Transport Committee - 10 November 2015

Transcript of Agenda Item 7 – Surface Transport Access to Heathrow Airport

Valerie Shawcross CBE AM (Chair): Moving on then to item 7, there is a presentation which many of us have seen informally or an earlier version of it. We felt it was perhaps important – because of the controversy around this issue and the direct argument going on about this issue – to have this presentation and discussion in the public arena.

Can I welcome to the table Richard De Cani, who is Director of Strategy and Policy at Transport for London (TfL), and Simon Nielsen, who is Head of Policy Appraisal and Evaluation at TfL? What we are going to do is quickly say a few things about some headlines on your analysis of surface transport access to Heathrow Airport, particularly in the context of Sir Howard Davies's [Chair, Airports Commission] proposal that Heathrow now be the airport that receives an additional runway. Welcome.

Richard De Cani (Director of Strategy and Policy, TfL): Thank you very much for the opportunity. What we want to do was just quickly highlight some of the issues about the approach that the Airports Commission adopted. Then Simon [Neilsen] will go on to some of the analysis that TfL did alongside the Davies [Airports] Commission and some of the concerns that we have raised.

Moving to slide 4¹, this is summarising the main assumptions that have fed through the Airports Commission process. TfL engaged fully with the Airports Commission. We responded to all its calls for evidence and its analysis and submitted our own analysis of our own thoughts. We had an ongoing dialogue with it. Slide 4 summarises the main assumptions it adopted around the current situation with Heathrow, the situation in 2030 if Heathrow does not expand and the situation in 2030 if Heathrow does expand. That is the comparison it has used throughout its analysis to show the incremental effect of Heathrow expansion. It is not comparing today with a three-runway airport. It is comparing what will happen if you do not expand in 2030 with what will happen if you do expand, the 'do nothing' with the 'do something'.

In terms of the headline figures on passenger numbers, there are about 73 million passengers per annum today, rising in a 'do-nothing' world to 87.5 million by 2030 with two runways. On top of that, with three runways, it would increase to 125 million passengers per annum. From the Airports Commission perspective, it was comparing the last two columns, 'do nothing' with 'do something'. We did that as well. However, we are also interested in how it compares to today because we know we have issues and challenges at Heathrow today in terms of the surface access. You can see through those tables there the comparison with those figures.

Just to highlight, the final row should just say 'passengers'. That is the passenger mode share. We are around 40% today and the Airports Commission assumed that would rise to over 50% in a 'do-nothing' scenario and that would be the same percentage of public transport mode share in a three-runway scenario. These are the input assumptions that are fed through to its analysis of what the surface access demand is.

Moving to the next slide, slide 5, it is showing the scale of change at Heathrow with these proposals. You can see there in blue - to the left of the two columns - you have the highway trips. This is looking at the totality of travel demand created by the airport today. This is passengers and employees. Currently you can see we have more highway trips than public transport trips. This shows the change in 2030 in a 'do nothing' and 2030

¹ See presentation at Appendix 4 to the minutes

with expansion. The point to note there is the shift in public transport and the scale of public transport demand that increases from today to a 'do-nothing' and a 'do-something' world.

This is one of the key concerns we have had with the analysis. Clearly, it is going in absolutely the right direction because that is the outcome we want to see at Heathrow. Any expansion at Heathrow has to be focused on an increase in public transport demand. It is the robustness of that analysis and the proposals that therefore back that up in terms of the proposals for new surface access that Simon [Nielsen] will come on and talk about.

The next slide, which hopefully is not so colour-dependent, is looking at the distribution of those trips. For those people travelling to Heathrow today, roughly 50 to 60% of them travel through London. They either start or end their journey in the Greater London Authority (GLA) boundary or they come through London because they are coming from outside the UK. That would include somebody travelling from Birmingham who comes into Euston and who then takes the Tube to Heathrow as a passenger as a trip through London. In terms of the scale of impact Heathrow has on our operations in the GLA boundary, it is very significant. Beyond that, the trips are much more dispersed. You have trips to the west, the northwest and the southwest. They are more dispersed and difficult to target because they are less concentrated. The focus for us, in particular, is about how to capture those people travelling in Greater London.

The next few slides highlight some of the proposals for surface access that are already being progressed at Heathrow. We have the Heathrow Express today and the Piccadilly line serving the airport in terms of the main rail modes. The next slide shows the proposals for Crossrail coming on stream and Network Rail's proposal for access from the west, which will connect Reading to Heathrow Airport. Again, it is important but for a relatively small amount of people travelling in on that corridor. There is less concentrated demand. It is important but less significant for London.

The final map is showing the southern rail links and the Committee will recall that this is a scheme that has been around for a number of years. It used to be called the Southern Rail Access to Heathrow. It is a very important scheme for two reasons. First, it provides a new rail link for passengers from south London, southwest London, Clapham Junction and Waterloo. Second, it taps into a major market for employees as well so that it can really drive the mode share. The previous scheme failed because of the impact on the existing rail network. This is a new proposal that has come forward by [Sir Howard] Davies, which we will come back to.

They are the main proposals that [Sir Howard] Davies outlines. You can see there in the pack the proposals for the road network. [Sir Howard] Davies assumes that all sorts of improvements will take place on the motorway network that are being progressed by Highways England.

The best thing to do with the time is to focus on some of the major concerns we have with the Davies Commission assessment. I will hand over to Simon to do that.

Valerie Shawcross CBE AM (Chair): That will be great. I am sorry that we have left you with less time. It is a fact that there are big differences between what [Sir Howard] Davies has come up with and what TfL believes from your work. Those are the things we want to get into the public arena and to understand the issues. Simon, if you can focus on those debates?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): Certainly. Thank you very much. What I would like to do is to run through some of TfL's concerns with the assessment that was undertaken by the Davies Commission.

On slide 16 is the first point we would like to focus on. That is that the background travel demand will be higher than that assumed by the Airports Commission with the GLA's new interim employment forecasts. This is important because the new GLA forecasts were published after the Airports Commission report was produced. It is not a criticism of the Davies Commission but this is something that does need to be taken into account and does have a material impact. If you look at the chart on page 16 you can see on the lower line - which goes into the future and takes us to 2030 - that there are about 5.6 million jobs in the GLA area. The new forecast - which is the line above it - takes us to something like 6.2 million jobs. Many of those jobs are expected to be in central London. Many of those jobs, therefore, will put additional pressure on rail services to central London and will need to be taken into account in any assessment of expansion at Heathrow.

Richard De Cani (Director of Strategy and Policy, TfL): It basically means that the railway lines are fuller than [Sir Howard] Davies assumed in 2030 because there are more people travelling on them to work in central London.

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): If we look at the next slide – and this is a very important point on slide 17 – Richard showed you the chart earlier that showed the increase in travel demand that was assumed by the Davies Commission. This chart tries to explain that what [Sir Howard] Davies has done is to only look at a proportion of the runway capacity being used. By 2030, the Davies Commission assumed 125 million passengers per annum would be operating at Heathrow. That is about 85% of the capacity of the runway. We think it is very important that the full utilisation of the runway should be taken into account. That is shown in this final column on this chart at about 148 million passengers per annum. It is a very substantial difference.

If you think of it in terms of trips on the network, we are talking about 385,000 trips, roughly, in the Airports Commission's analysis. If it had looked at the full utilisation, it would be up to something like 450,000 trips. It is a very big difference and, as a result of that, we think it has substantially underestimated the impact of the potential third runway at Heathrow. It is a little bit like, if you were planning a four-lane motorway, would you assess the impact of that four-lane motorway by only assuming three lanes are open at a time? That is a slightly unfair analogy but it is that kind of thing that we need to take into account. TfL's view is that we should look at the full utilisation of the runway capacity.

The next point, on slide 18, is indicating that the Airports Commission did not do a full assessment of the impact of freight and what we might call catalytic development around the airport. It has looked at the additional demand generated by the airport but, if you had an expanded airport, you would have a wide range of different activities that would congregate around there, which would create more demand. That was not taken into account in the assessment and, although some work was undertaken on freight, it did not feed back fully into the modelled assessment that it undertook. We think there would be further travel demand around the airport that was not taken into account.

Richard De Cani (Director of Strategy and Policy, TfL): It is interesting to note that the economic benefits of that additional activity have been captured but the traffic impact of it has not. You could say the positive side has been included but not the negative side.

Valerie Shawcross CBE AM (Chair): There is an internal inconsistency there?

Richard De Cani (Director of Strategy and Policy, TfL): Yes.

Caroline Pidgeon MBE AM (Deputy Chair): That is bizarre, is it not?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): If we now look at slide 19, this is just to flag that any transport assessment of the future is very dependent on the things you assume are going to be in place at that time. A number of these assumptions, while plausible to some extent, could be very different as they turn out and we believe that a range of sensitivity tests would be an appropriate way of dealing with this.

For example, we can see if we look at the second row here that staff in 2030 with three runways is assumed to increase by around 49%, whereas the number of passengers coming through the airport increases by 71%. There are a lot of staff efficiencies built into this. There will have been staff efficiencies at airports, but the extent to which that will continue is something that is at least uncertain and should be subject to some form of sensitivity test rather than taken as read.

The next point on transfer passengers is also important because, quite obviously, the inverse of a transfer passenger is a terminating passenger who has a surface access impact and so the proportion of transfer passengers is important in determining the amount of surface travel that there is. The assumption here is that in 2030 the percentage of transfer passengers reduces, which means that there will be more surface travel to the two-runway airport, and then increases, which means there would be slightly less impact with a third runway. It could be seen as masking the impact. The direction of change is quite plausible, but whether or not it would achieve that in reality is another matter. Again, sensitivity testing would be the sensible way of addressing that. Similarly, the scale of mode-shift that we see is very significant. Can that be achieved? We should be looking at the uncertainty of that. That is what that slide is trying to achieve.

If we turn on to slide 20, this is highlighting some of the air quality issues around the airport. The extra runway would result in nitrogen dioxide (NO_2) concentrations on the Bath Road higher than the current worst link in London. The worst link is important in the context of achieving compliance with EU limits. Without mitigation, the Airports Commission found, the Bath Road would have the highest concentrations in London and would delay compliance with these limits. It speculated about some partial mitigation and identified that if that was in place the Bath Road would fall just below the worst link in London and therefore would not delay compliance with achieving the EU limits.

This is where our point about the underestimation of demand becomes very important. The mitigation measures are very poorly developed and are not clear. We think that transformational changes in public transport capacity are highly relevant to this situation. They were not taken into account. We also think that the 'last link' approach is legally flawed and could be open to challenge, and does not support the Airports Commission's objective of improving air quality.

There is another factor that has come into play since the Airports Commission report was published, which is that the Department for Environment, Food and Rural Affairs recently publishing the Draft Air Quality Action Plan. This substantially changes the baseline for air quality and brings forward the date of compliance by about ten years. It is a very significant change and we think that this means that a third runway at Heathrow needs to be completely reassessed in the context of the new action plan.

The next slide - in fact, my final slide - is commenting a little bit on the scale of the issue that would happen if a road user charge was applied around the airport, which was considered in the Airports Commission report. The final column here almost speaks for itself if you compare it to the column on the far left. If you look at the public transport element of it, which is in the region of 90,000 trips per day, if there was a full expansion of the airport and a road pricing scheme around the airport to reduce the amount of highway traffic and get more mode-shift to public transport, you can see that the full extent of that in terms of public transport demand is approaching 300,000 trips per day, which is more than three times the volume of current public transport trips. We just want to get across the message that the scale of difference here could be very substantial and that the

amount of public transport that would be required to accommodate that scale of change would be very significant. With that, I will hand back to Richard to sum up.

Richard De Cani (Director of Strategy and Policy, TfL): In summary, we would say that the Airports Commission has done a narrow assessment of the increase in travel demand from an expanded Heathrow. It has compared 'do nothing' with 'do something'. It has taken optimistic assumptions about growth. It has looked at the year of opening only, 2030 and has not assessed a 2040 year, which is what we would expect for something so significant, and it has assumed all sorts of improvements to the transport network will be delivered by the public sector that are not currently in committed plans. There are very significant gaps, we think, in the analysis.

The scale of the public transport demand, in particular, to make something of this scale work, is huge and unprecedented at Heathrow. It would require major investment in new rail lines to achieve that sort of uplift in demand and mode share, and they currently do not form part of the plans. These are issues that are too significant to deal with by condition. They are not details that can be pushed down the line to be dealt with later. They go to the heart of the principle of expansion in this location and we feel those things just have not been assessed properly at this stage.

Valerie Shawcross CBE AM (Chair): Thank you very much. You have answered quite a lot of my leading questions. My core question was: how robust do you think the Airports Commission projections are for demand? I think what you have said is, "Not at all". Is that correct?

Richard De Cani (Director of Strategy and Policy, TfL): It has looked at a scenario and has looked at, in many cases, the most optimistic scenario. On something of this scale, we would test a number of sensitivities – best case, worst case – and that just has not been done.

Valerie Shawcross CBE AM (Chair): Yes. How big overall is the gap, if you could put it in monetary terms, between what it is projecting and what you would project?

Richard De Cani (Director of Strategy and Policy, TfL): We have looked at the transport you would need to make the network work in 2030 and beyond with background growth and with Heathrow. We believe the cost of that would be somewhere between £15 billion and £20 billion to make that work and deliver it in the way that the Davies Commission aspires to deliver it in terms of mode share. That is for investment in new rail links and road networks and also measures to restrict car use at the airport as well.

Caroline Pidgeon MBE AM (Deputy Chair): What you have said - and I have seen a version of this before - is very powerful. We tried to make the case when we questioned Sir Howard Davies, but it was quite difficult to be technical with him with our limited time. Out of the \pounds 15 billion to \pounds 20 billion that is clearly needed and that you think is absolutely needed, to what extent is it already planned and therefore going to happen in any case? What bit is needed for the expanded Heathrow if it goes ahead?

Richard De Cani (Director of Strategy and Policy, TfL): That is quite difficult to do. Because of the location of Heathrow in urban London, it is difficult to separate out airport demand completely from the rest of the demand on the network. The Piccadilly line is not just dealing with Heathrow; it is dealing with Heathrow, with journeys to work and with residents. Everything is mixed up. Often airports are right at the end of a line or in a corner somewhere where they are the only generator of demand. At Heathrow, you do not have that. It is in the middle of very busy networks and so it is difficult to separate that out.

There are schemes that [Sir Howard] Davies has identified as being necessary and we would agree with him. They are not part of funded plans at the moment. The southern rail link, for example, is an obvious one that is absolutely necessary because you need the additional rail capacity to central London but you also need to open up those markets to Clapham Junction and to places where people work at the airport. The solution they have come up with, as Davies recognises in their report, does not work. It is crowded on day one because the level of demand exceeds the capacity available.

We believe you need to do something much more ambitious with the rail network, which costs more money. You need to do that to deal with Heathrow and you probably need to do it for background growth as well, but it is difficult to separate these things out completely because of the location of the airport in proximity to the rest of London.

Caroline Pidgeon MBE AM (Deputy Chair): The Airports Commission has not disputed your figures, interestingly, but has said that only £5.7 billion - about a third to a quarter - is directly attributable to Heathrow. You do not think you can calculate it in such a fine way?

Richard De Cani (Director of Strategy and Policy, TfL): It is very difficult to separate out purely Heathrow demand from background demand because of the location of the airport. Everybody is travelling on the same networks. Crossrail is not just serving Heathrow; it is serving the whole corridor in and out of west London. Old Oak Common, for example, will generate a huge uplift in demand on Crossrail and that will take up capacity that people travelling to Heathrow will want as well. It is very difficult to separate these things out. We just know that the work that has been done by the Airports Commission underestimates the impact and the scale of capacity that is needed to deal with an expanded Heathrow.

Caroline Pidgeon MBE AM (Deputy Chair): Do you think that all of the schemes that have been referred to in the Airports Commission report are sufficient to match your predicted increase in demand for Heathrow surface access?

Richard De Cani (Director of Strategy and Policy, TfL): We do have a challenge with access between the airport and central London because, when you forecast to the future and you look at Crossrail and the Piccadilly line, even with the southern rail links, the Airports Commission work itself identifies all those corridors as being extremely crowded. The connection between central London and Heathrow is a critical one for rail. All of those lines will be operating at capacity. It is difficult to get additional capacity on those lines because they have already been maxed out. We will get to the point where we will need additional rail capacity into central London and that becomes a very difficult thing to squeeze into existing railway lines that are already full.

Caroline Pidgeon MBE AM (Deputy Chair): We need all of those schemes. Are there any additional schemes that you think are needed if Heathrow does go ahead?

Richard De Cani (Director of Strategy and Policy, TfL): There are additional railway schemes that are needed, yes. The assumption about trying to cap demand on the road network to encourage that modal shift is absolutely the right one, but is not matched by the investment in public transport.

Do we have the right mechanisms in place to cap that demand for employees and passengers at the airport? The consultants working for the Airports Commission identified a congestion charging scheme for the airport. That has not come forward as a firm proposal in the recommendations. Clearly, it is one way of managing demand to encourage that shift. You are going to need something that forces the behaviour change but then you need that investment in capacity to deal with it, which is largely around rail. **Caroline Pidgeon MBE AM (Deputy Chair):** How likely do you think it is that the Government will agree to fund some of these schemes, such as the Southern Rail access, and when would you expect a decision on that? Would that come by the end of the year when we get a decision on whether Heathrow goes ahead or not?

Richard De Cani (Director of Strategy and Policy, TfL): With the way that the Airports Commission has categorised these schemes, there are some that are seen as essential for Heathrow expansion and they are on the list where they have to be resolved if expansion is going ahead, and there are some that are seen as 'background-growth essential'. Therefore, someone else will have to sort them out but, once you have done them, they are beneficial for Heathrow expansion.

That is the category we are most concerned about because there is a big cost attached to those that currently is not in our plans or necessarily in Highways England or Network Rail's plans. Some of them are, but not all of them. It is fairly clear that the Government will have to identify some new schemes that have a budget attached to them. Southern Rail may be one of those. We do not know yet. There is a big chunk of capacity that falls outside of that, and the expectation is that the public sector will just need to pick that up.

Caroline Pidgeon MBE AM (Deputy Chair): This is a massive headache, is it not, if it goes ahead?

Valerie Shawcross CBE AM (Chair): It is.

Darren Johnson AM: This is looking, then, at modal shift. How realistic is the Airports Commission's projection that 53% of passengers will use public transport to reach an expanded Heathrow in 2030?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): The largest mode share by public transport that we are aware of is at Chek Lap Kok in Hong Kong, which is around 70%. Places like Gatwick achieve 44%. Heathrow is currently achieving around 40%. By looking at the charts we looked at earlier, we can see that to get to the 53% figure that is set out requires a massive amount of shift in terms of trips to public transport from the highway.

The extent to which that is achievable depends on the extent to which the public transport is available to enable those trips and that the public transport is available with sufficient capacity to enable those trips. It is potentially achievable but would require other measures to constrain car travel if it were going to go ahead.

Richard De Cani (Director of Strategy and Policy, TfL): One of the biggest challenges is airport employees as well. Heathrow does some very good work at the moment. It is trying to move the dial on mode share for employees with the free bus system around the airport campus and also the cycle hub, but we are currently in the mid to high 20s in terms of the percentage of people travelling to work by public transport. That needs to increase. That is an even greater challenge because of the time of day people are travelling and the dispersal of those trips across quite a wide area. Passengers are one thing; it is an even bigger challenge to deal with employees at the same time.

Darren Johnson AM: That is useful. Do you want to spell out a little bit more about what would need to happen to ensure that 53% modal share with an expanded Heathrow?

Richard De Cani (Director of Strategy and Policy, TfL): It is a combination of two things. It is the investment in public transport that provides the capacity but also the connectivity that entices people to use public transport to get to the airport, whether they are a passenger or whether they are working there, and it is also the other mechanisms that constrain car use. That could be a combination of factors, whether it is a congestion charge or whether it is car parking charges. The two things have to work together. That has been the approach that Heathrow has been adopting and it has had some success, but the scale of this is a big shift

upwards and so the scale of measures needs to be much bigger than what we have seen over the last ten to 15 years.

Darren Johnson AM: At a time when the airport would be expanding, rather than just dealing with the existing market.

Richard De Cani (Director of Strategy and Policy, TfL): Yes.

Darren Johnson AM: Have you done modelling on the implications of some form of road user charging for Heathrow?

Richard De Cani (Director of Strategy and Policy, TfL): Not specifically, no. We have read the reports that were produced by the Airports Commission consultants that recommended it. They even went as far as identifying what the level of charges would need to be to get the right effect. It was about £20 per passenger entering the airport zone. We have a good understanding of who is coming into the airport and where they are coming to and from, but we have not done any specific modelling at this stage, no.

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): The most we have done is identify the extent to which the mode shift would place additional public transport demand on Heathrow and to understand the scale of that change, which was in one of the slides we showed you earlier.

Darren Johnson AM: Yes. That was useful. Thank you.

Murad Qureshi AM: Thank you. It is quite clear from my side of town that Heathrow is expanding. You only have to see the traffic on the A4 and the A40 every day coming in, particularly at weekends, to see that. When you look at the quarterly figures for Heathrow, while it is not expanding in terms of flights, it certainly is in terms of passenger numbers. The big planes are pushing through.

You mentioned the top figures, but when the Environment Committee looked at this in the last term City Airport came out very well. It had 60%. Why should the Airports Commission not be aiming at something like that at Heathrow in light of some of the things that Heathrow Airport has already like the Heathrow Express?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): It should. It should be aiming for as high a mode shift as it possibly can.

Murad Qureshi AM: It is interesting. When we had those discussions, we did get Heathrow Airport in and they mentioned the stuff about what it is doing for staff, which is commendable.

I am just looking through the report. We heard that staff started using Heathrow Connect and it jumped from 500 to 1,700 on the 75% reduction or discount. Am I right in thinking that that is the kind of stuff that could happen on the Heathrow Express as well?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): Yes, that is right.

Murad Qureshi AM: What I am trying to do is probe the debate. What I am trying to get at here is that if Heathrow wanted to play ball, there are things that it could do. Given that it has four trains coming into Paddington every hour and the pricing of it, it could do things right now to mitigate the pressure on the roads that we have identified and that you have identified.

Another thing is that, of the modal shift that is anticipated, how much are you expecting Crossrail to pick up and help move?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): Crossrail plays a big part in it. The table that we showed you in the presentation showed that much of the mode shift occurs without the expansion of the airport and so it is to do with a combination of Crossrail and the Western Rail Access more than anything that is done to accommodate the expansion of the airport to the third runway. The only public transport scheme that is associated with that is the southern rail link and so it is mostly the other major schemes that are in place.

Murad Qureshi AM: Thanks for that. Again, when we looked at this in the Environment Committee, we were told that only a 1% increase in modal share was being suggested as a result of the completed Crossrail. Is there any way of increasing that modal share on Crossrail?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): Is that 1% in relation to the airport or in general?

Murad Qureshi AM: We were told that it is currently unclear what level of modal shift a completed Crossrail is likely to provide, although a 1% increase in modal share has been suggested. This was in our deliberations with Heathrow Airport Ltd.

Richard De Cani (Director of Strategy and Policy, TfL): The thing that Crossrail will do very effectively is to give a central London connection and beyond. It creates an opportunity to drive mode shift on certain corridors. The integration at Old Oak with High Speed 2 as well gives the opportunity for people to access Heathrow by rail from the Midlands. They may at the moment choose not to do it because coming through central London with your bags is just too difficult to do. There are other opportunities that Crossrail creates. The capacity on Crossrail will be four trains an hour to start with and there is a discussion about how that can be increased.

Murad Qureshi AM: I am glad that you have mentioned that, Richard. It is precisely where I am going to. What is the assumption that the Airport Commission has made on that? Is it sticking to four? Network Rail is keen to see it go up to ten per hour.

Richard De Cani (Director of Strategy and Policy, TfL): It is looking for it to go to eight trains an hour.

Murad Qureshi AM: It is assuming eight?

Richard De Cani (Director of Strategy and Policy, TfL): The Airports Commission, yes.

Murad Qureshi AM: Would an additional two make a huge difference?

Richard De Cani (Director of Strategy and Policy, TfL): It is how that can be accommodated with the pathing on the Great Western because Crossrail is doing a number of things west of Paddington, not just serving Heathrow. It is going beyond, elsewhere, and so it is about trade-offs. The Airports Commission is assuming a substantial increase but what we are currently planning for Heathrow at the moment is going from four to eight.

Murad Qureshi AM: Can I just come on to the Piccadilly line? That is a bone of contention. As you said, it is a local service as much as a Heathrow service. Local people's experience of it, if you are getting in at Hounslow West, East or Hounslow Central, is having a whole wall of luggage to face. What are the

assumptions they have made there? I want to be clear because I do not think they tally too well with what people experience.

Richard De Cani (Director of Strategy and Policy, TfL): They have assumed that the Piccadilly line with be upgraded in terms of new signalling and new rolling stock. That gives an increase in capacity and frequency, and it clearly is a priority for TfL to do that - it is one of the last remaining lines that needs to be upgraded to get that uplift - but that funding is not currently committed, subject to the outcome of the Government spending review.

Murad Qureshi AM: Yes. That is precisely the point.

Richard De Cani (Director of Strategy and Policy, TfL): This is one of the frustrations that we have: that the Airports Commission has placed weight on these things being funded and delivered and, separate to that, there is a risk these things will not be funded and delivered. What happens then? The Piccadilly line is just one example of that.

Murad Qureshi AM: The important thing about the Piccadilly line is that at the moment it just races through Chiswick. If it stopped there, would we get a lot fewer journeys in cars? I say that because in W4 and W5, if you look at the airlines, they would know that they get a lot of --

Richard De Cani (Director of Strategy and Policy, TfL): The challenge with the Piccadilly line is that increasingly, it would be full of passengers before it gets to the first place where people get on in the morning to go to work.

Murad Qureshi AM: That is true. Just coming back to the road charging, is the suggestion that the airport will do that or that TfL will do that?

Richard De Cani (Director of Strategy and Policy, TfL): It is not clear. It was just one of the measures that was identified in the technical transport report produced by the Airports Commission. It said that that was one way of constraining demand to get the mode share that it needs. It is not clear whether, if it does go ahead, it will be a condition or a requirement. We do not know. It is clearly one of the ways you can move towards that mode share.

Murad Qureshi AM: Assuming it was TfL, you would have to use the red routes around there, presumably. The roads that you have there.

Kemi Badenoch AM: My question was on freight and thank you for your presentation because you have answered some of it with slide 18. You have talked about expansion leading to an increase in freight movements and Sir Howard Davies responded to the Assembly a couple of months ago saying that the impact would not be significant.

My question was about what they had left out in assessing that impact. You have talked about additional freight activity and extra activity generated from business growth. To what extent have they accounted for an increase in freight traffic?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): OK. What they have is two things. First of all, there is freight that is associated directly with the airport itself. The way in which the modelling was done, which fed into the congestion and crowding work, was that they factored that up in accordance with the increase in passengers. They took into account freight in that way. They also did a separate study of freight that did not feed back into the modelling, but we think should be fed back into the modelling so that a more

accurate description of the routings which are taken around the airport for freight is taken into account. That is one aspect, which is the freight directly associated with the airport itself.

The second aspect is the freight and other activity that might be generated by the airport, which is more of an indirect effect. That, we believe, would generate substantially more road traffic and other demand in the area but was not part of the assessment. There are two different types of freight impact there.

Kemi Badenoch AM: I know we are running out of time and so I will rush through the next two questions. What are the implications of higher-than-expected increases in freight on congestion, air quality and journey times? Have they taken those into account at all?

Simon Nielsen (Head of Policy Appraisal and Evaluation, TfL): They will have taken it into account insofar as they have taken it into account in the road traffic and congestion aspects. They will not have taken into account the wider activity; they will have taken it into account to some extent in the expansion of the airport.

Richard De Cani (Director of Strategy and Policy, TfL): It will make those things worse, potentially. When you look at the road network around Heathrow that is accommodating those freight trips, many of those roads are operating at capacity at the moment in terms of congestion and additional freight trips will just add to existing problems with congestion and air quality, and potential safety issues as well.

Kemi Badenoch AM: What discussions has TfL had with local boroughs about the need for new road schemes to manage freight traffic? Have there been any?

Richard De Cani (Director of Strategy and Policy, TfL): We have had a close dialogue with local boroughs around the Airports Commission work and that has covered a whole range of issues. We have not got down to the specifics at this stage about particular measures that will be required to make that work. We focus more on the bigger strategic issues, which is really the gap in the public transport capacity that achieves the mode share that we need.

Kemi Badenoch AM: OK. Will there be any additional impact on Heathrow with the restriction on lorries and heavy goods vehicle traffic during rush hour?

Richard De Cani (Director of Strategy and Policy, TfL): It is an interesting point about the overlapping rush-hour periods because Heathrow has a slightly different peak period to what is happening in the rest of London. When Heathrow expands, you will see more of an overlap of the busiest periods for the airport with what is happening elsewhere in Greater London. You will see more of a problem occurring. That has been reflected to a degree in the modelling in the way that they have assessed some freight trips, but not all of them.

Steve O'Connell AM: The debate so far has led us to a place where the assumptions around the Heathrow recommendations appear to be flawed, around the transport piece of it.

Let us turn to what is my favourite subject and hopefully yours as this debate goes on. It is Gatwick. My first question is: does the Commission's Gatwick analysis contain similar flaws to those TfL has identified around Heathrow?

Richard De Cani (Director of Strategy and Policy, TfL): The approach it has taken and the methodology it has adopted, to look purely at the narrow uplift from airport expansion compared to background growth, is the same at Gatwick as well. Clearly, it is a different set of issues at Gatwick because of the location of it.

The gap there is really around the Brighton Main Line, the current levels of crowding, future levels of congestion and what impact Gatwick expansion would have on that. We believe there are some quite substantial gaps in the analysis around the impact on the Brighton Main Line to do with Gatwick expansion that have not been properly factored in. It comes back to the same approach: it has looked purely at the airport rather than the background growth. We know there is an issue on the Brighton Main Line today with the amount of demand and with background growth even before you look at an expanded Gatwick.

Steve O'Connell AM: Without an extended debate, there is confirmed extra capacity on the Brighton Main Line from 2018 onwards. That is a fact. It has identified the fact that the overcrowding issue around public transport would be less for the Gatwick option than Heathrow - in other words, would need less remedial work and less investment - but it still led itself to the conclusion that Heathrow was the preferred option, which flies in the face of the logic. Would you not agree?

Richard De Cani (Director of Strategy and Policy, TfL): There was a broader set of considerations beyond surface access that led to a recommendation. When you look at the report, there was a greater amount of weight placed on the economic benefits from Heathrow expansion versus Gatwick expansion. That was the primary consideration.

The concerns are of a different scale at Gatwick but we have raised similar concerns about what we believe is the underestimation of the impact of Gatwick expansion on the Brighton Main Line. It is probably more straightforward to address because it is a single line into London and it is less complex than Heathrow because it is outside the urban area, but it is not without its own challenges, complications and costs. The improvements the Government has committed to do will do something but we do not believe they go far enough to provide the demand you need for background growth and expansion.

Steve O'Connell AM: It is expensive but simpler to fix because it is about capacity on the Main Line - you are not building a whole new line, a new southern line, which is the dream-like aspiration of the Heathrow concept and is not going to happen, clearly - and capacity on the M25 junction. It is two pieces of work, is it not?

Richard De Cani (Director of Strategy and Policy, TfL): When the Airports Commission looks at Gatwick, it looks at what it is throwing out of the front door and whether it can fit onto the trains at that particular station at Gatwick. What we are concerned about is what happens at Croydon. In the morning peak with those trains coming in from the south, can people in Croydon in the future get onto those trains to go to London Bridge with an expanded Gatwick? We have a slightly different focus because of who we are to the Airports Commission. There is a challenge that we need to face with any Gatwick expansion on the Brighton Main Line.

Steve O'Connell AM: Richard, nobody bothers more about what happens to people in Croydon than me. Do not worry about that.

My last point is that if [Sir Howard] Davies had taken the TfL modelling, which he probably should have done, would he have reached a different conclusion? Would he perhaps have reached the Gatwick conclusion?

Richard De Cani (Director of Strategy and Policy, TfL): It is not just surface access that the Airports Commission has used.

Steve O'Connell AM: Of course, but just speaking for surface access --

Richard De Cani (Director of Strategy and Policy, TfL): A different way of answering it: if our approach to modelling had been adopted for Heathrow and Gatwick, the cost of the surface access improvements at Gatwick would probably be less than at Heathrow.

Steve O'Connell AM: Without a doubt.

Richard De Cani (Director of Strategy and Policy, TfL): The propositions at Gatwick and Heathrow are quite different for a number of reasons and so it is difficult to do that comparison.

Steve O'Connell AM: Lastly, the remedial work and the cost would be more simplistic because it is capacity on the Main Line, which is a piece of work, capacity on platforms, capacity at East Croydon and probably some widening on the M25. It sounds very trite to say that that is easy, but compared to some of the solutions aimed around Heathrow, which are not going to happen, would they be more doable in your mind?

Richard De Cani (Director of Strategy and Policy, TfL): We have yet to see the proposal for the Brighton Main Line that deals with all the problems in the future with background demand and airport expansion. There are proposals that have emerged recently, which you will have seen, that talk about a New Brighton Main Line and some additional capacity, but we have not seen the solution that deals with all of the issues yet. There needs to be one.

Steve O'Connell AM: Logic says that if those two propositions were dumped on your desk - if we have one proposition here, "Cure Heathrow", and one proposition, "Cure the Gatwick issue" - you would have less work and cost around the Gatwick remedial work.

Valerie Shawcross CBE AM (Chair): Steve, you have made your point. We know that south London loves Gatwick. We are, I am afraid, pressing on towards the end of the meeting and so, unless there are any urgent questions otherwise, I will just ask you very quickly, Richard and Simon, whether you want a last word on this.

I would say to you that we were very distressed to hear what Sir Howard Davies said about TfL. There was an implication that TfL was simply criticising his proposals because the Mayor wanted to build an airport at the Estuary instead and we felt that you had done very good technical work.

Can you give us a quick pen portrait of what would happen to London and London's transport if the Heathrow expansion goes ahead without acceptance of your modelling and the extra investment that you have identified the need for?

Richard De Cani (Director of Strategy and Policy, TfL): It is a simple word, which is 'congestion', congestion on the road network and congestion on the rail network of a scale that we have not seen. The level of crowding that you would have on those rail corridors into central London would be some of the worst that we currently see in London and that is based on 2030 demand in the year of opening. It is a level of crowding and congestion that we believe would start to impact quite significantly on the whole performance of the transport network across west and southwest London with quite significant consequences.

Valerie Shawcross CBE AM (Chair): We are very clear.

Richard De Cani (Director of Strategy and Policy, TfL): On your first point about the work that we did, there was a methodological flaw that we feel the Airports Commission adopted because it looked at it through the narrow question of what you had to do to make development work. It was like a developer. It was like a supermarket expansion. It looked at purely its uplift.

Valerie Shawcross CBE AM (Chair): Yes. In the report and the conversation there was very much a concept of, "That is not our pollution. That is not our population growth".

Richard De Cani (Director of Strategy and Policy, TfL): Yes, and we looked at the whole thing.

Valerie Shawcross CBE AM (Chair): In London, we need to have a holistic approach.

Richard De Cani (Director of Strategy and Policy, TfL): Yes, absolutely.

Valerie Shawcross CBE AM (Chair): OK. Thank you very much indeed. That was excellent. Thank you for the presentation. I am sorry we have rather rushed you today but you got your message across very well.

Richard De Cani (Director of Strategy and Policy, TfL): Thank you.