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 predicative 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 boroughwide 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 is 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 lowfloor 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 stocks 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.