA told us:

“One of the major problems in London is people having stuff delivered to their offices in London, which is very inefficient and causes immense congestion. I know some companies have actually banned it because it is causing congestion at their reception areas, let alone on the roads. That is something we have to look at.”³⁶

- 4.15 Some companies based at Canary Wharf have taken the step of banning non-work deliveries to offices. The Mayor and TfL have no power to compel other organisations to do this, although TfL told us that it is considering a pilot scheme aimed at reducing personal deliveries to its own offices.³⁷
- 4.16 TfL also provides ‘click and collect’ at some of its stations in partnership with a number of retailers. This service allows consumers to pick up packages at convenient locations, as part of journeys they are already making. Click and collect has the potential to cut congestion by allowing delivery vehicles to reduce the number of locations they must travel to, and preventing duplicate road journeys caused by missed deliveries.
- 4.17 TfL’s record in providing click and collect is mixed, however. High-profile partnerships with the food retail industry have failed; Tesco and Sainsbury’s both ceased to offer click and collect at Tube stations in 2015.³⁸ Other retailers continue to have click and collect points at stations – for instance Argos at Cannon Street and Amazon at Finchley Central and Newbury Park – but the service is available at only a small minority of stations. It may also be the case that limiting click and collect to only one retailer at a station narrows the opportunities for passengers to take advantage of the service.
- 4.18 **TfL has a significant role to play in changing the way people receive deliveries. As a major employer, TfL can lead by example in tackling the problems caused by internet shopping being delivered to workplaces in congested areas. As the operator of hundreds of Tube and rail stations**

across London, TfL has an even bigger opportunity. By promoting click and collect at Tube stations, TfL can raise additional commercial revenue while helping to reduce traffic congestion. We believe TfL needs to consider again whether it has the right approach to click and collect, and look to expand the opportunities for Londoners to collect packages from stations.

Recommendation 5

TfL should pilot a ban on personal deliveries for staff. Based on the findings, the Mayor should consider extending this to all GLA Group premises, and promote this change in practice to other large employers in London. We ask that TfL write to the committee setting out plans for a pilot by the end of April 2017.

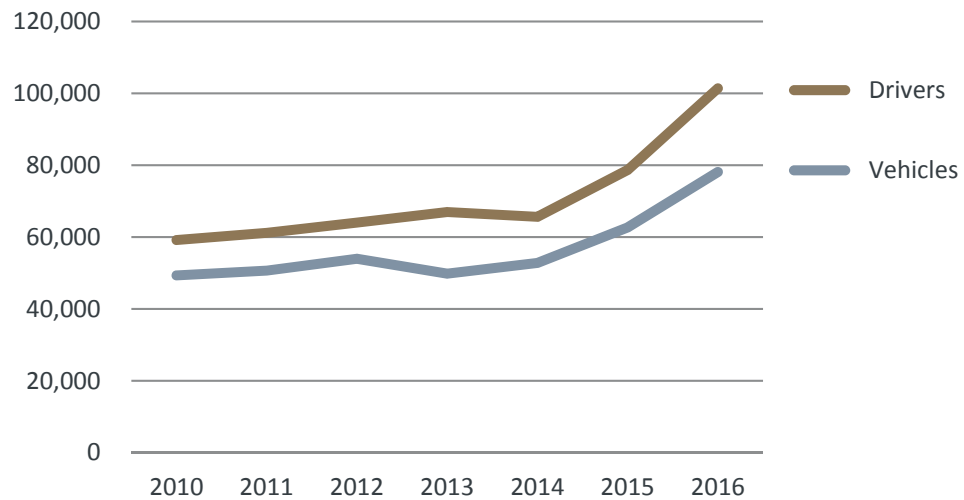
Recommendation 6

TfL should reconsider its approach to 'click and collect' at Tube and rail stations. Stations should be identified for a pilot programme in which multiple retailers and/or freight operators can deliver packages to a station for collection. We ask that TfL write to the committee confirming plans to seek partnerships of this type by the end of April 2017.

Private hire

- 4.19 TfL told the committee that the private hire industry (minicabs), while providing an essential transport service for Londoners, is increasingly contributing to congestion on London's road network. As discussed in Chapter 2, there has been a 72 per cent increase in private hire driver licences and a 70 per cent increase in vehicles since 2012/13. Figure 7 displays these trends.
- 4.20 Over this period, there has been a slight decrease in the number of taxis (black cabs) and taxi drivers licensed in London. The growth in private hire services is believed to be driven by the exploitation of new technology, which has enabled changes to the way operators and drivers offer services, and the way passengers book journeys. Despite the growing size of the industry, the number of private hire operators has fallen in London, suggesting there has been a concentration of the sector into a smaller number of larger operators.

Figure 7: Private hire vehicle and driver licences have sharply increased



Source: Transport for London, 2016

4.21 TfL told us how private hire vehicles are contributing to congestion in central London.

“Since 2013, the number of private hire vehicles entering the Congestion Charging zone during hours of operation has increased by 54 per cent to around 15,000 vehicles a day. This means they now make up 13 per cent of motorised traffic and 38 per cent of car traffic in the zone. This is approximately double the proportion of taxis, which make up around 20 per cent of car traffic. Outside of charging hours the figures can be even higher with up to 30,000 PHVs entering the zone on Saturdays.”

4.22 Uber, a global private hire operator that has grown rapidly in London, told us that most of its bookings do not take place at peak congestion times. According to its data, only 32 per cent of Uber travel occurs between 7am and 6pm.³⁹ However, this does not mean that private hire vehicles are not present in busy areas in sufficient numbers to cause congestion; the TfL data quoted above suggests that they are.

4.23 TfL has been seeking to strengthen regulations placed on the private hire industry, most recently through its Private Hire Regulations Review, which led to new measures on insurance, driver training and the journey booking process. The Licensed Private Hire Car Association (the largest trade body for the sector) and the operator Addison Lee told us that new regulation – for instance to prevent clustering of vehicles or to remove older vehicles – could help reduce the sector’s contribution to congestion.⁴⁰ The Impact Assessment for the Private Hire Regulations Review suggested some operators may face

difficulties meeting new requirements, but does not indicate that this would result in an overall reduction in private hire traffic.⁴¹

- 4.24 The Mayor has lobbied the government for new legislation to control private hire traffic. In particular, the Mayor has asked for TfL to have the power to cap private hire licence numbers.⁴² Other cities can implement a cap on licence numbers, but TfL is currently obliged to license every driver and vehicle presenting a valid application. The Mayor has also lobbied for the government to address the issue of cross-border hiring; under current legislation, any operator licensed in England and Wales can take bookings anywhere. The Mayor has not stated what impact these proposals would have on private hire traffic levels.
- 4.25 Another proposal put forward by the Mayor for managing private hire traffic is to remove the sector's exemption from the Congestion Charge. TfL has said it is currently assessing the feasibility of this proposal; a study was due to be completed by the end of summer 2016 but has not been published. Operators submitting views to the committee have strongly opposed this proposal. Addison Lee indicated that it would be open to the idea of a usage-based charging model as charges would more accurately reflect vehicle movements. It suggested that different rates could be charged for vehicles that were empty and those that were carrying passengers.
- 4.26 The Mayor and TfL are implementing changes to private hire regulation in London, although it is not clear that these will have any impact on the sector's contribution to congestion. Equally, TfL has not said how new legislation on private hire licensing, or the Mayor's proposal to remove the Congestion Charge exemption, could affect congestion. This suggests the Mayor and TfL lack a detailed analysis of the congestion effects of private hire traffic and a meaningful plan for addressing this.**
- 4.27 Our road pricing recommendation offers a positive way forward for responding to this challenge. Although TfL will need to conduct detailed assessment of this proposal and its potential impacts, we believe disincentivising private hire journeys in congested areas at peak times will reduce traffic congestion overall in London.**

Recommendation 7

The Mayor should set out how his new regulations for the private hire industry and the legislative changes he is advocating will affect congestion levels in London. He should also commit to assessing the impact of making private hire vehicles subject to a new road pricing regime, and different options for implementing this proposal. The Mayor should write to the committee by the end of April 2017 confirming these plans.

5. Encouraging modal shift

Key points

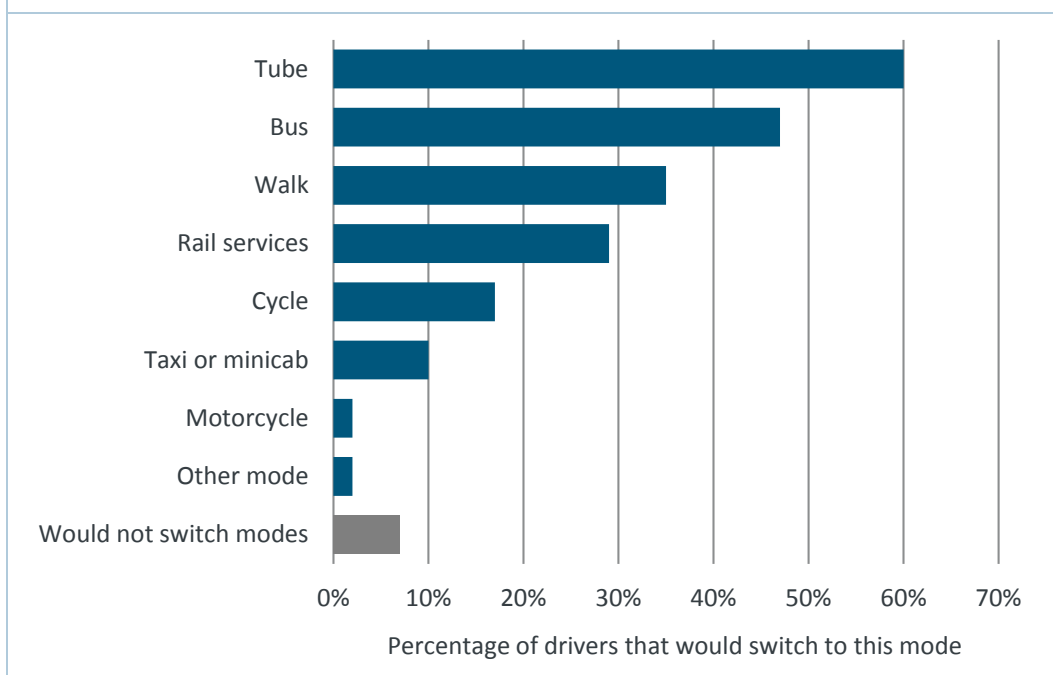
- Encouraging Londoners to shift to public transport modes and active travel would help to reduce congestion.
- Road pricing can encourage modal shift. Most drivers in London say they would consider switching to the Tube, underlining the importance of ongoing investment in capacity programmes.
- Buses are an efficient road-based mode and can help relieve congestion, but usage has fallen as a result of reduced reliability.

- 5.1 A major component of reducing traffic congestion is encouraging drivers and businesses to reduce their use of cars and vans, particularly at the busiest times. This will only be possible if viable alternative options are made available, such as walking and cycling, buses, the Tube, trams or National Rail. Achieving a shift to more sustainable modes has other benefits, too, including reductions in air pollution and improvements to Londoners' health.
- 5.2 TfL data shows, in fact, that a long-term shift toward more sustainable modes has been taking place. Between 2010 and 2014, the proportion of journey stages taken by private transport in London fell from 43 to 32 per cent. The corresponding figures for public transport mirror this trend: its mode share rose from 34 to 45 per cent. The mode share of cycling doubled from 1 to 2 per cent, while walking remained stable at 21 per cent.⁴³
- 5.3 Encouraging people to work from home could also help to reduce the number of journeys taken on the road network at peak commuting times. Whether this is achievable depends to a large extent on organisational cultures, although the Mayor can support this trend, for instance by taking steps to improve high-speed broadband coverage throughout the city.

Behaviour change

- 5.4 Road pricing could help encourage further modal shift among Londoners. As discussed in Chapter 3, about half of the drivers responding to our survey said that new road charges would encourage them to switch to another transport mode for their regular journeys. Figure 8 below displays the preferences they expressed.

Figure 8: Drivers switching modes would prefer the Tube, bus and walking



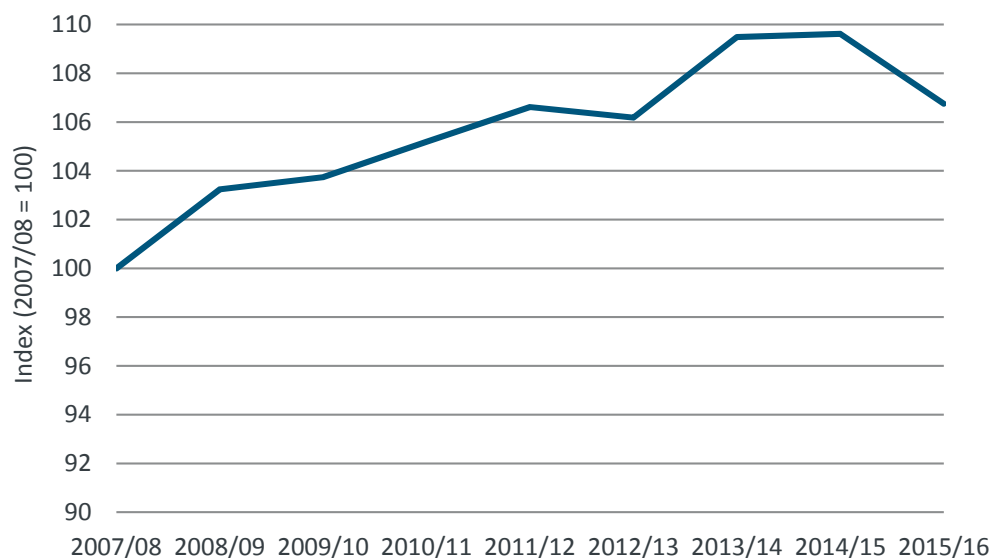
Source: Transport Committee survey, September 2016

- 5.5 These figures reveal one of the major challenges of achieving modal shift: most drivers in our survey would choose to switch to public transport. Although the number of drivers saying they would walk or cycle more is encouraging, most would choose public transport options, particularly the Tube. Yet, at the busiest times of the day, these transport modes are already very crowded.
- 5.6 TfL is investing heavily in increasing public transport capacity, particularly on the Tube. For instance, the New Tube for London programme is set to deliver capacity increases of between 25 and 60 per cent on four lines. However, the Tube is already heavily overcrowded, and is likely to remain so as London's population grows even with TfL's upgrade programmes. TfL will therefore need to redouble its efforts to encourage more people to use active travel options.

Buses

- 5.7 London's bus network must be a major part of the solution to traffic congestion. Buses are potentially the most space-efficient vehicle on the road, considering the large number of passengers they can carry. Encouraging people to switch from private transport modes to buses would help relieve congestion. Bus usage has fallen in the past year, after growing strongly for a many years (see Figure 9 below). TfL has stated that traffic congestion has caused this drop in usage, because bus journeys have become less reliable.

Figure 9: Bus usage has fallen in London following a long period of increase



Source: Transport for London, 2016

- 5.8 TfL invests in bus priority schemes – such as bus lanes, bus-only turns, and selective vehicle detection at junctions – which are designed to ensure the effect of congestion on buses is minimised. In November 2016, the Mayor

announced a number of measures aimed at tackling congestion, including an expansion of TfL's bus priority programme.⁴⁴

- 5.9 In some ways, buses are also a contributor to London's congestion problem. On certain routes, for instance Oxford Street, bus-on-bus congestion is a significant issue. Where many buses are travelling on the same road simultaneously, with relatively few passengers aboard, this cannot be considered an efficient use of road capacity. TfL is currently consulting on proposals to reduce the number of buses in central London, particularly on Oxford Street, as we have previously recommended.⁴⁵
- 5.10 The committee is currently undertaking a specific investigation into London's bus network.⁴⁶ This will explore in more depth how changes to the bus network can both improve service performance and address congestion problems.
- 5.11 To reduce congestion, London needs to continue encouraging people to shift toward more sustainable transport modes. Our survey results suggest road pricing will encourage modal shift, but further investment in public transport capacity and cycling and walking infrastructure is also needed. We will seek to identify further measures to increase usage of the bus network in our forthcoming investigation into this topic.**

6. Managing the road network

Key points

- TfL is upgrading its traffic management technology to enable more effective responses to congestion-causing incidents.
- An on-street presence supplements TfL's traffic management technology. However, there are no plans for TfL to expand its small team of enforcement officers despite its early success.
- Roadworks are a major cause of congestion, including those works being conducted by TfL such as the installation of Cycle Superhighways. These need to be planned more efficiently.
- Communication with drivers about expected road disruptions can help prevent congestion. A new pilot project displaying traffic information on buses could be rolled out.

- 6.1 Although it is clear that today's congestion problem requires strategic interventions, we have also considered how the day-to-day management of congestion can be improved. TfL has a vital role managing London's road network, including planning for and responding to incidents that cause congestion, and developing new road infrastructure.

Ensuring smooth traffic flow

- 6.2 TfL monitors traffic in London from a central hub, the Surface Transport and Traffic Operations Centre, and can respond to incidents on the road to help prevent the build-up of congestion.⁴⁷ The key tool TfL has in this task is the management of traffic signals; TfL controls all signals in London, numbering around 6,200, including those on borough roads.
- 6.3 The sophisticated technology behind TfL's signal traffic control system consists of the Urban Traffic Control (UTC) system and Split Cycle Offset Optimisation Technique (SCOOT) traffic signal optimiser. The UTC system allows TfL to monitor and deliver strategic control of the road network. The SCOOT system detects traffic approaching junctions – with sensors buried in carriageways – and minimises congestion through real-time optimisation of the traffic signal timings. SCOOT is installed at over half of all junctions in London, and over 90 per cent in central London.⁴⁸ TfL told us that SCOOT reduces traffic delays by an average of 12 per cent at each junction where it is installed.⁴⁹ The system does, however, increase waiting times for pedestrians when it is used to smooth traffic flows.
- 6.4 TfL is currently upgrading and replacing the UTC and SCOOT system, which will not be supported beyond November 2020. TfL is developing a Surface Intelligent Transport System (SITS), consisting of a number of programmes. The objectives of this upgrade have been described by TfL:

“[SITS] will replace and upgrade TfL's current systems and data capabilities for traffic signal control and incident management across London's road network. In addition to replacing systems which will no longer be supported from November 2020, the programme will use an integrated suite of new systems and tools to transform TfL's capability to understand and manage operations on the road network. This will not only enable TfL to respond quicker to unplanned incidents, reducing delays, but will also allow customers and stakeholders to make informed and timely travel decisions.”⁵⁰

Road and Transport Enforcement Team

- 6.5 Supplementing the technological management of traffic, in August 2015 TfL created a new Road and Transport Enforcement team to tackle road congestion. This team of 80 TfL officers undertakes a range of activity to tackle congestion, initially focused on 10 key routes.⁵¹ The team's role includes moving unlawfully stopped vehicles, issuing Penalty Charge Notices

to illegally parked vehicles and clearing unnecessary or poorly set-up roadworks. Officers use real-time information on road conditions to direct traffic.

- 6.6 A recent example of where this team have had a positive impact followed a major fire on Finchley Road, where officers controlled pedestrian crossings to ensure people could cross safely, and enforced a temporary ban on parking to ensure traffic could run smoothly. Alan Bristow, director of road space management at TfL, explained the benefits of the team:

“They are a very effective operational capability in that they can be tasked directly from our control room to attend incidents on the street. I would say their effect is mostly in enabling us to put a presence on the ground to make sure that what is happening down there is controlled safely. They can also stop individuals – they have those powers – from being in the wrong place, parking in the wrong place and that sort of thing. They have a local effect on what might cause congestion in an area.”

- 6.7 We asked TfL during this investigation whether there are any plans to expand this team beyond its current size of 80 officers. Despite the reported success of the scheme, TfL said it has no expansion plans.

- 6.8 **Implementing the next generation of traffic management technology will help TfL tackle incidents causing congestion on London’s roads. Recently TfL has supplemented this approach with an on-street presence, with a team of officers dedicated to ensuring smooth traffic flow. This is a relatively small team, yet despite the reported success of the scheme, TfL has no plans to extend it. This decision should be revisited.**

Recommendation 8

TfL should conduct and publish an analysis of the impact of the Road and Transport Enforcement Team and, if it is proven to be cost-effective, set out plans to expand the size and coverage of the team. We ask that TfL writes to the committee by the end of April 2017 with an update.

Reducing the impact of roadworks

- 6.9 Roadworks are a source of huge frustration to many road users. While much of this work is essential, it has to be managed effectively to minimise the disruption caused. Many roadworks are planned in advance as part of upgrade work, such as TfL’s Road Modernisation Plan. Others are unplanned, such as recent emergency works to address a spate of burst water mains around London.

6.10 In recent years, while the number of roadworks on major roads has fallen, the amount of disruption has grown:⁵²

- In 2011/12 the total number of roadworks – including TfL’s own works – on the TfL Road Network (TLRN) was 36,021. In 2015/16 there were 33,652 works.
- In 2011/12 the number of hours of severe and serious disruption on the TLRN was 1,994. In 2015/16 it was significantly higher, at 3,661 hours.
- The average length of severe and serious disruption per roadwork has therefore increased by over 80 per cent in just three years.

6.11 TfL operates two main schemes to minimise roadwork disruption:

- Under the London Permit scheme, which was introduced in 2010, TfL monitors and regulates roadworks taking place, and can prosecute companies breaching the terms of the permits. By June 2016, TfL had successfully prosecuted companies breaching conditions on 99 occasions. This included repeated prosecutions of some offenders, such as BT (37 prosecutions), Thames Water (13) and Infocus (11).⁵³
- The Lane Rental scheme was introduced in 2012. Under this, companies conducting roadworks on much of the TLRN are required to pay a charge of up to £2,500 per day, depending on the time and location. In 2016, TfL highlighted how the scheme had encouraged cooperation between companies, claiming that 1,200 roadwork sites in 2015 were shared.⁵⁴

6.12 In November 2016, the Mayor announced a series of new measures to help minimise the disruption caused by roadworks. These included:⁵⁵

- Connecting temporary traffic signals at roadworks to central traffic control so they can respond to traffic conditions, rather than being set on static timings.
- Working with the London Infrastructure Delivery Board to improve planning of major infrastructure works.
- Using cameras at roadwork sites to enhance enforcement against companies not complying with permits and agreements.
- Agreeing performance improvement action plans with local authorities, utility companies and developers.

6.13 TfL has been directly responsible itself for much of the work that has taken place on London’s roads over recent years. This has primarily occurred because of the implementation of TfL’s Road Modernisation Plan, which encompasses a wide range of schemes. Most prominent has been the installation of segregated Cycle Superhighways, with other schemes such as footway widening at Southall Broadway, removing the gyratory system at Tottenham Hale and junction alterations at Malden Rushett. TfL accepts that these works have significantly increased congestion in affected areas.⁵⁶

- 6.14 Alan Bristow of TfL, told us that TfL would be considering whether the Superhighways programme should continue to be delivered in the same way:

“We are currently looking at extensions to the North-South Cycle Superhighway into the City and also the Cycle Superhighway 11 programme is under debate for tying down in the future. The Cycle Superhighway programme will go ahead because cycling safety demands that we keep this process going, but probably the issue was the sheer scale and speed at which the current batch of Cycle Superhighways were put out there, which we intend to learn the lessons from.”

- 6.15 **TfL’s existing roadwork schemes do not appear to be working. The Mayor’s recent announcement of new measures to minimise the impact of roadworks on congestion was encouraging, and we will monitor what effect these have. However, the Mayor’s announcement did not include any changes to the financial disincentives for organisations carrying out works through the London Permit and Lane Rental schemes. The repeated prosecutions of some companies for roadwork violations suggest that the penalties may not be strong enough.**

- 6.16 **However, closer attention should also be paid to TfL’s own contribution to disruptions on the road. Cycle Superhighways and other schemes are vital to improving the safety of cycling in London, and therefore tackling congestion through modal shift, helping a growing population to get around the city and improving health. It should continue. It is inevitable that road improvements on major roads will lead to some disruption. Yet TfL does need to learn the lessons from the introduction of the first segregated Superhighways and other Road Modernisation Plan projects, to help ensure there is no unnecessary contribution to traffic congestion during the construction phase.**

Recommendation 9

The Mayor and TfL should carry out an assessment of the effectiveness of the London Permit and Lane Rental schemes for roadworks. This should be aimed at ensuring the cost of delayed roadworks on London’s road users is reflected in the amount companies must pay. We ask that TfL write to the committee by the end of April 2017 with an update.

Recommendation 10

TfL should continue to implement its Road Modernisation Plan schemes including the proposed network of safer cycling routes such as Cycle Superhighways and Quietways. It should report back to the committee by the end of April 2017 on how the construction of additional Superhighways and other major projects will be planned more effectively to minimise traffic congestion.

Communicating with drivers

- 6.17 Making drivers aware of disruptions to the road network is an important part of TfL's role. This ensures drivers can plan ahead and avoid disrupted roads, and therefore avoid adding to congestion levels.
- 6.18 Paul Gerrard of the National Joint Utilities Group told us there is a noticeable impact when roadwork information is posted on social media, with drivers avoiding disrupted routes.⁵⁷ TfL has a large following for its Traffic News Twitter account. In the Mayor's recent announcement of new congestion measures, he set out an objective to increase the number of followers. He also said TfL would work with app developers and sat nav providers to distribute more information about disruptions to drivers.
- 6.19 In August TfL started testing a new form of sharing information with drivers about road disruptions. On two bus routes, buses are showing 'real-time' information about disruptions on electronic display boards. For instance, buses on route 344 were publicising the part closure of Buckingham Palace Road. TfL describes the innovation as:
- "The buses have been fitted with electronic boards by Equitech IT Solutions, which use GPS technology to give accurate and up-to-date traffic information. The information is taken from the TfL Variable Message Sign network, which is fed by TfL's 24-hour traffic control centre."⁵⁸
- 6.20 **TfL should continue its efforts to give all road users as much information as possible, at the time they need it, about conditions on the road. We hope that growing TfL's social media streams and partnerships with the technology industry will enable this to happen. Displaying information on buses has the potential to reach more drivers; if successful this innovation should be rolled out more widely.**

Recommendation 11

TfL should conduct and publish an analysis of the impact of the pilot scheme displaying traffic notices on buses and, if it is proven to be cost-effective, set out plans to roll out the programme more widely. We ask that TfL writes to the committee by the end of April 2017 with an update.

Road infrastructure

6.21 In recent years there have been a number of proposals to add new road infrastructure in London. For instance, in early 2016 the previous Mayor asked TfL to explore the feasibility of two new east-west road tunnels to relieve central London congestion.⁵⁹ Sadiq Khan is not taking forward these proposals, but is proposing a new road crossing the Thames in east London, the Silvertown Tunnel, alongside a number of other river crossings for public transport, cycling and walking.⁶⁰ Under the Mayor's plans, both the Silvertown Tunnel and nearby Blackwall Tunnel would be tolled, to help fund the infrastructure and restrict demand.⁶¹

6.22 Some stakeholders we have heard from in this investigation have backed the idea of new road infrastructure. Edmund King of the AA said that new tunnels around central London could remove traffic from congested areas.⁶² Grant Davis of the London Cab Drivers Club further explained:

"The tunnels would work because, if I get a job in the City or Canary Wharf and they want to go to Knightsbridge or Hammersmith, either I have to come along the Embankment... or I have to go up to the Euston Road. With the developments that are looking to go at Euston Station, again, that is going to be gridlocked and so I am really stuck. These big tunnels that could go from east to west and from south to north would be fantastic, another crossing to supplement the Rotherhithe [Tunnel]. If you go to Rotherhithe Tunnel, if anything happens, it is major gridlock all through the south-east; Blackwall Tunnel likewise."⁶³

6.23 However, we have also heard that building new road infrastructure would encourage more people to drive. Dr Steve Melia of the University of the West of England highlighted the risk that building a new road-based river crossing would create congestion on either side of the crossing.⁶⁴ Dr Rachel Aldred argued:

"I would very much caution against new road infrastructure because there is plenty of evidence that building new roads will lead to more use of motor vehicles and will lead to congestion going back up again. We do need to increase capacity, but we need to increase people-carrying capacity... We really need more river crossings for walking and cycling. We need more public

transport capacity. We do not need more roads, which will funnel traffic. The traffic has to go somewhere from those roads and so we need to be very cautious about it.”⁶⁵

- 6.24 There are bottlenecks on London’s road network. TfL’s Road Modernisation programme is seeking to address a number of these, for instance improving junctions to encourage a freer flow of traffic, and make them safer for all road users. There is also new housing development across London requiring links to the road network, such as the Barking Riverside development in east London, to allow access for buses, cyclists and pedestrians, as well as motorists.
- 6.25 In general, we take the view that building new road infrastructure for private traffic risks working against efforts to encourage a shift to more sustainable transport modes. This does not preclude the possibility of targeted investment in capacity to relieve bottlenecks, and some new infrastructure is necessary to link new housing development to the road network. Road pricing revenue could fund this work, while primarily acting as a constraint on demand and encouragement to use more sustainable modes.**

Appendix 1: Views of David Kurten AM

The following statement is made by David Kurten AM, UKIP Group Lead on the Transport Committee.

The UKIP Group agrees with Recommendations 4, 5, 6, 7, 8, 9 and 11 of the report. It disagrees with Recommendations 2 and 3, and partially disagrees with Recommendations 1 and 10.

Lots of ideas have been mentioned as to why there has been a general increase in congestion in greater London over the last 25 years. We believe the ultimate reason however, is the increase in population from rapid mass immigration.

Between the census years 1991 and 2011 the British-born population in London was stable at around 5.2 million, but the foreign-born population doubled from 1.5 million to 3.0 million⁶⁶, an average of 75,000 per year. Net immigration to London from abroad has accelerated since 2011 averaging 97,000 per year between 2011 and 2015⁶⁷ and reached 133,900 in 2016.⁶⁸ The real figures are likely to be even higher as they do not include the unknown number of illegal migrants living in the capital.⁶⁹

We believe that whatever plans are enacted, congestion will continue to increase while the population is growing at the current rate of 135,000 people per year, of which 133,900 is due to net immigration.⁶⁸ This has hugely increased the demand for public transport and goods deliveries. The only way to ultimately reduce congestion on all modes of transport is to get a grip on the uncontrolled immigration of the last 20 years and stabilise the population.

Recommendation 1: Congestion Charge reform, road pricing and Vehicle Excise Duty devolution

We agree with the need to reform the Congestion Charge in the central zone to better reflect the impact of vehicles on congestion, and the principle of replacing a daily flat rate with a scheme which charges lower fees for motorists who use the zone at times when it is less congested.

However, we do not support the implementation of road pricing across the Greater London area as envisaged in the report. The report mentions road pricing schemes in Stockholm and Singapore, but these schemes go nowhere near as far as what is being suggested for London.

Stockholm has a congestion charging system similar to London with different rates for different times of the day. Singapore has 77 toll gantries with different prices for passing them at different times of the day. The ultimate aspiration for London however is 'big brother' style total vehicle monitoring for the entire Greater London area. All vehicle movements would be monitored and charged by a government agency: probably TfL. This will destroy privacy and civil liberties for motorists in London.

Vehicle Excise Duty should remain national and in the power of HM Treasury and not be devolved to London. The purpose of devolving it would be to abolish it and integrate it into a single 'big brother' road pricing scheme, to which we are opposed.

There is a very good case to be made, however, for an annual lump sum payment to TfL from the Department of Transport for the upkeep and maintenance of the red routes for which it is responsible.

Two major reasons are given for a large increase in vehicles in the central zone since 2010: an increase in Private Hire Vehicles and an increase in Light Goods Delivery Vehicles. The Mayor should apply the Congestion Charge in the central zone to Private Hire Vehicles. He has the power to do so and this is an easy and simple way to reduce vehicle numbers in the central zone.

Recommendation 2: ULEZ technology

We do not oppose the introduction of ULEZ in the central congestion charging zone from 2020 as proposed by the previous Mayor; however any ULEZ zone should be restricted to monitoring vehicles by static ANPR cameras, similar to the current camera cordon of the central congestion charging zone. We do not support the blanket implementation of satellite or remote monitoring of vehicle movements by a government agency, due to the devastating impact that would have on privacy and civil liberties.

Recommendation 3: Workplace Parking Levy

We do not agree with the implementation of Workplace Parking Levies. These would be targeted mostly at outer London boroughs where there are fewer and less frequent transport links to many workplaces, particularly business and industrial parks. The introduction of a WPL would be a tax on business. It is unfair to employers, employees and workers who do not have the benefit of frequent public transport to their workplace and is likely to have the unintended consequence of discouraging new businesses, particularly industrial businesses, from opening in London.

Recommendation 10: Road Modernisation Plan and cycling infrastructure

We support sensible measures to improve cycle safety which do not increase congestion such as Quietways where they are supported by local communities.

Cycle Superhighways, while well intended, have led to increased congestion in central London. London does not have wide and spacious boulevards like Berlin or Perth and it is not possible to convert the small amount of vehicle space that it already has into dedicated cycle lanes in an era of rapid immigration and population growth without increasing road congestion. The implementation of new Cycle Superhighways will further increase congestion and this policy needs to be rethought.

Appendix 2: Views and information

Committee meetings

The Committee held two meetings in public to discuss this topic with experts and stakeholders. On 8 September 2016 we met:

- Dr Rachel Aldred, University of Westminster
- Grant Davis, London Cab Drivers Club (LCDC)
- Paul Gerrard, National Joint Utilities Group (NJUG)
- Professor Stephen Glaister, Imperial College
- Stephen Joseph, Campaign for Better Transport
- Edmund King, The AA
- David Leam, London First
- Dr Aruna Sivakumar, Imperial College

On 11 October 2016 we met:

- Alan Bristow, Transport for London
- Councillor Feryal Demirci, London Councils & London Borough of Hackney
- Dr Steve Melia, University of the West of England
- Iain Simmons, City of London Corporation
- Alex Williams, Transport for London

Committee Members also undertook the following activities during the investigation:

- Site visit to the Go-Ahead iBus hub in Stockwell
- Site visit to TfL's Surface Transport and Traffic Operations Centre
- Informal meeting with representatives of High Speed Two Ltd
- Informal meeting with representatives of the Institution of Civil Engineers

Written submissions

In addition to 155 submissions from individual Londoners, the committee has received written submissions from the following organisations:

- The AA
- Addison Lee
- Advance Minibuses
- AICES

- The Alliance of British Drivers
- Barnes Coaches
- Battersea Society
- Better Bankside
- Brewery Logistics Group
- British Cycling
- Campaign for Better Transport
- Cargobike Life
- Carplus
- City of Westminster
- Confederation of Passenger Transport UK
- Connelly Coaches
- Cross River Partnership
- Delivered Exactly
- DriveNow UK
- Driver-Guides Association
- Ebdons Tours
- Federation of Small Businesses
- Freight Transport Association
- Friends of the Earth
- Gett
- GLH
- GMB
- Go-Ahead
- GreenRide Sharing
- Hackney Living Streets
- Hager Environmental & Atmospheric Technologies
- Hailo
- HubBox
- Imperial College London (Paul Fennell)
- Institute of Tourist Guiding, the Association of Professional Tourist Guides and the British Guild of Tourist Guides
- Institution of Civil Engineers
- InterCity RailFreight
- Islington Living Streets
- ITS United Kingdom
- John Lewis
- Kings College London (Gary Fuller)
- London Borough of Brent
- London Borough of Greenwich
- London Borough of Greenwich (Conservative Group)
- London Borough of Hackney
- London Borough of Kingston upon Thames
- London Borough of Lambeth
- London Borough of Redbridge

- London Borough of Richmond upon Thames
- London Borough of Sutton
- London Borough of Wandsworth
- London Cab Ranks Committee
- London Chamber of Commerce and Industry
- London Councils
- London Cycling Campaign
- London Forum
- London Living Streets Group
- London TravelWatch
- Licensed Private Hire Car Association
- Licensed Taxi Drivers Association
- National Express
- National Joint Utilities Group
- No to Silvertown Tunnel Campaign
- The Original Tour – LDN Sightseeing
- Phil Jones Assoc
- Royal Borough of Kensington and Chelsea
- RMT
- Safeguard Coaches
- Sense with Roads
- Sustrans
- Transport for London
- Transport Planning Society
- Uber
- Unite
- University College London (David Metz)
- University of Southampton (Terence Bendixson)
- University of the West of England (Steve Melia)
- Westminster Living Streets

References

¹ [Traffic Note 4: Total Vehicle Delay for London 2014-15](#), Transport for London, 2016

² The Transport Committee is currently conducting a separate investigation into the bus network. For more information see:

<https://www.london.gov.uk/about-us/london-assembly/london-assemblys-current-investigations/bus-services>

³ *Londoners' Attitudes to Traffic Congestion and Road Charging*, London Assembly/Populus, 2016

⁴ [TLRN Performance Report: Quarter 4 2015/16](#), Transport for London, 2016; [London Streets Performance Report: Quarter 4 2012/13](#), Transport for London, 2013

⁵ [TfL's quarterly finance, investment and operational performance reports: Quarter 4, 2015/16](#), Transport for London, 2016; [Operational and Financial Performance Report: Fourth Quarter](#), 2012/13, Transport for London, 2013

⁶ [TfL's quarterly finance, investment and operational performance reports: Quarter 4, 2015/16](#), Transport for London, 2016; [Operational and Financial Performance Report: Fourth Quarter](#), 2012/13, Transport for London, 2013

⁷ Numbers in the chart differ to due rounding.

⁸ [Travel in London 8](#), Transport for London, 2016

⁹ [Travel in London 8](#), Transport for London, 2016

¹⁰ [Traffic volume – kilometres](#), Department for Transport, 2016

¹¹ [Licensing information](#), Transport for London

¹² Submission from Transport for London, September 2016. All submissions received by the committee are published on the London Assembly website alongside this report.

¹³ Transport Committee meeting, 8 September 2016 (first panel). The transcript of this meeting is available at: <https://www.london.gov.uk/moderngov/ieListDocuments.aspx?CId=173&MIId=6152&Ver=4>

¹⁴ TfL annual reports and statements of account, 2003/04 to 2015/16. Available at: <https://tfl.gov.uk/corporate/publications-and-reports/annual-report>

¹⁵ Submission from Dr Steve Melia, August 2016

¹⁶ Transport Committee meeting, 8 September 2016 (second panel)

- ¹⁷ [Mayor's Transport Strategy](#), Greater London Authority, 2010
- ¹⁸ [The Stockholm congestion charges: an overview](#), Centre for Transport Studies Stockholm, 2014
- ¹⁹ Transport Committee meeting, 8 September 2016 (first panel)
- ²⁰ Submission from Institution of Civil Engineers, September 2016
- ²¹ Transport Committee meeting, 8 September 2016 (second panel)
- ²² Submission from Transport for London, September 2016.
- ²³ [Schedule 23](#), Greater London Authority Act 1999
- ²⁴ Submission from London Borough of Richmond upon Thames, August 2016; Submission from Royal Borough of Kingston upon Thames, September 2016
- ²⁵ [Raising the capital: the report of the London Finance Commission](#), Greater London Authority, 2013
- ²⁶ The Environment Committee response can be found at:
https://www.london.gov.uk/sites/default/files/air_pollution_high-level_consultation_response_-_29_july_2016.pdf
- ²⁷ [Workplace Parking Levy Nottingham](#), Nottingham City Council, 2016
- ²⁸ For instance, submission from Sustrans, September 2016; Professor Stephen Glaister, Transport Committee meeting, 8 September 2016
- ²⁹ [Traffic volume – kilometres](#), Department for Transport, 2016
- ³⁰ [Retail sales in Great Britain: October 2016](#), Office for National Statistics, November 2016; [Retail sales, October 2012](#), Office for National Statistics, November 2012
- ³¹ Submission from Freight Transport Association, September 2016
- ³² Submission from London Councils, September 2016; Submission from Institution of Civil Engineers, September 2016
- ³³ Transport Committee meeting, 11 October 2016
- ³⁴ [The Directory of London Construction Consolidation Centres](#), Transport for London, September 2016
- ³⁵ Meeting with High Speed 2 Limited, September 2016 (follow-up information provided by HS2)
- ³⁶ Transport Committee meeting, 8 September 2016 (first panel)
- ³⁷ Alex Williams, Transport Committee, 11 October 2016
- ³⁸ [Sainsbury's and Tesco ditch Transport for London's Tube station Click & Collect scheme](#), City AM, 17 June 2015
- ³⁹ Submission from Uber, September 2016

⁴⁰ Submission from Addison Lee, November 2016; Submission from Licensed Private Hire Car Association, September 2016

⁴¹ [Private Hire Vehicles Regulation Proposals: Integrated Impact Assessment](#), Transport London/Mott McDonald, January 2016

⁴² Sadiq Khan, Mayor's Question Time, 16 November 2016. The minutes and transcript of this meeting are available at:
<http://www.london.gov.uk/moderngov/ieListDocuments.aspx?CId=183&MIId=6040>

⁴³ [Travel in London: Report 8](#), Transport for London, 2015

⁴⁴ [Mayor of London vows to tackle London's road congestion](#), Greater London Authority, 21 November 2016

⁴⁵ [Transport Committee letter to the Mayor](#), London Assembly, September 2016. The TfL consultation is available at:
<https://consultations.tfl.gov.uk/buses/west-end-bus-changes/>

⁴⁶ Further information about this investigation is here:
<https://www.london.gov.uk/about-us/london-assembly/london-assemblys-current-investigations/bus-services>

⁴⁷ The committee visited the Surface Transport and Traffic Operations Centre in July 2016. Notes are available at:
<https://www.london.gov.uk/moderngov/documents/s59385/Appendix%20%20-%20control%20centres%20site%20visit.pdf>

⁴⁸ [£4 billion road modernisation programme gets underway](#), Transport for London, 25 March 2015

⁴⁹ Submission from Transport for London, September 2016

⁵⁰ [Surface Intelligent Transport System](#), TfL Programmes and Investment Committee, 30 November 2016

⁵¹ [Mayor and TfL launch new team to crack down on congestion](#), Transport for London, 30 November 2015. Gracechurch Street, Bank; Eastcheap to Leadenhall, Bank; Gosport Street to Hoe Street, Walthamstow; Hackney Road to Ball Pond Road, Dalston; Ladywell to Loampit Vale, Lewisham; Highshore Road to Heaton Road, Peckham; Manor Park Road/Craven Park to Manor Park Road/High Street, Harlsden; Kensington High Street to Notting Hill Gate, Kensington; Columbia Avenue to Balmoral Road, Worcester Park; Gatton Road to Trevelyn Road, Tooting.

⁵² [Surface Transport - Key Performance Indicators 2010/11 to 2015/16](#), Transport for London, November 2016

⁵³ [British Telecom ordered to pay more than £8,000 for dangerous and disruptive roadworks](#), Transport for London, 28 June 2016

⁵⁴ [Teamwork on roadworks in 2015 saves over 144,000 hours of disruption](#), Transport for London, 14 January 2016

- ⁵⁵ [Mayor of London vows to tackle London's road congestion](#), Greater London Authority, 21 November 2016
- ⁵⁶ [Operational and Financial Performance and Investment Programme Reports – Fourth Quarter 2015/16](#), Transport for London, 2016
- ⁵⁷ Transport Committee, 8 September 2016 [second panel]
- ⁵⁸ [Real-time traffic updates to be displayed on buses](#), Transport for London, 10 August 2016
- ⁵⁹ [Mayor call for new measures to secure the success of London's roads](#), Greater London Authority, 4 February 2016
- ⁶⁰ [Mayor commits to building greener, public transport-focused crossings](#), Greater London Authority, 4 October 2016
- ⁶¹ Alex Williams, Transport for London, Transport Committee, 11 October 2016
- ⁶² Transport Committee, 8 September 2016 [first panel]
- ⁶³ Transport Committee, 8 September 2016 [first panel]
- ⁶⁴ Transport Committee, 11 October 2016
- ⁶⁵ Transport Committee, 8 September 2016 [first panel]
- ⁶⁶ [The Demand for Housing in London](#), Migration Watch, October 2014
- ⁶⁷ [London population growth twice that of UK, official figures show](#), The Guardian, 12 October 2016
- ⁶⁸ [Net migration pushes UK population over 65 million as London grows by 135,000 people](#), Evening Standard, 23 June 2016
- ⁶⁹ [Cameron's migration figures don't include UK's 1.1 million illegal immigrants](#), Daily Express, 28 August 2015

If you, or someone you know, needs a copy of this report in large print or braille, or a copy of the summary and main findings in another language, then please call us on: 020 7983 4100 or email: assembly.translations@london.gov.uk.

Chinese

如您需要这份文件的简介的翻译本，
请电话联系我们或按上面所提供的邮寄地址或
Email 与我们联系。

Vietnamese

Nếu ông (bà) muốn nội dung văn bản này được dịch sang tiếng Việt, xin vui lòng liên hệ với chúng tôi bằng điện thoại, thư hoặc thư điện tử theo địa chỉ ở trên.

Greek

Εάν επιθυμείτε περίληψη αυτού του κειμένου στην γλώσσα σας, παρακαλώ καλέστε τον αριθμό ή επικοινωνήστε μαζί μας στην ανωτέρω ταχυδρομική ή την ηλεκτρονική διεύθυνση.

Turkish

Bu belgenin kendi dilinize çevrilmiş bir özetini okumak isterseniz, lütfen yukarıdaki telefon numarasını arayın, veya posta ya da e-posta adresi aracılığıyla bizimle temasa geçin.

Punjabi

ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਦਾ ਸੰਖੇਪ ਅਪਣੀ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਉਪਰ ਦਿੱਤੇ ਡਾਕ ਜਾਂ ਈਮੇਲ ਪਤੇ 'ਤੇ ਸਾਨੂੰ ਸੰਪਰਕ ਕਰੋ।

Hindi

यदि आपको इस दस्तावेज़ का सारांश अपनी भाषा में चाहिए तो उपर दिये हुए नंबर पर फोन करें या उपर दिये गये डाक पते या ई मेल पते पर हम से संपर्क करें।

Bengali

আপনি যদি এই দলিলের একটি সারাংশ নিজের ভাষায় পেতে চান, তাহলে দয়া করে ফো করবেন অথবা উল্লেখিত ডাক ঠিকানায় বা ই-মেইল ঠিকানায় আমাদের সাথে যোগাযোগ করবেন।

Urdu

اگر آپ کو اس دستاویز کا خلاصہ اپنی زبان میں درکار ہو تو، براہ کرم نمبر پر فون کریں یا مذکورہ بالا ڈاک کے پتے یا ای میل پتے پر ہم سے رابطہ کریں۔

Arabic

الحصول على ملخص لهذا المسمى بلغة،
فرجاء الاتصال برقم الهاتف أو الاتصال على
العنوان البريدي العادي أو عنوان البريدي
الالكتروني أعلاه.

Gujarati

જો તમારે આ દસ્તાવેજનો સાર તમારી ભાષામાં જોઈતો હોય તો ઉપર આપેલ નંબર પર ફોન કરો અથવા ઉપર આપેલ ટપાલ અથવા ઇ-મેઇલ સરનામા પર અમારો સંપર્ક કરો.



Greater London Authority

City Hall
The Queen's Walk
More London
London SE1 2AA

Enquiries 020 7983 4100
Minicom 020 7983 4458

www.london.gov.uk

This page is intentionally left blank

Subject: Transport Committee Work Programme

Report to: Transport Committee

Report of: Executive Director of Secretariat

Date: 2 February 2017

This report will be considered in public

1. Summary

- 1.1 This report provides details of planned or ongoing scrutiny work by the Transport Committee and the schedule of Committee meetings for the 2016/17 Assembly year.

2. Recommendations

- 2.1 **That the Committee agrees its work programme for the remainder of the 2016/17 Assembly year, including the schedule of topics for forthcoming meetings set out at paragraph 4.11.**
- 2.2 **That the Committee agrees to hold an additional meeting on Wednesday 19 April 2017 at 2pm, with the main purpose being a discussion with the Mayor's new Cycling and Walking Commissioner.**
- 2.3 **That the Committee notes the record of its site visits to a) the Dearman Technology Centre and b) the High Speed One service at St. Pancras station, as included at Appendices 1 and 2.**

3. Background

- 3.1 The Committee receives a report monitoring the progress of its work programme at each meeting.

4. Issues for Consideration

- 4.1 The Committee has discussed a number of priorities for the Committee's work programme in 2016/17. The following is a list of topics that the Committee will aim to explore:
- Pedestrianisation of Oxford Street;
 - Traffic congestion;
 - Buses;
 - Mayor's Transport Strategy;

- Night tube;
- Tube stations – staffing and ticket office closures;
- Cycling; and
- Surface transport access to airports.

4.2 In addition to the above topics, the Committee will also seek to hold a meeting with the Commissioner of Transport for London (TfL).

4.3 The exact scope and timings for work on any of these other possible topics will be determined in due course and more detailed reports submitted to future meetings. The Committee seeks to maintain flexibility in its work programme to take account of any relevant developments when scheduling its work and has a rolling work programme so work on any topics may continue beyond each Assembly year.

Motorcycle safety

4.4 The Committee investigated motorcycle safety in 2015/16, publishing the report *Easy rider* in March 2016. The Chair has written to TfL to request an update on progress with recommendations in this report.

Bus services

4.5 The Committee has identified London's bus services as a topic for investigation in 2017. Following scoping research and discussion among Members, the Committee has identified two major strands to this work: bus network planning and bus safety. Today's meeting is being used to discuss bus safety.

Expansion of Heathrow Airport

4.6 On 25 October 2016, the Government announced its support for the construction of a third runway at Heathrow Airport. Expansion of Heathrow will require significant changes to London's transport network, including adding capacity to road and rail networks. The Committee discussed this topic with stakeholders at its meeting on 8 December 2016. The Committee has written to the Department for Transport sharing findings from the investigation; this letter is included under agenda item 5 – Action Taken Under Delegated Authority.

Pedestrianisation of Oxford Street

4.7 Following a pledge made by the Mayor in his election manifesto, the Committee considered a proposal for pedestrianising Oxford Street at its meeting on 15 June 2016. The Committee submitted its views to the Mayor on plans for pedestrianisation in early September 2016. The Chair has received a response from the Mayor to this letter, which was noted at the Committee's meeting on 8 December 2016.

Traffic congestion

4.8 The Committee investigated traffic congestion during the first half of 2016/17. Recent evidence suggests congestion has risen in London, with various causes cited including an increase in internet shopping, roadworks and the provision of private hire services. The Committee's meetings in September and October 2016 were used to discuss this topic. The Committee published a report on this topic in January 2017, which is being considered under another item on this agenda.

London Underground services

- 4.9 The Committee discussed major changes to London Underground services at its November 2016 meeting. TfL and London TravelWatch representatives were invited to attend, with discussion expected focusing on the rollout of night tube services on a number of lines, and the closure of ticket offices and associated station staffing changes.

Cycling and walking

- 4.10 The Committee has identified TfL's cycling and walking programmes as a topic for a future meeting. The meeting would be used to scrutinise schemes such as the Cycle Superhighways and Quietways, and the future priorities of the Mayor's Cycling and Walking Commissioner. Will Norman has now been appointed as the Cycling and Walking Commissioner. The timing of the appointment means there is no opportunity for a discussion with Mr. Norman within the Committee's agreed schedule of meetings. Therefore, it is proposed that the Committee hold an additional meeting on Wednesday 19 April 2017 at 2pm, and invite Mr. Norman to attend.

Site visits

- 4.11 The Committee has undertaken two site visits recently. The first was to the Dearman Technology Centre on 7 November 2016; the record of this visit can be found at **Appendix 1**. The second was St Pancras station, for a tour of High Speed One facilities, on 23 November 2016; the record of this visit can be found at **Appendix 2**.

2016/17 schedule of meetings

- 4.12 The dates of the next meetings of the Transport Committee are set out below with details of the main topic identified:
- Thursday 2 March 2017 – Commissioner of Transport; and
 - Wednesday 19 April 2017 (to be confirmed) – Cycling and walking

5. Legal Implications

- 5.1 The Committee has the power to do what is recommended in this report.

6. Financial Implications

- 6.1 There are no financial implications arising from this report.

List of appendices to this report:

Appendix 1. Record of visit to Dearman Technology Centre

Appendix 2. Record of visit to High Speed One facilities at St Pancras station

Local Government (Access to Information) Act 1985

List of Background Papers: None

Contact Officer:	Richard Berry, Scrutiny Manager
Telephone:	020 7983 4000
Email:	scrutiny@london.gov.uk

Transport Committee

Dearman Visit Summary

Date: Monday 7 November 2016
Time: 13:00 –14:15
Location: Dearman Technology Centre, Unit 5 Stafford Cross Business Park, Stafford Road, Croydon CR0 4TU

Attendees: Caroline Pidgeon AM
 Caroline Russell AM
 David Kurten AM
 Florence Eshalomi AM
 Keith Prince AM
 Navin Shah AM

Officers
 Georgie Wells
 Samira Islam

Meeting with: Michael Ayres, Director, Dearman Technologies
 Laura Gilmore, Head of Public Affairs and Campaigns, Dearman Technologies
 Gloria Esposito, Head of Projects, Low Carbon Vehicle Partnership (LowCVP)

Background

The Committee was invited by Dearman, a clean cold technology company, to visit their site in Croydon to hear about their technologies are being developed. The Low Carbon Vehicle Partnership also attended to speak to Members about the work they are doing to reduce harmful emissions in London.

Dearman

Dearman has developed technology that uses liquid nitrogen to deliver zero-emission power and cooling.¹ The Dearman Engine can be used for a variety of applications including transport refrigeration, back-up power and cooling for buildings, and increasing fuel efficiency (hybrid systems can be used on buses and can increase fuel efficiency by 20 – 30 per cent).

Low Carbon Vehicle Partnership

The LowCVP, which has about 200 members, is an organisation that aims to promote a shift to lower carbon vehicles and fuels. LowCVP working groups focus on buses, passenger cars, fuels, commercial vehicles and innovation. The LowCVP core aims are to:

- Develop initiatives to promote the sale and supply of low carbon vehicles and fuels
- Provide input and advice on Government policy
- Provide a forum for stakeholders to share knowledge and information
- Contribute to the achievement of UK Government targets for road transport carbon reduction

¹ Zero NOx and CO2 emissions

Transport Committee

Record of discussion topics

Dearman

The Dearman Engine

- The Dearman engine is an auxiliary engine that can be used for refrigeration on trucks. It can be retrofitted and is very quiet because there is no combustion.
- The liquid nitrogen storage tanks are 10 times larger than diesel tanks meaning that the technology is only suitable for large trucks.

Transport Refrigeration

- Diesel-powered transport refrigeration units can consume up to 20 per cent of a refrigerated vehicle's diesel and can emit up to 6 times more NOx and 29 times more particulate matter than the truck's main engine.
- Red diesel² can be used to power transport refrigeration. Cleaner options for transport refrigeration would be more cost-competitive if the diesel used for transport refrigeration was taxed at the same level as diesel fuel for road vehicles.
- Dearman would like the emissions from diesel engines in transport refrigeration to be included within the scope of the Ultra-Low Emission Zone (ULEZ).

Testing

- Dearman is trialling its refrigeration technology with a local Sainsbury's depot. It has one delivery truck that has been in operation since summer 2016.
- Dearman plans to publish the results of the trial by summer 2017. Not all the data will be published as some will be commercially sensitive but they will share findings on emissions savings.
- Dearman is working with Sainsbury's to develop a programme for ten Dearman trucks to be in operation next year.

Market competitiveness

- Liquid Nitrogen is a by-product of the process used to create liquid oxygen by industrial gas companies. It is therefore readily available and can be supplied at a stable price.
- The cost of the fuel and engine is competitive with engines using white diesel fuel.
- The Dearman Engine is cheaper to buy and operate than other zero-emission alternatives.

Low Carbon Vehicle Partnership (LowCVP)

Introduction to Low CVP

LowCVP is public-private membership organisation that exists to accelerate the shift to low carbon vehicles and fuels whilst protecting air quality.

LowCVP's work on Buses

- The LowCVP has been involved with developing the UK green bus market for over a decade. It helped create the Low Carbon Green Bus Fund, Bus Service Operators Grant (BSOG) Low Carbon Emission Buses (LCEB) Incentive and the Office for Low Emission Vehicles (OLEV) Low Emission Bus Grant.
- There are 4301 green buses operating across the UK. Approximately two thirds are hybrid.

² Red diesel is rebated fuel that is subject to lower taxes. Red diesel cannot be used to fuel road vehicles and is dyed red to discourage misuse. It is mainly used in agricultural and construction vehicles.

Transport Committee

- Electric buses have additional costs associated with their introduction, such as charging infrastructure requirements.
- LowCVP have created a 'low/ultra-low emission vehicle' standard for buses (including air quality and greenhouse gas emissions emissions).

Retrofitting

- LowCVP is designing a Vehicle Retrofit Accreditation Scheme for the Department for Environment Food & Rural Affairs (DEFRA). The scheme will measure the performance of retrofit technologies in reducing NOx emissions and ensure new technologies meet a certain standard.
- LowCVP claim that some retrofitted catalytic converters can reduce NOx emissions by 95 per cent.

Collaboration with TfL

- LowCVP is an active stakeholder in TfL's LoCITY program which brings stakeholders together to stimulate the uptake of low emission commercial vehicles.
- LowCVP is in the process of creating van and truck test cycles for TfL to be used to determine the performance of low emission technologies and fuels.

This page is intentionally left blank

High Speed 1 Visit Summary

Date: Wednesday 23 November 2016
Time: 13:30 – 15:00
Location: St Pancras Station

Attendees: Caroline Pidgeon AM
Florence Eshalomi AM
Joanne McCartney AM

Officers

Alison Bell
Georgie Wells
James Potts
Samira Islam
Stephen Morgan

The Transport Committee visited St Pancras Station to receive a briefing from Rob Holden (Chairman, HS1) and Wendy Spinks (Commercial Director, HS1).

The key discussion points are noted below.

New Trains

- New trains have a capacity of 1000 passengers and are more efficient to operate. The old trains have a capacity of approximately 750 due to power units at either end of the train.
- They are buying 10 new trains and are refurbishing 8 old trains.

Future plans & Crossrail 2

- At the moment HS1 runs 12 to 14 trains per hour (TPH) with plans to increase to 24 TPH. The increased capacity is projected to increase annual footfall by 30 million, to 80 million. HS1 is working on a master plan to accommodate the increase in passengers.
- Plans for the interface between the new Crossrail 2 entrance and the rest of the station were discussed. Work is being done to consider how passengers move around the station, and whether these behaviours can be accommodated better. HS1 is considering the mix of people using the station and their different behaviours - some will be regular commuters who are moving through the station, some will be slower-moving passengers with bags, and others will be there to use the retail facilities.
- The toilet facilities at the station are an area of concern. The station has poor connections with the sewers which cause regular problems.
- It was noted that the Crossrail 2 development would involve tunnelling under three Grade 1 buildings: the British Library, Kings Cross station and St Pancras International.

Retail at St Pancras

- When the Arcade first opened in 2007 it only had a few food outlets. Gradually, the success of the stores (and Terminal 5 at Heathrow) encouraged other businesses. Now there is a waiting list for the retail units.
- 30 per cent of visitors to the station are visiting it as a destination. It is being used as a meeting place and is a minor tourist attraction.
- The redevelopment has been criticised as being similar to retail facilities at airports which do not benefit local communities and are geared towards those passing through.

Around the station

- St Pancras is a busy area for traffic, pedestrians and cyclists. HS1 is working with TfL and London Borough of Camden to ensure pedestrian and cyclist safety is managed effectively. There were discussions about the cycle superhighway (which may run in the opposite direction of the 1-way traffic on Midland road), and HS1 is considering work to improve the crossings in front of the station on Euston Road.
- HS1 is part of Urban Partners which is a local business partnership. They launched a green walking route to get people to Euston via side streets and pathways that avoid busy main roads.
- There are two taxi ranks, one on the Euston Road side and one on Midland Road. There are times when taxis are queuing at one rank with lot of idle time while passengers are waiting at the other. Taxi drivers also complain that there are times when the rank is full of private hire vehicles.

Southeastern Platforms

- Trains currently operate with six carriages. High demand means that the high speed trains often only have standing space during peak hours. The trains are capable of operating with up to 12 carriages but the space around the platforms cannot cope with double the number of passengers.
- The East Midlands trains (which are diesel) are facing three problems: the train roofs get dirty from the fumes so the station has open sides to allow fumes to escape, which is not so pleasant for passengers in bad weather; the track 'wells' get full of oil; and the trains are noisy and do not turn off their engines which impacts on people who live near the station.
- The planned move to electric trains in 2019 will resolve these problems.

Eurostar & Brexit

- St Pancras Station does not have the infrastructure to undertake full passport control. The trains often arrive at the station in pairs which would mean processing around 2000 people at a time.
- The potential for Stratford to operate as an international station was discussed. It currently does not have facilities for immigration and passport control but space has been reserved on site for potential expansion. Stratford may become more feasible as a starting and terminating destination for Eurostar as the area develops.