

Transport Committee – 14 October 2014**Transcript of Item 6 – Mayor’s London Infrastructure Plan 2050**

Caroline Pidgeon MBE AM (Chair): We are now going to focus on the Mayor’s Infrastructure Plan.

Can I welcome our excellent panel of guests before us today? Starting off, we have Michèle Dix, Managing Director of Planning at TfL. Fantastic. Welcome back before the Committee. Ian Brown who is no longer working at TfL but he has a great deal of knowledge around transport. Welcome back, Ian, before our Committee today. We have Alastair Willis, who is the Commercial Manager for Abellio London, and he is going to give us a commercial perspective today. Thank you very much for coming along. Joanne Dodds, who is Technical Director at Intelligent Transport Systems (ITS), has stepped in at the very last minute as well. Thank you very much for coming along today. We are going to be joined by Dr Stephen Marshall. He has had train issues coming in from Cambridge this morning, but he is a Reader in Urban Morphology and Planning at Bartlett School of Planning, University College London (UCL). We have very distinguished guests before us today looking at the Infrastructure Plan to 2050.

There are a lot of assumptions in this plan: the population of London looking to grow from 8.7 million in 2015 to 11.3 million in 2050, jobs going up, visitors going up and all sorts of pressures. I wanted to pick up one of the assumptions, which is that we have a central activity zone and all the transport seems to be focused around that with radial transport routes, rather than the idea of satellite zones around outer London and investing in orbital transport. Why has the Plan chosen to go down that route?

Michèle Dix (Managing Director of Planning, Transport for London): We have looked at the way in which London would develop in terms of its economic development and the pros and cons of supporting the pressures for increased development in the centre. We have done a lot of work – and it is referred to in the document – about the benefits of agglomeration. In areas where employment density is greater, the output per worker is actually greater. The output per worker in central London is 70% greater than the average for the UK and there is a direct correlation between density of employment and output.

Whilst there is pressure for people to invest in London, particularly in central London, it is whether or not we respond to that. If we respond to that, it gives rise to greater levels of gross domestic product (GDP). If we do not respond to that – and we have done tests whereby we have made assumptions about putting more of the employment out of central areas – then you can save on some of the infrastructure costs associated with moving people out. That is if the people who want to place those jobs actually want to move out. However, there is then a net loss in terms of the contribution to the economy because those jobs by definition end up not being as productive. Therefore, there is a pressure to continue investing in the centre.

We have also looked in some of our work at where housing would go, particularly in relation to those jobs. We have looked at different distribution patterns, again, to understand what that means for long-term plans for London and how London should be developing. The central area growth is very much based on how we can support the economy to the maximum and certainly, by supporting it, we will do that but that does then imply more radial capacity into the centre. It does not mean that there is no orbital capacity required across the network.

Caroline Pidgeon MBE AM (Chair): All right. Ian, you are the king of orbital travel. You helped bring about London Overground. It seems to all of us that lots of people want to travel around --

Ian Brown CBE (international transport consultant): I agree with the diagnosis from Michèle regarding employment and the contribution to the economy. Nevertheless, there are an awful lot of journeys, particularly the percentage market share by road journeys, which are orbital. When we tried the Overground ideas, ie a circle around London, we had great difficulty trying to work out what the market was for all these journeys because the aggregate was a big number but the individuals were very small.

The proof of the pudding is there are a lot of journeys which are orbital and if we are going to change market share from road to rail, we can justify investment in them. However, that response in supporting orbital development is in the context of Michèle's response about employment.

Caroline Pidgeon MBE AM (Chair): You see orbital travel and the investment in that far more about relieving road capacity rather than actually travelling to employment zones?

Ian Brown CBE (international transport consultant): The journeys that exist already rather than the creation of new urban centres is the discussion. There are a lot of journeys, particularly in the service industry, to employment, of course, so yes.

Caroline Pidgeon MBE AM (Chair): Joanne [Dodds] and Alastair [Wills], do you have anything you want to add on that about orbital travel versus radial?

Alastair Willis (Commercial Manager, Abellio London): I have nothing to add on that topic, thanks.

Joanne Dodds (Technical Director, Intelligent Transport Systems): It probably depends, really, if you think about the type of journeys that people are making. Michèle [Dix] makes a very valid point regarding business.

I do not live in London now. I live up in the North East. My parents live in the South. The fastest journey by public transport is via London. I do not want to really come into the central London area, but there is no public transport equivalent of the M25 to get me around the city and thereby avoid the need to go into the central area. That kind of thing is something that could possibly benefit people both inside London and outside London, if that were to happen.

Caroline Pidgeon MBE AM (Chair): What about commercially, Alastair, in terms of looking at forward investment? Would Abellio and other commercial operators only see radial routes as more profitable?

Alastair Willis (Commercial Manager, Abellio London): Having a central point delivers a lot of benefit for the focus for passengers' demands going into one location. The interesting one is the focus around where people are working, but actually do people look at different locations for where they are going for their leisure demand or other areas that creates the requirement to travel elsewhere? That is quite an interesting one.

Certainly, from an operator's focus around having some central points to go into, it enables us to focus resources on those areas. The demand between those locations will clearly then also be a factor in where and how we would resource those impact requirements.

Caroline Pidgeon MBE AM (Chair): There is clearly an urgency of investing in new transport - and obviously that is the focus of our meeting and the Planning Committee is doing some more detail on it this afternoon - before 2050, which is what this plan is about, particularly given that Peter Hendy, the

Commissioner [of Transport], recently said that there would be “overwhelming” overcrowding by 2030 and predicted “social unrest” if low-paid workers could not easily commute to work. Is this plan perhaps too late?

Michèle Dix (Managing Director of Planning, Transport for London): This plan is part of a timeline of improvements. On the orbital point, I will just come back to say that the Plan does allow for orbital improvements in transport. The Plan recognises that there is a demand in outer London for movements between areas and town centres and there is provision for encouraging more orbital movements, particularly making more of the National Rail network, which Ian [Brown CBE] will be very much aware of. Our aspiration is for greater devolution of the suburban part of the National Rail network so we can join the dots, particularly so that we can enable some of those movements and obviously with bus travel as well.

Is the Plan too late? No, the Plan is all about identifying what is needed by 2050 and making sure we have a means of funding it and financing it in place by 2050. As you know, quite a lot of the big things that we want to do take a long time and we have to start now if we are going to deliver them by 2050 and, indeed, by 2030. Peter [Hendy] is quite right in terms of all the stuff we are doing right now by upgrading the Tube, finishing Crossrail 1, completing Thameslink and doing the improvements that Ian [Brown CBE] started on the rail network.

All of those will not suffice for 2030. We need to provide some additional capacity by 2030. Crossrail 2, therefore, is very much a project that we want to take forward. We have started work on it. We are consulting on it. We are trying to move that forward as fast as we can so that it is ready by 2029. We are also doing a lot in terms of making sure that some of the other improvements that are going to be in place in London by 2030, such as High Speed 2 (HS2), actually have connections into the rest of the London network, thereby providing some of the orbital links that people have referred to; particularly at Old Oak Common. We have a big interchange with Crossrail 1 and that would actually provide for vast improvements to west Londoners if we connected the Overground to Old Oak Common and also if we had linkages between the West Coast Main Line and Crossrail 1. These are things that all can be done by 2030.

In terms of the point that Peter [Hendy] made, the point that Peter made was all about the fact that because poorer people are moving out of central London and are moving into areas where they are perhaps more reliant on the bus network, it is about making sure that we do not forget about the revenue part of our business; that we do get revenue support to ensure the buses still can be provided, so that we can provide people with a reasonable fare by which they can travel in order to access the jobs.

Valerie Shawcross CBE AM (Deputy Chair): It is really a question about how the assumptions behind the proposals have or might change in the future. One of the basic assumptions in there that changed very, very quickly was of course that the Estuary Airport is not going to proceed. However, the infrastructure proposals mentioned in here from a transport point of view are based around an assumption that there would be an Estuary Airport. How would knowing that then when you wrote this have changed what has gone on in this consultation document?

Michèle Dix (Managing Director of Planning, Transport for London): This is a 2050 plan. Sir Howard Davies [Chairman, Airports Commission] has only made proposals for 2030 with the identification of options between two runways. In terms of London’s growth, many of the proposals that we have put in place for supporting London’s growth - particularly in the east, where a large amount of the population growth will take place - will require some of the infrastructure improvements that have been identified to also support a Thames Estuary Airport.

Valerie Shawcross CBE AM (Deputy Chair): In fact, Michèle, it is quite clear that the Mayor's aspiration was to see Heathrow Airport closed and the hub moved. It is clear that Heathrow is not going to close and, indeed, there is not a demand anywhere for it to close. In fact, there is more concern that anybody could have thought it should close.

Would you not have wanted, for example, to see some better surface transport links to support Heathrow? Terminal 5 has two great big multi-billion pound station boxes underneath. Would it not have made more sense for a 2050 Infrastructure Plan to have talked about the realistic infrastructure demands of surface transport to Heathrow rather than a speculative proposal for the Estuary? I appreciate it was your boss's main aspiration, but there is not a reference in here to giving better services to Heathrow, which seems to me to be a huge lack in an infrastructure plan for London. Do you not think there is a hole to fill there?

Michèle Dix (Managing Director of Planning, Transport for London): As I say, the aspiration is what we need for London for 2050. This is a plan that sets out those requirements for 2050. It identifies a new airport in the East. In doing that, it acknowledges that aviation connectivity is really, really important, particularly in terms of opening up new routes to new destinations, which it so happens a four-runway hub airport would do.

However, in the work we have been doing in response to the Airports Commission proposals and in responding to the three options that are still on [Sir Howard] Davies' [Chairman, Airports Commission] shortlist, we recognise that substantial improvements will be needed in London if we are going to have additional aviation growth in those locations. We would also have to identify many more places in which new housing can be developed.

Valerie Shawcross CBE AM (Deputy Chair): Are we likely to see some of that expressed in the final document, then?

Michèle Dix (Managing Director of Planning, Transport for London): I still think the 2050 plan is all based on ensuring that we have a hub airport fit for purpose by 2050. As I say, Sir Howard Davies has only identified a solution to 2030.

Valerie Shawcross CBE AM (Deputy Chair): I know all my colleagues would not necessarily agree with me, but for the record I think it is a huge disgrace that a London Infrastructure Plan could not really seriously address the need for better surface transport access to Heathrow. It rather degrades the quality and status of the document when that is being evaded as an issue.

Can I just move on? You mentioned and there has been a quick discussion about Sir Peter Hendy's comments about the need to address the transport needs of the poor. We have talked about, really, this orbital and radial debate. Do you think there is scope within London's transport plans to generate different levels of job growth and to influence the shifting of the population around London? Do you think we could be doing more to push towards generating sustainable, high-population, active economic areas in the rest of London?

Michèle Dix (Managing Director of Planning, Transport for London): We have looked at the opportunities for doing more of that. We also recognise that not all the jobs in London are in central London. Even the growth of jobs is not just going to be in central London. There will be jobs in outer London. Some 60% of jobs are in outer London already but they are dispersed across the network. They are along high streets and in different smaller centres. Therefore, those jobs will still be there and those jobs will still grow.

However, in terms of what we can do about those high productivity jobs and whether we can encourage more of those to be located elsewhere, as I was saying to Caroline, there is a downside to doing that in terms of how

productive they become. What we do imagine is that the pressure for the central area growing will continue in the same way we have seen the central area growing into Elephant and Castle and into Vauxhall; we will see further extensions into Paddington; we have Stratford and, with the provision of HS2 at Old Oak Common, there will be pressure for that to grow as well. However, that does not mean that there will not be jobs elsewhere and that those jobs will not be serviced.

Valerie Shawcross CBE AM (Deputy Chair): The implication of what you are saying there is passive, “There will be jobs elsewhere, but ...” In fact, there has been a proactive attempt to create some mini-centres with polycentric approaches; Croydon is the classic. That radial transport scheme created a mini-hub in Croydon as an employment-generator. In terms of quality of life in London and reducing people’s journey times and reducing congestion, does it not make any sense to look at creating some more polycentric hubs around the rest of London?

Michèle Dix (Managing Director of Planning, Transport for London): It was certainly one of the things that was looked at in the creation of the Mayor’s Transport Strategy (MTS). It has been revisited this time. It was also looked at by the Outer London Commission to see what more you could do in outer London to create centres for employment. Office employment was one of the things that was examined. In particular, in places such as Croydon, they were built up and then they declined. A lot more work is now going into Croydon to reinvest in Croydon, however, the offer there is very much a mixed offer of residential, leisure and some office, it is not all as focused on office as it was previously. We expect we would want to support that in other centres such as Brent Cross, such as Stratford, such as the town centres.

However, that does not take away the demand that will still exist for central London. We recognise that we have to support them all, but that does not negate that support for central London.

Ian Brown CBE (international transport consultant): Previous strategies talked about “hubs” in places like Stratford and Croydon. Where we have tried them, they have been enormously successful, of course. There is the employment hub argument and of course there is a dominance of central London, which I am not trying to contest. However, if you think of transport hubs as well as employment hubs, the two come together very strongly.

Valerie Shawcross CBE AM (Deputy Chair): Yes, that is the point.

Ian Brown CBE (international transport consultant): Bringing up some of the points made by Joanne [Dodds] and Alastair [Willis], we could make much more of our orbital links. For instance, the Overground is a starter pack that has proved - I tried to go on one last night; I failed and I got on the one behind - it is enormously popular. If we finished that off and did Brockley, Brixton, Old Oak Common, Willesden Junction and West Hampstead, for instance, you actually have double the network for all these journeys. Therefore, I do think that argument about employment hubs needs to have the transport part added to it. If you have good transport links to places like Croydon - not just on the main line from London but all around - the actual attractiveness of those points, as seen by Stratford, increases.

Valerie Shawcross CBE AM (Deputy Chair): That is exactly the point I was trying to make, but you made it so much more eloquently, Ian.

Ian Brown CBE (international transport consultant): I am always here to help.

Caroline Pidgeon MBE AM (Chair): Thank you for that. I am not sure I fully understand how you are more productive if you work in central London. I used to work in Croydon; I think I was very productive there.

Richard Tracey AM: I just wanted to follow up the discussion that, Michèle, you were having with Val [Shawcross AM] about the idea of a hub airport. As I understand it, effectively, the Davies Commission is talking about 2030 and so it has ruled out the need for a hub airport by 2030. However, your plan, of course, is to 2050.

Can we just clarify? Is TfL actually still in its forward planning looking at the need for a hub airport for London in 2050, in 35 years' time rather than in simply 15 years' time? Of course, the present Mayor and one of the present Deputy Mayors will be Members of Parliament come next May for the foreseeable future --

Caroline Pidgeon MBE AM (Chair): We are still living in a democracy.

Richard Tracey AM: -- and there is no doubt about it, they will continue to pursue the idea of a hub airport. How is TfL's planning looking at that?

Michèle Dix (Managing Director of Planning, Transport for London): TfL has two roles: we have been supporting the Mayor in his aviation policy and making the case for a hub airport, which we believe is the right solution for London and the UK's needs; we also have a responsibility at TfL to respond to the proposals that will turn up on the table in terms of what they mean for surface access for London.

We have been doing both roles. We have been identifying - if there were to be an additional runway at Heathrow - what the surface access implications are and what costs are associated with that and how they are attributed to the airport. Similarly, for Gatwick, we have been doing the same. There are surface access provisions that are required for those two airports.

However, as you quite rightly say, that only takes us to 2030, based on [Sir Howard] Davies' responses. What we are concerned about is what happens post-2030 in terms of where then we provide the infrastructure required to meet the demands that London will require. Therefore, the whole debate is not finished.

Richard Tracey AM: It is a work in progress looking towards 2050. Thank you very much.

Caroline Pidgeon MBE AM (Chair): We are not clear why you do not have stuff in the short-term to 2030, more details on stuff that is needed for Heathrow and so on and then, if it is the vision beyond that, you think you are still going to need this.

Valerie Shawcross CBE AM (Deputy Chair): We have stuff about Tube upgrades that are current.

Caroline Pidgeon MBE AM (Chair): Yes. We feel there needs to be --

Michèle Dix (Managing Director of Planning, Transport for London): We have all sorts. We have the Piccadilly line upgrade, which is going to be of use with a 50% increase.

Dr Onkar Sahota AM: I just want to make the point that there is a pie-in-the-sky idea from the Mayor for a hub airport, but we have a reality situation with what is happening around Heathrow and Gatwick. TfL shares a responsibility to deal with the reality rather than deal with the visionary thinking of the future. What is your proposal for the reality of the situation as it is on the ground now and why is it not in the document, please?

Michèle Dix (Managing Director of Planning, Transport for London): It is in the document in the sense of improvements associated with access to Heathrow such as western access, southern access, the

improvements on the Piccadilly line and the connections from Crossrail 1 to Heathrow. They are all in there. We recognise also, though, if Heathrow does expand in the way that has been described, there will be some significant improvements required by the Highways Agency and others on the motorway network.

Caroline Pidgeon MBE AM (Chair): OK. That might be something we can pick up in our response.

Welcome, Dr Marshall. Thank you very much. I know you have had a bit of a transport nightmare coming here this morning, but you are very welcome. We are just moving into a section that I know we will have questions for you on, which is about funding the Mayor's Infrastructure Plan.

Tom Copley AM: Between 2021 and 2025, capital expenditure is going to need to double to £15 billion annually. How likely is it that this will be achieved, given it is only seven years away?

Michèle Dix (Managing Director of Planning, Transport for London): It is a big challenge in terms of how we fund schemes. As I said earlier, Crossrail 2 is one of our top schemes that we want to progress between now and 2030. There was the work that London First did in terms of how it can be funded and we are doing our own work in terms of how it can be funded.

It is likely to need additional funding. We cannot rely on Government grant because that is not going to be a sensible proposition, but it will require additional sources to be considered; as will any other schemes we are contemplating at present such as the Bakerloo line. What we are saying is that we cannot rely solely on Government grants or just on fares to help pay for these schemes. We have to look at ways in which other beneficiaries from these schemes can contribute, whether it is through business rate supplements, through the increased value associated with land and therefore developers and/or businesses or through some of the other ideas that are put forward in the Infrastructure Plan in terms of devolved taxes.

Tom Copley AM: Is TfL's view very much now that you are looking, therefore, increasingly at other ways of raising funds? Also, how likely do you think it is that we are going to get devolution and more taxes - property taxes, for example, or even maybe income taxes - given the debate that is going on at the moment about devolution within England?

Also, if we get devolution of these taxes, there then come all sorts of extra political wranglings within London. Will the pressure be for a Mayor to decrease taxes? Will the pressure be for a Mayor to make the case to increase taxes to spend funding on infrastructure? It would be a bit, I suppose, like the fares arguments we have about whether or not you raise and cut fares. What do you think the challenges are there and how likely do you think it is we are going to get these powers?

Michèle Dix (Managing Director of Planning, Transport for London): The challenges are real. They are here and now. I talked about the Bakerloo line extension work. We are starting now, but in order to help pay for it we need to understand what development contributions can be made to help cover the costs of that scheme. We are talking about a £3 billion scheme. Therefore, we need contributions because we do not have the money in our business plan now to pay for that and we are not going to get the money from the Government to pay for that.

We have to identify these new ways. We have to look at the Northern Line Extension model and see whether we can apply that to other parts of London. In the case of the Northern Line Extension, it is the actual business rates that come from the development that have been allowed for by the Northern Line Extension and the contributions made by the Community Infrastructure Levy (CIL) and section 106, which will cover the costs

of the Northern Line Extension. For all the schemes in London, we need to look for those sorts of things and more. If we are going to fund the sorts of schemes we have identified here, it is the “and more” that we have to make a case for.

London and the other cities - Manchester, Sheffield, Leeds - are all asking for an element of devolution so that we have more confidence in having a steady stream of income with which we can pay for schemes. That in turn gives suppliers a more uniform set of projects on which to bid. Therefore, their costs can be brought down and made more uniform because they know the supply is going to be even. That will help us in terms of delivering the proposals.

Tom Copley AM: Is this something that TfL welcomes, the fact that actually it is better for London to be able to raise this money itself rather than having to go to the Treasury every time it needs funding for things, or is there a danger that London will end up losing out to other parts of the country if the central Government grant is cut back?

Michèle Dix (Managing Director of Planning, Transport for London): What TfL wants and what lots of people and businesses want is certainty in terms of investment. We want a long-term investment plan. Paris has a long-term investment plan to 2030. We have bits. We know what is happening over the next five years. We would like to know what our investments are over the next 20 years or 30 years. Anything that is going to give us more certainty about that investment and, as I said, the knock-on effect in terms of our suppliers is really, really important.

Tom Copley AM: What about extra borrowing powers for TfL?

Michèle Dix (Managing Director of Planning, Transport for London): We are limited in terms of our borrowing. In terms of how we did the Northern line, we did not borrow the money; the GLA borrowed the money. If there are extra borrowing powers, then obviously we need to ensure that we have the means by which we can pay back those monies and, therefore, the funds and the funding stream is always going to be the most important thing. What are the funding streams available to us?

Tom Copley AM: I know TfL is increasingly looking at how it can use its land assets and other assets in order to create value from development. What scope is there or what leverage is there to generate significant amounts of money for infrastructure from things like development?

Michèle Dix (Managing Director of Planning, Transport for London): Certainly within our current business plan, there is an assumption about the additional revenue that we can bring into the business plan from our commercial development. In the future, when we look at things such as Crossrail 2 where we are creating stations and enhancing stations, improved connectivity with higher frequency of trains, then it is looking to see what more we can do with the land around those developments --

Tom Copley AM: Capturing uplift in land value and things like that?

Michèle Dix (Managing Director of Planning, Transport for London): -- that either we own or other public sector bodies own or National Rail owns to make more of those opportunities. When you look to see what some transport authorities or transport businesses do in other countries like [Hong Kong's] Mass Transit Railway and the East Japan Railway, they do create more wealth from their developments than certainly we in the UK do.

Tom Copley AM: Can I bring Ian in on any of these points? Do you have anything to add on any of these?

Ian Brown CBE (international transport consultant): It is a serious question. I have felt like a *The Big Issue* salesman going around Docklands trying to get small contributions from developers and it is usually a small proportion. Even with Crossrail, the developer contribution was small, unless it is very specific such as the Northern line to Battersea.

What we have learned from the Crossrail business case, as it is a big scheme, was to try to come at it from the other way around. What are the benefits of Crossrail? What are the economic benefits? Quantify those benefits and who gets those benefits and then design a scheme to fund Crossrail to bring those benefits into the capital scheme. I feel as though our transport plan should be basically around who gets the benefits from a defined plan, which we will perhaps come back to. I would do it the other way around.

However, I do feel that just going around trying to raise development benefits is very localised. The target is £400 million for the whole of Crossrail against £15.7 billion for the whole scheme, therefore we need to think about a base plan for how to fund it, and then the little extras like stations and things for developments go on top with very specific funding. If they put the money up, great; if they do not, they do not get the infrastructure.

Tom Copley AM: It is about making sure that TfL can capture the benefits of these things.

Ian Brown CBE (international transport consultant): Crossrail would not have happened, absolutely, unless those agglomeration benefits were recognised because it was not a transport scheme; it was an economic scheme permitted by good transport.

Tom Copley AM: Excellent. Stephen, do you have anything to add on this?

Dr Stephen Marshall (Reader in Urban Morphology and Planning, Bartlett School of Planning, University College London): I do not think so at this stage.

Caroline Pidgeon MBE AM (Chair): Let us move on to some of the transport projects that are in the Mayor's Infrastructure Plan.

Steve O'Connell AM: Thank you very much. I will pursue that by asking colleagues what they would like to have seen in the Infrastructure Plan that is not in there. I will open that up because that is always an interesting one.

I will start with Michèle, if I may. We have spoken at length about the financial challenges, the limited envelope and how monies may be raised for future projects. What I do not see in the Plan is prioritisation. The Plan is led by three main principles. We have heard about the economy and the increasing population, etc, but have you any thoughts around - within a limited budget - what sort of prioritisation TfL and the Mayor would be inclined towards in an ideal world?

Michèle Dix (Managing Director of Planning, Transport for London): In terms of prioritisation, we have schemes prioritised already within our own business plan.

To just remind people why we have produced the Infrastructure Plan, we have produced the Infrastructure Plan so that we have a clear idea of what is needed by 2050 in terms of the scope of infrastructure requirements and, importantly, what the cost of that will be. We can then make judgements and decisions about how we are going to fund it and therefore what new funding powers and/or regulatory powers are required to deliver on it.

That was the aspiration. That will then inform a series of subsequent plans and revisions to the plans that we have already in order to get there.

Within our own business plan, we do have priorities already. Certainly the Tube upgrade is still a priority, making the most of our systems, our New Tube for London, and we have far more better, frequent services on our Tube with improved trains and improved air-cooling systems, etc. Making the most of what we have is important and making more of what others have. As I said, with the National Rail network, we have aspirations for greater devolution. We have the West Anglian suburban lines. We want to demonstrate to people - just as Ian [Brown] has demonstrated with the Overground to date - how we can transform those services. There is an aspiration to do more of that because it is relatively lower cost than some of the investments in big, new pieces of infrastructure.

Crossrail 2 is really, really important and is prioritised in trying to take it forward. As I said, central London will get more congested again, even after all the improvements we are finishing off now are in place. Importantly, because we are talking about the growth of the city, we want to connect up areas that have the potential to grow - particularly the Upper Lee Valley - and getting Crossrail 2 in there. Also, there are big problems on the South West Main Line with trains coming into London. Crossrail 2 in the south west will provide a big solution to that.

River crossings is another package of measures which are being prioritised, particularly Silvertown, which we will start a consultation on tomorrow in terms of how we can relieve the problems at Blackwall and also help support growth in that area. There are a whole host of priorities, as Andrew [Gilligan] was talking about, in terms of what we can do to our road network by making it safer, improving it and making it better for cyclists, pedestrians, buses, etc.

Steve O'Connell AM: I understand it is quite a broad statement, although there are some gaps and I will get on to one or two of them, predictably enough, in a minute. Would it be fair to say that much of the prioritisation would be led by the numbers and by how much you can raise the money? That is why I come back to - and apologies for this - the airport question. Within your Infrastructure Plan, you talk about a hub airport being built by 2029, with respect, not 2050. In your sums, there is quite a large slug of money predicated on that said hub airport. For those of us who are concerned about much smaller numbers - for example, which I will ask you about, the appearing exclusion of all tram extensions, because it says "tram extensions" in the plural - with no business case for them, that logic would worry us. What do you say about the fact that you seem to be predicating finances around a hub airport to be built in 2029 to the exclusion of - and I am very excited by thoughts of this - perhaps a south London outer metro, which again is something we could think about? How do you tie those different priorities up around the costing?

Michèle Dix (Managing Director of Planning, Transport for London): It is not a case of whether we have the money for them and whether we can do them. It is a case of need and how we can help to get the money for them. If we, say, take the Barking Riverside to Gospel Oak extension, it is because there is a need for housing. There is an opportunity to build 11,000 homes, but they have to have a public transport link to enable those homes to be built. We did not have money in the business plan for that, but it is a need and we have identified a mechanism by which we can take that forward and we have asked the Government to help us take that forward.

In terms of the south London trams, there are a lot of aspirations for Tramlink extensions and there are varying business cases for those. We have no money in the business plan for them, certainly not in the front end of the business plan, though some monies might be available to us at the latter end of the business plan period in 2022. However, we have to ensure that they are good value, that they do what is required in terms of

enhancing those areas and that there is a further contribution that can be made to help fund those from development associated with those trams.

Steve O'Connell AM: I know colleagues will be talking about the Bakerloo line in detail very shortly. What concerns me particularly, speaking as a constituency Member, is that with the aspiration around the Bakerloo line extension, which does not seem to have any numbers around uplift other than those predicated on Bromley being an opportunity area, the business case around that seems suitably vague. We seem to be putting all our eggs in that one particular basket, which is good for that line - Greenwich and New Cross and Bromley - and by that we seem to be disqualifying the tram extensions, which is to be completely regretted. However, we can talk about that another time. I will be taking that up with the Mayor.

Ian, can we talk about Crossrail? I am excited by thinking about orbital because you and I worked together and stood and celebrated the West Croydon Overground a couple of years ago, you will remember.

Ian Brown CBE (international transport consultant): Yes. The thing that worries me about this priority business is that TfL's business plan is quite well defined in the short term because it has a five-year horizon, etc. However, in the long term, it is a bit more of a series of choices and then it runs out at about 2030, yet the Plan says 2050. Twenty-five years ago, I had sold my first Cortina, I think. The world has changed.

What it lacks, which is relevant to your question, is: what is our vision for this city? I have just been to the United States to talk about their visions in New York and Washington, which is going to introduce trams, by the way, next week. Have we actually looked at these choices; a car-free city, for instance, versus a car city? Those sorts of choices will dictate whether you want to put a dual carriageway around the South Circular and river crossings. If you decide on the future of your city, you can start to rank these schemes.

What we do know about is - and it is rightly said - that it is about growth of the economy and physical growth in London and the need to do better on the environment. Against that background, rail and schemes like Crossrail and links to the airport are critical, of course. Crossrail has come as 10% bite-size chunks of the capacity of London and they can be justified if they are justified against these economic benefits and transport is integrated into them. I do feel that a second Crossrail linked into the National Rail network - the version that TfL is going for from the south west to the north east - is a critical building block.

Steve O'Connell AM: I agree. Crossrail 2 has great advantages for the south west of London going up to the north east.

Ian Brown CBE (international transport consultant): Yes. If you think about that with Thameslink - and I do feel as though we have to think about Thameslink a lot more intelligently, perhaps, if we get to that - and Crossrail 2 and this and then an orbital - and I have the old orbital diagram for the last ten years - and if you think then about that as a city which is totally public transport available, you can put your feeder services into that equation such as extensions to trams. There is a hierarchy in your vision: what you want to do and then the bits that make it work?

Steve O'Connell AM: That makes an awful lot of sense because you touched upon earlier the significant numbers of orbital journeys by car, which are very hard to measure even with TfL's systems. That is a sort of hidden constituency. Many people who might get up in Bromley and want to drive across to Wimbledon or wherever might go by tram for part of it, but many do travel by car. That is why we need to address that.

Ian Brown CBE (international transport consultant): Absolutely.

Steve O'Connell AM: Many of our constituents do struggle with the capacity issue going into town on the train and we need to think about that and hopefully the Mayor, through devolution, will get a handle on that.

Ian Brown CBE (international transport consultant): Yes. I am very keen to see some more orbital tram extensions, but I think the Mayor preferred a heavy rail solution. It is quite expensive - and we know the geography - to build heavy rail, especially around the south of London.

Steve O'Connell AM: Again, as I touched upon earlier, from a user or consumer point of view and from your members, is there anything that leaps out that is actually not in there that you regret, Alastair?

Alastair Willis (Commercial Manager, Abellio London): From an operator's perspective, and certainly from our perspective focusing on the bus side, around ensuring infrastructure to deliver the increase, there is a lot of focus around rail. There is an implication that the likes of buses will be required. However, from an operator's side, clearly, you need to allow to provide for that to operate those services. The wider infrastructure can support that.

For example, for electric vehicles, there is a focus around the sustainable nature but there is a much wider focus than just having areas to operate those vehicles from and how you provide for that as part of the wider strategy. You need more supply to deliver that.

There is also an interesting one around what passengers want. You touched on people doing the last mile. If you do want to go into Wimbledon because that is where you have the higher focus, how do you provide that to ensure you can provide a throughput or whole-journey experience that meets people's needs and hopefully brings them away from their cars so that you can prioritise the road space if you are looking at buses for that area.

For my approach, looking at it from the bus side, there is a lot of focus around rail and potentially some of the light rail side. It is just how it all joins together to provide that seamless transport option for passengers.

Steve O'Connell AM: You are absolutely right. We talk about getting people out of their cars. We all aspire to that. Again, going back, the tram is that model. It gets people out of their cars. It goes orbital. People enjoy it. It is cost-efficient to deliver on the sums, comparatively speaking.

Joanne Dodds (Technical Director, Intelligent Transport Systems): From my perspective, there is not as much focus as I would like on technology. We have talked about sharing other systems like the heavy rail and things like that, but really we are living in an age now when we all have devices. I walked here from the City today using my phone to guide me where to get to, for example. I did see a lot of other people doing that. It uses satellite navigation (satnav) whether you are on your bike or in a vehicle.

It includes freight as well. For example, I know that there are a lot of freight journeys when someone comes in in their truck to deliver a load and finds the loading bay is busy. They go around the block and then they come back again. We can manage those kinds of things to reduce the journeys much better through technology and particularly, therefore, more co-operative information technology systems across all modes.

It could also be used to encourage modal shift as well because you could say, "Did you know this journey would have been so much quicker if you had walked or if you had gone on the bus?", for example.

Steve O'Connell AM: Ian, any shortfalls there?

Dr Stephen Marshall (Reader in Urban Morphology and Planning, Bartlett School of Planning, University College London): Thanks. I am not representing any particular constituency here --

Steve O'Connell AM: No, I know that.

Dr Stephen Marshall (Reader in Urban Morphology and Planning, Bartlett School of Planning, University College London): -- but just looking over the various issues here, Ian's point was very important, the point about the vision and where you are starting from. A document that looks as far forward as 2050 is a major opportunity to start thinking about these changes. The document is very useful in acknowledging, in a sense, the unpredictability of the future. We do not know what it is going to be like. If we consider back to what the world looked like in the 1970s and 1980s or thereabouts and how we could have predicted the rise in various forms of travel; who could have predicted pedicabs, taxis and gondolas over the Royal Docks, for example, in the city of 2014?

However, in terms of the question about the things that one might like to see brought out, one of the areas that I am involved with is more on the planning and design side. It is very important. The discussion of spatial location and density is mentioned at various points and it would be interesting to see different kinds of density because density, as we know, is a controversial topic that can be measured in different ways. For example, are we talking about accentuating transport hubs? Should there be a Shard at every London terminus, every Tube station and so on? Should the increase in density be spread more at a mid-level across more of central London and so on? There are various issues that are really important to do with location and density that help dictate, as the report suggests, how transport would serve it and how we can help to shape that.

Personally, I would be interested to see more detail on how provision for walking and other forms of human-propelled transport could be made. I could not find it exactly here, but there is a reference to needing a step-change in provision and so on. It may be possible to imagine what a step-change would be like, for example, on the airports front, like a new hub airport, but what would a step-change be in terms of pedestrian provision? Would we be talking about large-scale pedestrianisation or rolling out further priority routes for walking or even walkways in the City of London if we are going to have increased density?

There are a whole lot of possible solutions. Although all of these cost money, there is a balance between how much those would cost and the cost of a road closure to get it in proportion and perspective, especially given - I would just add - the importance of the health benefits of walking modes of travel. I do not know if we will be coming on to that later, but I would just like to flag that up as an issue because, of course, it is an issue to do with health and other budgets and so on.

Steve O'Connell AM: Yes, indeed. OK. That was very helpful.

Victoria Borwick AM: Just a very quick one. TfL - and I do not normally defend it, as Michèle [Dix] will know from our years together - has an excellent report and actually has members of the health team from here co-located. Actually, there are two reports almost covering entirely what you have just talked about. They both have stuff about Legible London and about making it clear to people how much quicker it is. I do not want to waste time in this particular meeting, but if you are interested there are two reports that are actually already embedded in TfL's plans on increasing walking in London.

Caroline Pidgeon MBE AM (Chair): Some of that should be in this Infrastructure Plan.

Victoria Borwick AM: The point is that it is what you put in. These are much quicker. Michèle [Dix] can answer on those, but those are much quicker than 2050. The point is that

walking is over the next five years, as opposed to this, which is much longer.

Dr Stephen Marshall (Reader in Urban Morphology and Planning, Bartlett School of Planning, University College London): If I may just come back, for example, this is great stuff but in a sense the question is about prioritisation.

Victoria Borwick AM: The point is that this is longer term and walking has a much shorter-term delivery timeline. The difference is you can write a book that covers everything for one year, two years or three years, but actually this infrastructure is a longer-term objective and that is what we are talking about because, actually, that is the future. The points you have just made and the things you suggested are much shorter-term delivery. Sorry, Michèle [Dix]. You must speak.

Caroline Pidgeon MBE AM (Chair): I think Stephen [Marshall] was making a different point to you, in fact, Victoria. We have Stephen's point that in the infrastructure long term we might want to look at that.

Dr Stephen Marshall (Reader in Urban Morphology and Planning, Bartlett School of Planning, University College London): Thank you. Yes, that was it.¹

Caroline Pidgeon MBE AM (Chair): Richard, did you have anything you wanted to pick up on this?

Richard Tracey AM: Yes, I did. On the one point, there has been quite a lot of criticism of the 'R25' project, as it seems to have been named, that it is over-ambitious, over-costly and so on. There have been some suggestions I have read that perhaps you could achieve much of it by extending the Overground. Ian, you are the great expert on the Overground, as we know, the 'father of the Overground'. What do you feel about that? Do you see some potential for extension of the Overground to achieve the same things as this metro R25?

Ian Brown CBE (international transport consultant): It depends on the vision of the R25 and if it is a pure R25. It is quite hard to find a railway alignment that has value for money. If you think about it as a doughnut - ie the inner Overground we have now - and then think of a wider range taking in places like Croydon, Bromley and Wimbledon in the north and put in a whole series of linkages - like extending the Docklands Light Railway to a key point, say, at Catford or talking about the Croydon Tramlink doing more to other centres there - and if you go for that sort of vision, I can see a way of doing it.

The harder one is to say we should just have an M25, which is built in a greenfield area, of course, and is much further out. It should be within two or three miles, possibly five, of the Overground system so that journeys can be made around that and around the Overground and between. It will address that issue about whether every journey can be done by public transport as a choice, other than from central London. Yes, it can be done, but it does need the Overground in terms of expansion. We need to think about the Southeastern trains, the Thameslink inners, South Central and South West [routes] under our control or under TfL's control to be planned to do that, which is a different focus.

¹ Following the meeting, Dr Marshall gave the following clarification: "this point indeed relates to long term infrastructure provision. For example, if we are to have a 'large scale pedestrianisation', or 'walkways' (ie elevated walkways as in the City of London), or a step-change in 'provision for walking and other forms of human-propelled transport' (ie priority routes or dedicated infrastructure for anything from wheelchairs and pedicabs to roller-blades, etc), then this would be a long-term infrastructure project needing to start now. Prioritisation of such schemes could derive not only from their transport benefits (ie justification via transport budgets), but health benefits (ie justification via health budgets), etc."

Richard Tracey AM: Yes. That is another objective we have, as you well know. Michèle, do you see the arguments for actually extending the Overground and linking with the Overground in the way Ian [Brown] speaks of, rather than setting out and building some completely new R25 railway?

Michèle Dix (Managing Director of Planning, Transport for London): Yes, exactly, and that is what is in the 2050 Plan. In terms of a brand new railway, we have not drawn conclusions by not testing these things. We have tested some of the new R25. We have tested it in different forms and we have tested it by making different assumptions about the densification of town centres and putting more jobs in those locations.

Even though there are lots of car trips in outer London, they are not going to the same place. They are not going necessarily into town centres that are forming hubs. They are going across town centres. They are going all over the place. There is still always going to be a role for car travel when it does not make sense [to use public transport]. If someone is going from A to B and if you put a bus in there or a public transport network in there, there is only one person going from A to B.

Valerie Shawcross CBE AM (Deputy Chair): Cycling provision?

Michèle Dix (Managing Director of Planning, Transport for London): You let them go from A to B by car, but you want them to go in a very clean, cost-efficient car.

However, in terms of looking at outer London, as I say, we have tested grand schemes and we could not justify them, even if we densified the town centres greatly. We have also tested the sort of scheme that Ian [Brown] has talked about, which is referred to in the 2050 Plan and which is almost making use of bits of infrastructure that we have there already and joining some of the dots. It is not going to give us a whizzy service all the way around, but it is going to enable some people to move from a car to public transport and provide some of the connections that people are talking about.

Richard Tracey AM: We heard from Joanne that she would prefer some sort of connectivity like that. Would that meet the objectives you were looking at for your connectivity? Would it persuade you to travel around?

Joanne Dodds (Technical Director, Intelligent Transport Systems): It would, yes. I have lived in London before. I lived in Harrow and worked in Epsom and I used to go out to the M25 and around and then back in, as well as my journeys now that I do. This is why I was thinking it would be of benefit to people who live in London and externally as well to improve that connectivity.

One of the things, though, that is missing in the extra sense to make things more efficient is that information flow to people. We are talking about grand civil engineering-type investments here, but of course we need to enable people to make those choices and to use these systems better. We live in an information age and we need to have that connectivity to help people. For example, today I went wrong because the satnav signal to my phone was bouncing off all the buildings. It is a big problem that you have in London if you want to have mobile information to people. We need that to be addressed to do the last bit of the journey either side. It is not necessarily a transport issue, but I believe the Transport Committee should be supporting a communications committee or something to actually improve that information availability.

Steve O'Connell AM: Chair, can I make just one last comment? The tension here is practicality against vision. In other words, Ian [Brown] is quite rightly talking about the vision of transport fifty years hence and having a plan that is dictated by that. Thereby, you are going to get big schemes that may be critical and a potential route all the way around, which may or may not happen, against practicality, which is the joining-up-the-dots piece that people can touch and feel and understand and it will cost an amount within a limited

budget. The tension that you have and the pressure the Mayor has in delivering the Plan is how he balances the visionary piece - and you could cite the airport debate around that as well - against the practicality piece - and again, I could cite the example of Gatwick, which is more practical - within a limited budget. What do you deliver?

The Overground is a good example. The Overground joining the dotted lines with the tram would give that orbital vision and link, compared with building a whole new route. Actually, the man on the Wimbledon omnibus would say, "That is never going to happen. Why do we not do something practical?" It is practicality against the vision. Thank you, Chair.

Richard Tracey AM: The other thing I wanted to ask about is Crossrail 2 because we are all pursuing this objective of Crossrail 2 as hard as we can. I wonder if you can tell me, Michèle, how much further are you in specifically deciding about the tunnel component of Crossrail 2, particularly the entrance at the south end of the tunnel which concerns a good many of my constituents in Wimbledon? At some point we believed maybe the opening would be south of the Wimbledon main line station and now there is some talk of it possibly being north of the Wimbledon main line station. Can you clarify for me?

Michèle Dix (Managing Director of Planning, Transport for London): Where we are is we have just finished the consultation on the options for the route. Some variants were put on the table that we have investigated. The Mayor will be reporting back in early November in terms of which options we will seek to safeguard and we will be safeguarding a route then. Safeguarding, as you know, means that those areas will then get referred to if anyone wants to try to develop in those areas.

We will then be doing more detailed design in terms of what the stations would look like, where the station entrances would be, where the portals would be, etc. That work will be done in far greater detail over the next year, subject to us safeguarding a route.

Richard Tracey AM: You have not actually decided on the portal yet?

Michèle Dix (Managing Director, Planning, Transport for London): We have got locations for portal but we will --

Richard Tracey AM: I see. Options?

Michèle Dix (Managing Director, Planning, Transport for London): That still will be subject to further consultation on the detail next year. The main purpose of what we have been doing is going from, "Do we need a metro scheme or do we need a regional scheme?" We have concluded a regional scheme is going to give us better value for money and be a better scheme for all sorts of reasons. We need to decide on a route so we can safeguard it because Chelsea to Hackney needs safeguarding. It is a refresh of an old safeguarding which is what we are responding to. We will safeguard the route. We will continue to do much more detailed engineering work whilst we then also build up a case to take to Government to make an ask for as much money as we can get to develop the scheme. That ask will also include how we see funding the scheme going over and above Government grant.

Richard Tracey AM: When do you think we might have a bit more certainty on such things as the portal?

Michèle Dix (Managing Director, Planning, Transport for London): Next summer.

Richard Tracey AM: Next summer. There are, of course, many people, businesses especially, and the massive centre court in Wimbledon, that are very concerned about that. I do not want to bring it down to --

Caroline Pidgeon MBE (Chair): Let us not go into that detail now. We have got an assurance and we will pick that up next year.

Richard Tracey AM: Next summer. Thank you very much.

Caroline Pidgeon MBE (Chair): Let us move onto a specific project which consultation is out on at the moment, the proposed extension of the Bakerloo line south which brings a smile to many of our faces.

Darren Johnson AM: There is certainly a lot of interest in the expansion of the Bakerloo line. Michèle, could you just outline what you see as the main benefits, and the business case for extending it?

Michèle Dix (Managing Director, Planning, Transport for London): The Bakerloo line extension is a scheme that we have been looking at, alongside other schemes, to improve connectivity into south-east London. If you look at the Mayor's transport strategy not only does it identify Crossrail 2 as a scheme that is needed for the future, it identifies the need to better connect the south-east into central London. We have been looking at Docklands Light Railway (DLR) extensions, further improvements to the Overground, and the Bakerloo line extension in different forms. What we have concluded in terms of that improved connectivity, that the Bakerloo line extension would offer us more benefits; not only in terms of assisting in that connectivity between places such as Bromley, but also in helping, particularly in the context of the 2050 Plan, to open up areas for further growth. We know we have got to find more locations for houses and for development. If we are able to extend the Bakerloo line so we can serve more areas, open up those areas, then that will be advantageous.

As you know, we are consulting on the route with a number of options. At this stage we want to understand people's response to the principles of extending the Bakerloo line and the different options that are on the table.

Darren Johnson AM: Firstly just to look at the funding option. You are not expecting, or indeed even asking, for funding from central Government for this. Are you looking solely, however, at getting the money from redevelopment along the route, or are you looking at options to capture the inevitable uplift in land values that would happen along the route?

Michèle Dix (Managing Director, Planning, Transport for London): We have not got funding for the Bakerloo line extension within our business plan. We have got monies to do the development work that we are doing. We have not got funding to implement it. If we are to implement it by 2030 we need to find new ways of funding it. That does not mean we will not ask Government, it is whether or not Government says yes or no.

Picking up on Ian [Brown's] point, which I agree with, the extension will actually benefit three groups of people. It will benefit users of the system, fare payers. It will benefit developments along the route, in terms of enhancing their value. It will also, in turn, benefit taxpayers because it should increase the contribution to GDP within the UK. Therefore you would expect the sources of funding to come from those three sources, not necessarily in equal chunks. What we have not been very good at in the past, and we certainly need to get better at, is what chunk can we get from development and business in terms of the contributions that they pay, and how we can capture that? We will be looking to see whether or not there are far greater opportunities for extracting value from the developments that can take place along whichever route is --

Darren Johnson AM: Would it all be from new developments, or would there be options for capturing some of the funding from existing properties, business and so on? I remember when I sold my old flat, as a result of the DLR extension being built it virtually more than doubled overnight through nothing I had done. The public sector had paid for the DLR and I got a huge boost in my bank account. Is there not an obvious case for actually capturing some of that unearned windfall that people accrue from new transport developments?

Michèle Dix (Managing Director, Planning, Transport for London): Not specific to the Bakerloo line extension discussion, but certainly to the discussion generally in terms of how we can fund these schemes. How that is captured is one of the things that people are talking about. In the London First work, which was about Crossrail 2 but equally could apply to other schemes, the proposal was whether or not there is a means of capturing that through stamp duty. If the value of someone's house has gone up, then stamp duty goes up. How can you ring-fence that to help pay for some of the schemes which have helped the price of property go up and hence the stamp duty go up? We do need to look at those things.

Darren Johnson AM: I think that case absolutely needs to be put. Given the timescale of the Bakerloo line, I would not have thought this was too soon to be starting to get that on the agenda rather than simply looking at the redevelopment options as the only source of funding.

Michèle Dix (Managing Director, Planning, Transport for London): All sources, yes.

Darren Johnson AM: I would urge that you begin making the case for capturing some of the windfall increase through stamp duty. I think that has got to be something that is looked at.

If we can move on now to the different route options, I have long been a supporter of extending the Bakerloo line, indeed a number of years ago I chaired a transport scrutiny for Lewisham Council and extending the Bakerloo was one of the key recommendations there. Could you just go through some of the pros and cons of the different options, just to help us at this stage?

Michèle Dix (Managing Director, Planning, Transport for London): We have not set out the pros and cons of the different options within the leaflet. We are seeking people's responses to those. We put the proposal on the table, as I said, to improve connectivity between the south-east and central London so that we can open up those areas. The different route options serve different areas. In the case of the Old Kent Road route it would allow more opportunities for serving that opportunity area that has been identified there. If it goes the other way then it is serving existing areas which want improved connectivity. We put the consultation out there for people to respond to on the basis of their own concerns.

Darren Johnson AM: Thank you. I have had concerns expressed to me about the impact on the existing route should the extension go ahead beyond Lewisham. Have you thought through some of the implications of that at this stage?

Michèle Dix (Managing Director, Planning, Transport for London): Yes, we have done work in terms of looking at the impact, particularly on the National Rail services on the Hayes Line. How that will be affected? Six trains an hour that currently run on that route would be replaced by Bakerloo line trains which would be up to 15 trains per hour, and more depending on the route options that are provided. Overall, there will be improvements for journey times for people getting into central London. There will be a group of users going into Cannon Street who will be required to make a change that they do not make at present, but we have been working closely with the boroughs in terms of sharing figures about how those journey times will be affected. Overall it is an improvement.

Darren Johnson AM: Thank you. Finally, on timescale, can you just say something about the likelihood of completing the Bakerloo line extension by the early 2030s?

Michèle Dix (Managing Director, Planning, Transport for London): Totally dependent on being able to fund, or find funding mechanisms, to pay for it. It is not in our business plan. We also want to do the Bakerloo line upgrade first so all the improvements associated with the upgrade, signalling etc, can be just rolled out straight onto the extension. We are talking about a scheme that, subject to those things, we would have done by the early 2030s.

Darren Johnson AM: Thank you. Do any of the other guests today want to comment on the Bakerloo line plans?

Ian Brown CBE (international transport consultant): Yes. The Bakerloo line has always had an inferiority complex and needs somewhere to go; it is an obvious thing. Elephant & Castle is a big development area and certainly it needs to serve that properly. There is also a Thameslink route through Elephant & Castle and it needs to integrate with that properly. Whether replacing the Hayes Line, with its ten car capacity and National Rail, with a Bakerloo line train is the right answer I doubt actually. The bit that we have not mentioned though is Thameslink.

Darren Johnson AM: Sorry, just on the Hayes Line issue, the issue for you would be capacity? Even though frequency would improve you would be concerned about the loss of capacity?

Ian Brown CBE (international transport consultant): No. I think that needs to be looked at, there is an issue of capacity along that corridor which is rightly identified. The scheme we are not talking about in that context is Thameslink. Thameslink has got a scheme at St John's for Lewisham, for instance, a £55 million grade-separated junction to run onto precisely those routes. The Thameslink specification is a complete dog's breakfast, as everybody around this table knows. If we recognise Thameslink should be a long-distance service, serving Gatwick and Luton etc, as well as a suburban service; and then look at Thameslink along that corridor, in conjunction with these options, you might get the right answer. I do not think just a substitution network rail down to Hayes, but there are other options, is the right answer, and there are cheaper ways of doing it.

Darren Johnson AM: Your big message today is that it needs to be looked at in a wider context, not simply about the Bakerloo line.

Ian Brown CBE (international transport consultant): I think the demand is right. There are solutions to it, including these National Rail solutions and DLR, but I would say that, would I?

Darren Johnson AM: That is very helpful. Thank you.

Valerie Shawcross CBE (Deputy Chair): Thank you very much. Yes, there is quite a lot of excitement south of the river about the Bakerloo line extension. To continue that conversation really, I think we all accept and we understand now that for high-capacity schemes, the way they are funded now and in the future, is going to be because there is 'developable' land along the route. However, in looking at the logic of the routes that have been suggested, if it is, for example, the case that the Old Kent Road alignment is much more fundable from development sources, it still leaves places like Camberwell and places in that area left hanging.

I would like to know if TfL are going to look at what could be done for the unsuccessful competitors along those routes. Even if there is not development land, in Camberwell for example, there is nonetheless a growing

population and a growing need for high-capacity transport. Would you be looking, for example, at things like complementary projects such as reopening the old station at Camberwell on the line between Elephant & Castle and Loughborough Junction? Or is there just going to be winners and losers from this consultation? Are you going to look at what else could be done?

Michèle Dix (Managing Director, Planning, Transport for London): I think in the context of 2050 what we are seeking to do is enhance public transport across the piece, whether it is specifically in this corridor or elsewhere. We are aware that improvements are required all over the place. One of the things that we keep on saying that we want to do though is make greater use of the National Rail network, because we feel particularly on some of the lines it is an under-utilised bit of network. As we were talking earlier, whether or not you can join the dots to make more use of that network, whether it involves opening new stations or not, it is something which was very much in the MTS. It is something that is still very much in the 2050 Plan. How do we use a bit of infrastructure that is there already to better serve some of those areas? If we are able to demonstrate that with the West Anglia lines that we have got, increased frequencies, cleaning things up, staffing, etc, etc, would make a big difference then hopefully we can get access to more of those lines.

Valerie Shawcross CBE (Deputy Chair): May I just quickly ask you a question about how the consultation will work? Clearly there is enthusiasm in some areas, Southwark and Lewisham. The noises I am hearing from Bromley are much more mixed. Bromley Council has always had a focus on the existing town centre really, although it has not been a borough that has gone for much development to be frank. It has not seen itself as a regeneration zone. If Bromley, for example, just walked away and said, "No, we do not want to play with this; this is not our aspiration" would that completely destroy the business case for the routing options for the rest of the service going through Lewisham and Southwark?

Michèle Dix (Managing Director, Planning, Transport for London): We are talking about [implementing] a plan [for the BLE] that is for 2030. However, we are talking about an Infrastructure Plan for 2050. We are also talking about needing to find ways in which more housing can be located in London. I think one of the gentlemen over there referred to densification and the fact that we cannot just ---

Valerie Shawcross CBE (Deputy Chair): That is what I am saying to you.

Michèle Dix (Managing Director, Planning, Transport for London): Yes.

Valerie Shawcross CBE (Deputy Chair): Bromley does not see itself as a borough that is intensifying. What happens to the upstream?

Michèle Dix (Managing Director, Planning, Transport for London): No, but if London is to grow and accommodate the people that are being born now, and those of us that will live longer and still be here, then we have got to look to some of our town centres in accommodating some of that growth. If the Bakerloo line extension will help accommodate some of that growth that is a policy decision to be discussed.

Valerie Shawcross CBE (Deputy Chair): Does it fall over if Bromley do not support the scheme?

Michèle Dix (Managing Director, Planning, Transport for London): We have to look at what is needed for London.

Valerie Shawcross CBE (Deputy Chair): All right, you are not going to answer.

Michèle Dix (Managing Director, Planning, Transport for London): There are two things: the densification of town centres, and how they might contribute towards helping pay for the scheme in the first place.

Valerie Shawcross CBE (Deputy Chair): Thank you.

Caroline Pidgeon MBE (Chair): That is great. Thank you very much. Let us move to something Joanne [Dodds] was touching on a bit earlier about transport innovations in the Plan and use of technology.

Dr Onkar Sahota AM: I just want to look at the impact of transport innovation on London's transport systems. Do you have any ideas about this? I am talking particularly of things like driverless cars, impact of the solar pavements, or other technologies which I am not even aware of and you can tell us about.

Joanne Dodds (Technical Director, Intelligent Transport Systems): Driverless cars, yes, fantastic. We have all seen the Google car driving around and things like that. The trouble is it is in a very surreal environment that does not really fit if you look at the environment of London, or probably most city centres, most places in the world actually. However, the important thing to recognise, I think, really is actually we are on a journey to get there eventually. Eventually we will be going around in *Minority Report* type things but there is a long way to go. There is always that transition where you have got the old cars. We have still got classic cars on the road, and how do you put the technology in them? How do you get that integration with all of the other modes of transport, and all the random people, dogs and things like that, that run out into your road? How do you actually get that working; not just for the road area itself but equally to get people to use the public transport more effectively, or sustainable transport? I see these things all being as one.

The key thing for me here, and I would like to draw an analogy to your house, everyone's home. These days if you were building a new home you would not dream to not put plugs or sockets in, would you, and not have electricity all around the house in different places. You do not know when you put that in what gadgets you are going to have in five or ten years' time. I only got a tablet a couple of years ago and I put my wiring in a long time ago. To me this is where there is the idea of having an equivalent of an electricity circuit, or communications platform, is really important. We do not necessarily know what is going to come up in the future, but we know that we are going to need to communicate with it. We know we need to have accuracy in terms of where we are, so that we make sure when we are on our transport journeys we take the right turnings in places. We need to encourage third-party individuals to actually develop the systems for the end-users.

The key thing, I think, for transport operators, like TfL, is to actually provide that information about the transport and still to manage the transport as effectively as they can. A conversation with TomTom [satnav manufacturers], for example, they said, "You don't need sensors; we have got all of the sensor information". Then they could not answer when I said, "What if the police close a road because there is an accident? All your TomTom sensors are going to say that road is clear and free for everyone to use, and actually be directing people towards the closed road". That is the kind of thing to actually help. Not necessarily having a vision about specific things, but providing that platform that will allow of these innovations to come forward in the future.

Dr Onkar Sahota AM: I am told that the Government is offering £10 million to three cities in England to test out driverless cars. Is TfL minded to apply for this grant to have driverless cars in London?

Michèle Dix (Managing Director, Planning, Transport for London): We are not bidding for that pilot. We recognise that technology can help in London. I think many of the points that Joanne [Dodds] has made about certainly improving real-time data to passengers, whatever mode they are in, is really important. I think

TfL are at the forefront in rolling that data out. We have opened our data to all sorts of different app developers who have developed some amazing apps for all people to use. We are doing much more on our public transport than any other provider. We are doing more on our road networks to make sure they are better managed to the full. Going back to my point about making the most of the systems that we have got, it is fundamental in our plans. We do recognise that come 2050 the world may be a different place and all the autonomous vehicles that are spoken about - and some people say these are going to be on the roads in five years' time and others will say 20 years' time - we have to develop our plans acknowledging that. I agree with Joanne's point about making sure that we can adapt to them as necessary.

Even with all those new technologies being envisaged, that does not take away the need for additional infrastructure which is what this Plan is about. Whether it is infrastructure for broadband, or infrastructure for more electricity or whatever, what are the infrastructure needs, and what are the transport infrastructure needs to help support that?

When we have talked about provision for additional road space, and, yes, we are seeking to encourage as many people as possible to use public transport and all our forecasts show less and less people will be using car-based transport and more and more will be walking, cycling and using public transport. There will still be some users on the road. We know currently 80% of all trips in London are made on the road network, be it somebody in a bus, somebody in a taxi, someone on a bike, someone walking, a freight vehicle, someone in a car. Roads will be important because there is not enough road space for all those demands on the surface. Andrew [Gilligan] was talking about how you make London more liveable, certainly for cyclists and pedestrians. The conflicts that exist between road-users at present are such that we do need to provide some additional space. When we are looking at the provision of that new space we are looking at it in two ways. What would you need if it was just for conventional vehicles, as we know them today? Also, what would you need if you were looking at new types of autonomous vehicle that could drive closer together, that in theory could be smaller, that would be electric and, in the case of the tunnels that we are looking at, would not require ventilation shafts or would not require as many?

We are thinking about the future. I think given the scale of problem that we have in central London doing a pilot, perhaps, in central London is not the best starting point. We are very much watching, learning, keeping in contact with all the academics who are working on this, the Department for Transport and European partners, in understanding how it is developing.

Dr Onkar Sahota AM: Do you see things like solar highways and kinetic pathways generating new energy?

Michèle Dix (Managing Director, Planning, Transport for London): We put them in the 2050 Plan because these are things that are in existence. Therefore again, as with the autonomous vehicles, we have to be mindful that these things may come along and not bury our head in the sand and think we can only develop things as we know them.

The most important thing is information. Being able to get that information out in a way that is personalised in many ways, so that when people come to the city they are informed about how best to travel.

The other thing not to forget is, in terms of our innovation, making sure that the systems we have got are comfortable. Cooling the Tube is a really big innovation.

Dr Onkar Sahota AM: Thank you.

Joanne Dodds (Technical Director, Intelligent Transport Systems): The solar pavements point you made, that, to me, is particularly to address how safe and secure people feel to use the transport. I see that as being the primary benefit of that, rather than alleviating congestion. Sorry if Michèle [Dix] and I are skirting around that a bit, but it is a side-benefit, if you like.

Caroline Pidgeon MBE (Chair): Thank you for that. Let us move on to tackling some of the road congestion issues.

Valerie Shawcross CBE (Deputy Chair): Thank you very much. Do you know I have to confess it is one of the projects that is in here and when I looked at it I thought, "Is that really just a bonkers eye-catching project for media management purposes or is there anything substantial behind it?" It is, of course, the new Inner Orbital Tunnel at a cost of £15 to £25 billion that is canvassed in here. Was there a study or any fundamental research that suggested we needed a project for a road tunnel in that way?

Michèle Dix (Managing Director, Planning, Transport for London): Yes, the Roads Task Force. The Roads Task Force looked at all the ambitions to make London more liveable. To provide for additional walking, to provide for additional cycling, to provide for all the additional public transport. Also to provide for all the needs that are out there already, with schemes like Vauxhall, schemes like Elephant and Castle.

Valerie Shawcross CBE (Deputy Chair): Was there a research study done looking at it? Has it been in any way modelled?

Michèle Dix (Managing Director, Planning, Transport for London): In terms of the demands, yes, as part of the Roads Task Force. What that work did was to put all the ambitions that boroughs and others alike, right across London, want for London to be more liveable in terms of the use of the road space and said if you did all those things, and you did nothing else, then you would basically introduce large-scale congestion in central, inner and outer London. Therefore, this is what the Roads Task Force concluded, if you want that ambition to be fulfilled, and people do, then you have to think of a way to manage that congestion. The things that they proposed that we looked at in response to that was providing more space, which is providing more road space, managing the demand in a different way, looking for 24/7 usage of the road network which is looking for a greater use of the road network at night, particularly in the case of goods vehicle deliveries --

Valerie Shawcross CBE (Deputy Chair): Yes, but this particular project --

Michèle Dix (Managing Director, Planning, Transport for London): -- and/or pricing. In terms of looking at the management of the road space and the options. Then we did a piece of work for the Roads Task Force looking at ways in which a provision of new space, in the form of tunnels, could actually help alleviate that congestion. That then informed us to go and do a piece of work.

Valerie Shawcross CBE (Deputy Chair): I am having difficulty understanding how the modelling, which would create a large amount of new road space and obviously need feeder roads and tunnels and construction all over very densely developed areas of London, would reduce congestion when in fact it would invite more traffic into central London. I am having difficulty understanding the concept of how this additional major motorway under the ground, and all the feeder roads it would need to get up to the surface, would reduce traffic. It looks to me like a scheme for bringing more traffic into London.

Michèle Dix (Managing Director, Planning, Transport for London): It is relocated capacity. Certainly lots of schemes have been drawn up over the years for taking Marylebone Road and Euston Road and reducing

the traffic on that so it could become a vastly improved environment. It is the traffic on that, where will it go instead? If you relocated it, it is not additional traffic it is relocated traffic.

Valerie Shawcross CBE (Deputy Chair): Since all the other major infrastructure projects are funded by growth intensification, more houses, more jobs, how does moving the traffic from the surface to underground generate the billions of pounds that it would cost to do this scheme?

Michèle Dix (Managing Director, Planning, Transport for London): Because, in theory, if you can move some traffic from the surface underground then you can create some additional opportunities for more development on the surface. You are not giving all that space over to people to walk, cycle, use public transport. You are opening up that area for new development.

What we have agreed to do is do the feasibility study to understand whether or not, if there was a tunnel under the ground, where the portals would be, how much it would cost.

Valerie Shawcross CBE (Deputy Chair): This project has made it into this vision document without having had a feasible study done?

Michèle Dix (Managing Director, Planning, Transport for London): It has made it into the vision document on the basis of the findings of the Roads Task Force in the sense that if we are going to reduce congestion --

Valerie Shawcross CBE (Deputy Chair): You said that, the Roads Task Force. Michèle, do forgive me. We are short of time, I am really sorry about this. What is your likely timescale for development for this underground wonder?

Michèle Dix (Managing Director, Planning, Transport for London): Coming back with a report on it or actually being able to --

Valerie Shawcross CBE (Deputy Chair): Building it, because it says 2050, this is one of the things you want.

Michèle Dix (Managing Director, Planning, Transport for London): Yes, it is one of the schemes that is on the agenda in terms of delivering more liveability in London. It would be one of the schemes that is post-2030.

Valerie Shawcross CBE (Deputy Chair): Post-2030?

Michèle Dix (Managing Director, Planning, Transport for London): Yes.

Valerie Shawcross CBE (Deputy Chair): OK then. Road pricing is something we have had divisions about in this chamber before. I think everybody accepts congestion charging has been very successful. What do you think about the potential opportunities for using congestion charging tools for other developments to manage things like road bridges and other traffic schemes?

Michèle Dix (Managing Director, Planning, Transport for London): Certainly, and this was in the Roads Task Force, any new Orbital Tunnel that we might look at we would also look to see whether or not you could have a charge on it so that you could help manage the use of that by changing. We have also said that for the tunnels that we are looking at in east London. In terms of provision of new space for river crossings, we have

said that if we were going to provide that space (a) to help pay for them, and (b) to also manage the traffic on them, we would consider charges.

In terms of road pricing more generally, it is referred to in the report as a means, certainly of helping manage traffic, but also as a means for helping raise funding. Particularly with vehicles being more fuel efficient, and fuel duty and vehicle excise duty potentially going down, there is an opportunity to try to capture those whilst the value still exists and turn that into a price per kilometre travelled mechanism as a means of capturing value and managing traffic.

Valerie Shawcross CBE (Deputy Chair): You see it as an investment source?

Michèle Dix (Managing Director, Planning, Transport for London): Both sources. As I say, the Roads Task Force specifically asked that we look at new capacity to help address congestion and/or more radical means of managing demand, including road pricing.

Valerie Shawcross CBE (Deputy Chair): Thank you. I do not know if any of our colleagues want to comment on this?

Caroline Pidgeon MBE (Chair): Yes. Stephen [Marshall], particularly from an academic point of view.

Valerie Shawcross CBE (Deputy Chair): Do you think we could be doing more to make use of congestion charging?

Dr Stephen Marshall (Reader in Urban Morphology & Planning, Bartlett School of Planning, University College of London): I think it comes back partly to what we were saying before about what the objectives are. Also, I think, in terms of the spatial aspect of which areas of London you would be talking about. Are we talking about individual sections of infrastructure like a tolled route? Or are we talking about zones, different zones, outer, inner? Also, I guess, the impact on different users and the distributional aspect. Also what the revenues would be used for, whether it was being ring-fenced for some particular aspect.

If I might also just bring in the issue of parking? I do not know whether it is something you would be wishing to discuss but I wondered if there might be any links to how parking is controlled, and how parking is a management demand tool as well. It might sit alongside some of these other issues, including technologies as well which I was going to bring in, in terms of reducing congestion by reducing the need for circulating traffic looking for parking spaces. Looking at the wider package of how these fit in together.

I think there are a number of issues there but it depends on the priorities really of what the purpose is.

Valerie Shawcross CBE (Deputy Chair): It would be fair to say that any strategy for congestion-type charging ought to follow the Plan in terms of supporting what you are trying to deliver, I think is what you are saying. Yes, thank you.

Caroline Pidgeon MBE (Chair): Thank you.

Darren Johnson AM: Yes, on this very point. There is the issue about using tolls on specific bits of infrastructure tunnels or whatever. There is the wider case as well about a more sophisticated form of road pricing which would replace all tolls, which could replace the congestion charge and have a much more flexible approach on different roads at different times of the day and so on. How much modelling has TfL done on

looking at that sort of more sophisticated road pricing? I know there is still a commitment to it in your Transport Strategy, in spite of the current Mayor's scepticism of it. How much actual work has been done?

Michèle Dix (Managing Director, Planning, Transport for London): TfL did a lot of work on different forms of road pricing about 2006-7 in terms of London wide pricing, different charges, different technologies.

Darren Johnson AM: You have not been allowed to do any more work on since then?

Michèle Dix (Managing Director, Planning, Transport for London): We have acknowledged it in the 2050 Plan and say the work we are doing as part of the Roads Task Force is understanding the role different mechanisms can play in addressing congestion. Also the reason why we want to do this is so that London is more liveable. The ambition is to have a more liveable London, one where you can walk, cycle, use public transport and deliver goods and services in a pleasant environment. If you just take the space that you have at present and allocate it to all those users you cannot expect the rest of the traffic to disappear. It does not disappear unless you make some provision for it. What we are saying is that we are looking at both: the addition of additional supply and other demand management measures.

Darren Johnson AM: The previous studies that you have commissioned on road pricing, are they all published and available?

Michèle Dix (Managing Director, Planning, Transport for London): I think so because it was part of what was in those days called a Transport Innovation Fund (TIF) submission. It was a few years ago.

Darren Johnson AM: Could you check that? I think now this is really starting to come onto the agenda. I think any work that TfL has done in the past on this I think it would be valuable to have that in the public domain, if it is not already. Thank you.

Caroline Pidgeon MBE (Chair): Technology has moved on considerably in that time.

Navin Shah AM: The Mayor has pledged a new fund of £75 million to speed up delivery of step-free stations, I think there are about six of them, with joint match funding from local authorities and developers.

Given this situation, would it be realistic that the Plan looks at a scope for actually speeding up the whole completion of 100% of public transport journeys by making step-free stations by 2050?

Michèle Dix (Managing Director, Planning, Transport for London): There is an ambition, as you know, to improve it. With the investments we make, and the additional investments that Mike Brown [Managing Director, London Underground and Rail, TfL] referred to the other day is to get to 40% of journeys being step-free. We will need to find, as with all these things, more additional funding mechanisms so that we can make more of the journeys step-free. In some instances some of the stations are just going to be too difficult to make everything 100% step-free. Where we can we are doing more.

Navin Shah AM: The vision currently for 2050 goes up to two-thirds. There is a huge argument for making all facilities step-free for obvious reasons like economic growth, which we mentioned before, where we have got opportunity areas and so on; and a larger population, younger as well as an older population who would benefit from step-free access. This is something which I do believe should be a priority when we look at the Infrastructure Plan.

Also what concerns me is that at the moment the whole strategy for step-free access in terms of prioritising seems to be ad hoc. Is there some kind of route map by which you are actually prioritising the whole of the network which then can feed into the Infrastructure Plan or the immediate plan that you have, like the Mayor's current funding?

Michèle Dix (Managing Director, Planning, Transport for London): In terms of step-free access certainly making the bus step-free access, in terms of the buses themselves and the bus stops, that will be 100% step-free so there will be a step-free access. The taxis are totally step-free. You are talking about the Underground?

Navin Shah AM: Yes. Underground and Overground stations.

Michèle Dix (Managing Director, Planning, Transport for London): With the Overground, the DLR, it is easier for us to make those improvements because of the depth or height of stations. The difficulty is with some of the existing Underground stations and the depth of those stations, being able to get people down to the platforms in those environments. We are not committing to 100% for that reason, because it will be very, very difficult to do so.

We produced a report, the Transport Accessibility Plan, which was a plan that followed the Mayor's Transport Strategy which set out the ambition for making the network step-free, and importantly looking at the difference in journey times between origins and destinations. Whether or not you had to make a step-free journey versus not making a step-free journey, our ambition is to narrow the gap between those two sorts of journeys so that it was no greater than 25%. That means making improvements strategically across the network so you can bring that gap right down because that is the important thing.

What we are also concerned about is where you have got locations which not only will help people who might be wheelchair users etc, but also locations where by making step-free access available you are helping the elderly, people with buggies, you are helping people with luggage. We are trying to maximise opportunities for getting as many more people able to make journeys; as well as looking across the piece to reduce this gap between making journeys by step-free modes or step-free uses versus step-free; non-step-free versus step-free.

Ian Brown CBE (international transport consultant): The question is a valid one and there is no excuse for the industry not dealing with it. The reason we are not dealing is twofold. One, innovation. If ever there was an example of where you could put innovation in it is in this area. The Tube is quite difficult, as Michèle said. National Rail is also difficult, but it is covered in rules about application of access, the Access Rules. Basically from a train operator or network rail's point of view it is, "I have got to do all this and it is going to cost £50 million, I cannot do it". If we went for some innovation and partial change to the rules to make partial step-free access and all sorts of things like that, you could change the rules to make it available for a lot of people. The thing is that all the operators are nervous or improving marginally because you have to go all or nothing because of the legislation. An urgent look at legislation so we can make material short-term, value for money improvements would unlock that. I mean that from the heart.

Navin Shah AM: Can there be some form of incremental approach to this?

Ian Brown CBE (international transport consultant): Yes.

Navin Shah AM: Your aim would be to provide fully accessible step-free but in the interim, for whatever reasons, go for a measure which will part of the way provide the solution?

Ian Brown CBE (international transport consultant): Yes. Things like corners, the curvature. If you have got a curved railway you cannot really put some step-free access in. You try to rebuild Clapham Junction on that basis, you cannot do it. You can make one point, such as the Harrington Hump as London Underground did, and just to do one little bit. Where you have got staff stations you can bring those to bear to help people. There is no excuse for this at all.

Navin Shah AM: Dr Marshall, do you want to comment on this?

Dr Stephen Marshall (Reader in Urban Morphology & Planning, Bartlett School of Planning, University College of London): I do not have anything specific on the Tube but I will just bring up the issue of hopefully the agenda for improving street facilities for step-free access and those with wheeled mobility.

Navin Shah AM: One last question, if I may? This very approach to funding whereby you are substantially relying on local authorities, as well as developers, to contribute; looking at the £75 million, for example, funding announced recently. It talks about match funding from these two sources. We know that local authorities are strapped for funds. Developers will only do what suits them. OK, you might get some money from a CIL but then you have got social infrastructure and other priorities local authorities have. This gives me a great cause for concern that even this current programme you have to expedite step-free access may not happen for a much, much longer period. Is this not a fallacy, and you should actually be looking at better and more reliable sources of funding than the current approach you have?

Michèle Dix (Managing Director, Planning, Transport for London): I think we have to look at all sources of funding. If we can make our money help deliver a scheme with a developer because, as I say, it is just not for people in wheelchairs but it is for the elderly and we are all getting older, the age of the population is going to increase, then it will be in developers' interest to ensure that older people, people with buggies etc can access improvements. I think it is working together with those developers in locations where we can make these things happen. There is an opportunity to make them happen, particularly putting lifts in within the development that is taking place in order to provide access to the station. It is not just about the money, it is about the physical opportunities for doing these things as well.

Navin Shah AM: We will leave it there.

Caroline Pidgeon MBE (Chair): Lovely, thank you. I think it is about the ambition; we were hoping to see in the Plan. Finally, just very factually, Michèle, if you could just clarify what the next steps are for this Plan? I think we have highlighted quite a lot of issues, potential weaknesses, this morning and obviously we will be putting in a submission. What is the role going to be of this London Infrastructure Delivery Board in taking it forward, and what are the next steps for this, please?

Michèle Dix (Managing Director, Planning, Transport for London): As I say, the Plan was produced in order to identify the infrastructure needs and the costs associated with it so that one could actually start then looking to see that we have got a means of funding these things. It also identified that looking at infrastructure across all the aspects reported in the 2050 Plan, such as water provision, energy provision, there needs to be greater synergy between infrastructure providers so that where you can do things together, help reduce the cost, become more efficient, then there is a meeting of minds and ideas. The Delivery Board is to help ensure that infrastructure can be delivered in a more cost-effective way, and to bring those other infrastructure providers into the room to talk; people like TfL, who are delivering on one side, with the boroughs, with the utilities etc. It is a Board to help take the Infrastructure Plan forward and to consider some of the aspects that are raised in here about prioritisation. It will also, having been set, help establish a

framework for the subsequent revisions that will be required to (a) the London Plan and (b) the Mayor's Transport Strategy etc. They take us to 2030 and we need to have more detailed strategic plans to take us to 2050.

Caroline Pidgeon MBE (Chair): Lovely, thank you very much. It has been a very interesting discussion. I think it raises lots of questions in our mind so maybe not everything has been answered. Thank you Michèle [Dix], Ian [Brown], Alastair [Willis], Joanne [Dodds], and Stephen [Marshall] for your contributions this morning.