

## **London Assembly Transport Committee – Friday, 19 July 2019**

### **Transcript of Item 3 – Rotherhithe to Canary Wharf Crossing**

**Florence Eshalomi AM (Chair):** Those views we just had in that video were very much echoed at the Southwark Council meeting that I attended on Wednesday, where a number of groups presented a deputation to the Council calling on it to continue to work with me, as their local Assembly Member, to look at why this bridge is paused and if we can bring it back.

Welcome to our guests this morning, we have before us the Deputy Mayor for Transport, Heidi Alexander and David Rowe, Head of Major Project Sponsorship, Transport for London (TfL). Deputy Mayor, from the letter you sent to me on 21 June [2019] outlining the decision to pause the bridge, we wondered if you could go through and set out clearly and clarify the chronology of events that led to the escalation of the cost of this Project?

**Heidi Alexander (Deputy Mayor for Transport):** Thank you for the opportunity to come to speak to you this morning. It might be helpful if I address my involvement in the Project over the last 12 months since I have been in the role and if I ask David Rowe [Head of Major Projects Sponsorship, TfL] to talk about the two years prior to that, 2016 – 2018.

Within weeks of being appointed to this post last summer I was briefed in writing by officers from TfL. They gave me a simple history of what work had been done to date and advised me that the cost estimate for the bridge at that point in time was between £380 million – £430 million, which was substantially more than what the initial cost estimates were. In fact – David may correct me if I am wrong – I think the upper estimate that was taken to the Programmes and Investment Committee (PIC) of TfL back in October 2017 was £260 million. Therefore I knew at that stage the team at TfL were working on the precise designs for the bridge, the alignment of the bridge and how many lifts and ramps and so on would be needed. The Commissioner [of TfL] was very clear with me that the instruction he had given to the TfL team was to try to get those costs down from the £380 million – £430 million estimate. In September the Mayor and I received a further update from TfL that suggested the costs would be between £355 million – £395 million, hence the allocation in the Business Plan that was published in December of last year [2018] for £350 million.

In the early part of this year TfL continued to work on the Project intensively, there was a lot of detailed and really extensive work that was happening and they produced a new design for a vertical lifting bridge. It is important to say this would be a very, very big and complex structure, three times the span of Tower Bridge. The clearance height that would be required is the same as the cable car further down the river. The Institute of Civil Engineers was asked to look at the choice of design because there were a number of options that had previously been considered, and we may get into the detail of what that review showed. Atkins, as I understand it, produced an initial cost estimate for that design, which TfL's internal assurance team reviewed.

As that work progressed, towards the very end of March and beginning of April this year [2019], I got a further update from TfL. They told me that the midpoint estimate for the bridge, having done all of this very intensive and detailed work, was now £455 million. That went up, having done more work, to £463 million in May. That was the point at which I became quite concerned about the short to medium-term deliverability of this Project

because costs were only going one way and all of the substantive value engineering options had been explored. I also knew there was not going to be cash to be thrown around in this year's Business Plan.

The Mayor and I discussed this with TfL in mid-May. The Mayor asked TfL to go away and do some work on reviewing the case for the Scheme and to look again at the ferry option. That resulted in a paper being taken to the PIC of TfL in June. As soon as they took a decision – Chair, as you will know – I wrote you to the day after, when they decided to go back to the earlier stage in the project development process which was looking at the option again of a bridge versus a ferry.

I would like to add that this decision was not one that was taken lightly. I am someone who, when I first moved to London and could not afford a Travel Card, cycled from Balham to Canary Wharf for six months for my first job in London. Having navigated four lanes of traffic on the northern side of Tower Bridge I think there are few people in London who understand the importance of improved river crossings in this part of London more than me. However, in this role I have to think with my head and not my heart. I knew this Project was entering a phase where we would be spending nearly £1 million a month on developing the Scheme further and yet I knew, given the wider financial context of TfL, in the short to medium term there would not be money available realistically in the next five years to be constructing this. Therefore we took the responsible decision, I think, with the PIC of TfL to go back to that earlier stage where we look at what the different options are. As the Mayor said yesterday, this would have been a great project. It would have been wonderful to have constructed a world first but this cannot be at any cost. The cost was only going in one direction, which is what led to the decision back in June.

**Florence Eshalomi AM (Chair):** Is there anything you wanted to bring in, David?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** If it is helpful I can run through the chronology from 2016 in terms of how the costs have built up and what the factors were that have driven those increases.

**Florence Eshalomi AM (Chair):** Very quickly, please.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** I joined the Scheme in spring 2017. Prior to that TfL had already allocated within its Business Plan £100 million towards the crossing. It is important to say at that point we had not confirmed whether it would be a bridge, a tunnel or a ferry; those were our short-listed options that we were looking at. Even at that early stage the estimates we had for a bridge were from £115 million, which excluded land and inflation, through to £200 million.

Those initial estimates were produced for us by a company called Faithful+Gould, a cost and programme management consultancy worldwide. They looked across bridges that had been delivered in other parts of the world – Europe and the United Kingdom (UK) – and different types of bridges – road, rail, pedestrian and cycle bridges – with different types of opening mechanisms. They logged information on the spans, the width, the length and various other factors to produce a cost per metre average that we could then apply at that point in terms of producing that preliminary estimate. We did not at that point have a design for a bridge because we were still building the case to ascertain which the best solution was. That is why we were not able to build what is called a bottom-up estimate, which is where you use a design to then quantify what the cost might be.

We then did further work and went through what is called our Stage Gate 2 in September 2017. At that point the estimate for the bridge was between £150 million – £260 million. That was taken to our PIC. At that time we were also looking at three possible alignments in terms of where the bridge could land.

After we had gone to PIC and they confirmed that they agreed with our recommendation that the bridge was the best of the options we had identified at that point, we then went out to public consultation. We asked people whether they agreed with our recommendation that a bridge was the right crossing solution here. We also asked for their views on the three different crossing alignments and therefore that helped us inform which ones we would be narrowing down going forward.

When we had done that work and had the results of the consultation we then did much more detailed testing around the designs. When that detailed testing took place what became clear quite quickly is that the bridge designs that had been produced were not going to be sufficiently rigid and robust to stand the day-to-day prevailing conditions on this part of the river. Particular challenges were wind resistance, the tides and the amount of opening that was required in relation to this bridge. This bridge has a 120-year design life and we wanted to try to test that in earnest to understand what was necessary. That was the next point where costs increased effectively because what that meant was we had to increase the strength of the structure so we had to add more steel into the structure. That meant we needed stronger mechanical and electrical lifting equipment and we needed larger foundations, all of that was driving up the costs. Therefore even then we were aware there were challenges and we were doing what we could to try to bring that cost back down. For example, with the Port of London Authority (PLA) we had agreed we could reduce the height of the bridge down from 15 metres to 12 metres.

Heidi has spoken about the subsequent cost increases but I am happy to explain why they came about, if that is helpful for the Committee.

**Florence Eshalomi AM (Chair):** To clarify, if we go back to 2016 the original figure in the Business Plan is £100 million.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes.

**Heidi Alexander (Deputy Mayor for Transport):** Yes.

**Florence Eshalomi AM (Chair):** In the briefings, when TfL went out to consultation in November 2017, the capital costs were estimated at between £120 million - £180 million.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is correct in terms that that was the figure quoted in the consultation material that we published, which is 2016 prices. What we did as part of the consultation - to ensure people had a fair understanding of the cost of a bridge compared with a ferry compared with the immersed tunnel, which was the other option - was to put everything on the same basis in terms of the year it was analysed as well as putting what are called the whole-life costs, the ongoing operational and maintenance costs that are associated with those different options as well. Where I spoke about the figure of £150 million - £260 million, it includes the inflation allowances that we need to add on for when the Project is actually built.

**Florence Eshalomi AM (Chair):** You are saying that included whole inflation. Did that include the operating and maintenance costs of the bridge?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** No.

**Heidi Alexander (Deputy Mayor for Transport):** No.

**Florence Eshalomi AM (Chair):** What was the figure for that when you went out to consultation in November 2017?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is in the same Consultation Report. I think the figures at that time were £2.4 million a year, if I remember rightly off the top of my head; £2.2 million – £2.4 million.

**Florence Eshalomi AM (Chair):** What figures are you looking at now?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Over the life of the bridge, over that 120 years, the average is £3.5 million per annum. It is important to remember that is the average across the whole of that period so you have to discount that back for the early years. Therefore in today's terms it is about £1 million a year but obviously it gets progressively more expensive as you move through that life-cycle period.

**Florence Eshalomi AM (Chair):** Deputy Mayor, this was before your time. I think, David, you said you started in spring 2017, is that correct? We note that the sponsorship and budget of this Project was transferred to Surface Transport in April 2017.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is the point it came across to --

**Florence Eshalomi AM (Chair):** Where was it before that and where were the decisions being made?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** The early feasibility work that is done around our larger strategic schemes is done through our City Planning Department. They do that initial work for us and then that came across to us when it was at the point where we needed to move from looking at the case of the Scheme to what is the right solution.

**Florence Eshalomi AM (Chair):** In terms of the estimates, City Planning would have been happy presenting those figures to the senior leadership team?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes, as I say that was based on the information that was put together.

**Florence Eshalomi AM (Chair):** Coming back to when you then decided to look at pausing the Project, in your letter you stated that £350 million had been allocated in the Business Plan. Can you clarify how much has been allocated for the Project over the five years of the Business Plan?

**Heidi Alexander (Deputy Mayor for Transport):** That £350 million figure relates to the five-year period of the Business Plan, albeit I think I will ask David to pick up on perhaps some of the detail of whether any of that slipped beyond the end of the five-year business planning period.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** There was a residual amount of that £350 million that sat outside the five years. The reason for that is the final year that our forecast shows in terms of the construction of a new bridge was 2024/25, just the start of that year. The approach that we take with projects is that you hold a certain amount back in terms of retention for any

defects or faults that you need corrected by a contractor. Therefore it spans slightly beyond the 2018 Business Plan.

**Florence Eshalomi AM (Chair):** In terms of the different cost escalations we are seeing in this bridge; can you clarify the body that would have been discussing these figures, was it the Independent Investment Programme Advisory Group (IIPAG).

**Heidi Alexander (Deputy Mayor for Transport):** IIPAG reviews a number of the large-scale projects and programmes that TfL is doing. In terms of the governance of this Project, it was reported internally through the Healthy Streets Portfolio Board. When there were significant and important decisions it would come to the PIC, which is why it was the PIC that in June [2019] took the decision to return to the earlier stage in the Project's development.

**Florence Eshalomi AM (Chair):** We are going to come on to Assembly Member Pidgeon, who is going to dig in a bit more detail in terms of the decisions and where those decisions were made.

**Caroline Pidgeon MBE AM (Deputy Chair):** Thank you. I made a note of what you were saying earlier, Deputy Mayor. Could you clarify when you were told the costs had escalated? You said they had gone to £455 million and then it became £463 million in May. When were you told £455 million?

**Heidi Alexander (Deputy Mayor for Transport):** Right at the end of March, the very end of March. I think it would have been one of the last days in March.

**Caroline Pidgeon MBE AM (Deputy Chair):** It was the end of March you were told this is going up and by May it had gone up further. In mid-May you said there was a discussion with the Mayor.

**Heidi Alexander (Deputy Mayor for Transport):** Correct.

**Caroline Pidgeon MBE AM (Deputy Chair):** Was there a briefing paper sent to the Mayor for that meeting?

**Heidi Alexander (Deputy Mayor for Transport):** A briefing paper was prepared for a meeting with the Mayor at the beginning of April, when we had a lengthy discussion at which David was present. There was not a further paper prepared in May but there was a discussion with the Commissioner [of TfL] present when we talked about the ferry option as well. That was the point at which, in the middle of May, the Mayor asked TfL to go and review the case for the bridge and explore the ferry option again in more detail. That was partly because in the six weeks between the first week in April and mid-May when that work had taken place we had said to David and his team we want everything to be explored in terms of bringing these costs down. The Commissioner, David and Gareth Powell [Managing Director of Surface Transport, TfL] had said, "We have done six months of work on this now". There may have been one or two further things to explore and I thought given the significance of this Project it was important that we left no stone unturned.

Between the beginning of April and the middle of May, despite that work being done, the costs were not coming down. That was on the back of three or four months' work at the beginning of the year when absolutely everything was being explored; using concrete instead of steel in the towers, looking at whether we needed lifts and ramps on both sides and looking again at things like the landing points. The truth is in April/May time of this year I felt that TfL had gone through all of the major opportunities for value engineering on this Project, when they had constantly been doing that really detailed and intensive work, and

there was not really any further to go on that. It was at that point we felt it was the responsible thing to do. That was not least because David was advising us there was a need to let some quite big contracts that would have resulted in TfL spending nearly £1 million a month to develop this Project when there was no realistic prospect of finding that additional £100 million, possibly an additional £250 million, in the business planning round that is in front of us and that we are starting in the next couple of months. That was the context in which that decision was taken.

**Caroline Pidgeon MBE AM (Deputy Chair):** I am trying to pick up some process things because obviously I am a huge advocate for this bridge and I think it would be absolutely fantastic. However, I understand you have to make decisions and I am trying to understand the process. My colleague is going to pick up some of the issues with the Mayor in a bit.

David, what were these contracts you were looking to let and how urgent was it to let these contracts? This Project had been going on for some time. In April we were told there was going to be a consultation.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is correct.

**Caroline Pidgeon MBE AM (Deputy Chair):** That then got delayed and we were told you were working out further detailed stuff to go out to consult in the autumn. What was it that was so urgent that you were about to sign?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** The next very significant stage of work for us was a series of surveys that we needed to do to ascertain information on things like ground conditions as well as the condition of the riverbed. That was fundamental to ensuring that - in the environment we had selected through our work with the PLA, the boroughs and others - we were not going to find anything untoward in terms of what particular ground conditions we were going to be challenged with. That would have been both very expensive and also quite intrusive in terms of the work. It would have meant, for example, quite significant work in places like Durand's Wharf as well as at Westferry Circus in terms of undertaking those surveys. We really could not move forward any further without having done that work because it is fundamental to be able to ascertain that, "Yes, there is nothing untoward in this part of the river that we have not anticipated". We already had some survey information, the Jubilee line runs quite close to here, but that only gave us a certain amount which is why we had these additional surveys that we needed to do for the next stage.

**Caroline Pidgeon MBE AM (Deputy Chair):** You could have signed that contract within a week, or within a month, or within two months given how the Project had been slightly slipping in any case.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We already had that contract that we had gone through the procurement process for. It was there and was ready to go. We had to make a decision on it because otherwise those costs effectively become redundant because you have to go through a repricing process with potential for risk.

**Caroline Pidgeon MBE AM (Deputy Chair):** Not if it is a few weeks later, presumably.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We had a timetable that we had published in terms of when we were looking to let that contract. We had to make a decision as to whether we were going to pursue that or whether we should pause that.

**Caroline Pidgeon MBE AM (Deputy Chair):** When were you looking to let the contract?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That was part of the timing for the decision in May.

**Caroline Pidgeon MBE AM (Deputy Chair):** When?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We had already paused that whilst we were doing this additional work during the period of March and April. We were waiting on it for a period but it calls into question as to how long you could wait to do that.

**Caroline Pidgeon MBE AM (Deputy Chair):** The issue I have is that the announcement of this decision was rather bizarre, a letter to the Chair of our Committee that most of us saw on Twitter first before any sort of formal process. It was not actually made by the Committee in a normal way, where there is a discussion at the Committee in public; it was made under a Chair's Action. On Tuesday, 18 June the TfL Chair's Action Short Report went out to the Committee members. They had to feed back by Thursday and the decision was made on Friday. A Chair's Action, according to TfL's Standing Orders, is only in a situation of urgency the Board delegates to each Chair of a Committee or Panel to exercise the functions of TfL on its behalf. Therefore it seems to me, given you had already paused this, a few more weeks could have been allowed so this could have properly gone to a full Committee, which met a couple of days ago, where there would have been a discussion with all the members in front of the press and the public. There was no discussion about this in public this week. It seems it is a very odd use, possibly a misuse, of Standing Orders when it seems to me it was not urgent.

**Heidi Alexander (Deputy Mayor for Transport):** Can I answer that?

**Caroline Pidgeon MBE AM (Deputy Chair):** Yes, please do.

**Heidi Alexander (Deputy Mayor for Transport):** I totally refute that. I think David has explained the reasons why the substantial contract, given it had already been paused once, needed a decision to be taken about whether to let it or not. When you are talking about expenditure that is possibly hundreds of thousands of pounds it is important you do not delay on those decisions. I have been a member of the PIC for the last year. A number of urgent decisions come through - whether it is the PIC, the Finance Committee or some of the other Committees that exist within the TfL Board structure - and a full paper is written. Members of the Committee are able to comment on the contents of it. Often the members will comment to all the other members of the Committee and there will be a discussion about it. I can confirm for you that there was a number of people engaged in response to that paper being circulated. Therefore I think, given the urgency, it was an appropriate route for this decision to be taken. I was absolutely clear that having taken that decision it was imperative that we put it into the public domain, hence my letter to the Chair of the Committee the following day.

**Caroline Pidgeon MBE AM (Deputy Chair):** I personally think it is a strange way to have proceeded with this because I do not see the absolute urgency and that is where this Standing Order is coming in.

What I would ask is, could we see that email exchange so we can see what members of the Committee did say? If we had been at a Committee and heard them we could see what concerns they raised. I think that would help our discussion if we could see that email exchange and comments from the Committee.

**Heidi Alexander (Deputy Mayor for Transport):** I see no reason why that could not be made available.

**Caroline Pidgeon MBE AM (Deputy Chair):** That would be fantastic. Can I move on to these plans? Clearly you came up with this design, a different design. You said the Institute of Civil Engineers had done some sort of review. I asked the Mayor about this yesterday, whether all bridge designs had had an independent review. Can you confirm that?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** When we decided the right solution from our perspective was a central lifting bridge we then asked the Institute to undertake an independent review of that mechanism compared with the other options that we developed. We looked at three essentially, in terms of a short list of possible options for how you could design a bridge on this bit of the river. To very simply explain what those options are; you have something called a central lifting bridge, which is where the opening section goes up and down like that [demonstrates]; you have a possible swing bridge, where the opening sections do that [demonstrates] to allow the boats through; or you have what is called a bascule bridge, which is similar to Tower Bridge so it does that [demonstrates].

The Institute of Civil Engineers appointed somebody called Ian Firth [structural engineer] to lead that review.

**Caroline Pidgeon MBE AM (Deputy Chair):** Ian Firth did the review of all three designs?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Ian Firth is the former President of the Institute of Structural Engineers. He is a world-renowned expert on bridges. We were very comfortable that he was the right person to bring in, given his experience on bridges. I do have the report in front of me and I am happy to read the conclusion for you, if that is helpful, in terms what they found.

**Caroline Pidgeon MBE AM (Deputy Chair):** We would like to see the report really, please.

**Heidi Alexander (Deputy Mayor for Transport):** I am sure that will be possible too.

**Caroline Pidgeon MBE AM (Deputy Chair):** We would like to see it to really understand the work you have done to get to this point.

**Heidi Alexander (Deputy Mayor for Transport):** That is absolutely fine, we will share it with you. I think it would be helpful though for David to read the conclusions in the report.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** The conclusions are,

*“There are three types of opening bridge mechanisms that are being considered; a double-leaf bascule, a double-leaf swing or a vertical lifting bridge. It is clear that the double-leaf bascule bridge is the least preferred solution and it presents several difficulties, making it doubtful as a viable option for the bridge. It would be approximately twice the size of any double bascule bridge built to date. The swing bridge would be feasible but has a number of undesirable features, such as the added risk of vessel impact on the opening spans. In addition, the bridge would need a locking mechanism between the leaves at mid-span and these can create difficulties in operating leading to risk of delays in opening the bridge with unacceptable consequences to navigation. The preferred operating mechanism is the vertical lifting bridge. It is the simplest and most reliable operating system, presenting the fewest risks and the greatest opportunities.”*



**Caroline Pidgeon MBE AM (Deputy Chair):** Thank you for that, it will be great to see that.

**Florence Eshalomi AM (Chair):** What was the date of that, please?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** The final report was --

**Heidi Alexander (Deputy Mayor for Transport):** I think the final report was provided at the beginning of April.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes, 8 April [2019].

**Heidi Alexander (Deputy Mayor for Transport):** Yes, 8 April the final report was provided. I think an initial draft came a couple of weeks prior to that.

**Caroline Pidgeon MBE AM (Deputy Chair):** Lovely, thank you. Did Ian Firth, working on behalf of the Institute of Civil Engineers, talk to the other architect practice, ReForm Design, which had developed a bascule bridge to understand some of their technical information and drawings or was this just a generic bascule they were working on?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** There are certainly references in the report to the Sustrans commissioned design through ReForm. I do not know if there were conversations directly between Ian and the ReForm team.

**Caroline Pidgeon MBE AM (Deputy Chair):** Would that not have been something you would ask if you were trying to look at a proper independent review of a scheme that was already out there?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** What we wanted was him to look at the different possible solutions that you could come up with here in terms of a bridge, not just focus on what we had done or what ReForm had done, and make a recommendation to us on what was the right solution for this part of the river given the challenges that we had.

**Florence Eshalomi AM (Chair):** Just to clarify, that Sustrans consultation or feasibility study was partly funded by TfL?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is correct, yes.

**Caroline Pidgeon MBE AM (Deputy Chair):** Yes, it is strange --

**Florence Eshalomi AM (Chair):** That you would not refer back to it.

**Heidi Alexander (Deputy Mayor for Transport):** Like David said, there are references to it.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** No, as I say it does make reference to it but whether he had a direct conversation with ReForm, I do not know.

**Caroline Pidgeon MBE AM (Deputy Chair):** You would have thought they would want to get behind some of their figures and stuff because certainly their costings that I have seen, which were assessed independently

as well, came in a lot lower than where you have ended up. The Mayor yesterday said if there was a way we could deliver this a lot cheaper he would want to. He is still very keen, if possible, on the bridge idea.

Going forward, should TfL have really consulted key stakeholders perhaps at an earlier stage to understand the complexities and costs of this project, is there more that should have been done earlier?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We have been engaging with key stakeholders, the London boroughs, landowners, PLA and the Environment Agency, all of the significant parties that you might expect, from the outset in terms of the development of this. I do not think it is the case that we have come to the party late in terms of engaging with anybody.

It is the case that as a design progresses there is more rigorous testing of that design that needs to take place. As I said, when we did the consultation back in 2017 we had three different alignment options that we were looking at, and that had come from a list of something in the order of 30 different alignment options that we had initially investigated. It is only once you begin to refine down and do that more detailed testing that you are able to ascertain whether there are changes that are required.

**Caroline Pidgeon MBE AM (Deputy Chair):** Your conversations with the PLA were obviously important. You have already mentioned earlier that they had reduced the height needed from 15 metres to 12 metres, which would save considerably on your structure in terms of costs. In some ways you would think the price would have started to come down if they were being more flexible with their requirements.

Last week at the Budget [and Performance] Committee your colleague who was there mentioned one of the big things that he could recall that had led to the increase in costs was to do with shipping impact or something.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes.

**Heidi Alexander (Deputy Mayor for Transport):** Yes.

**Caroline Pidgeon MBE AM (Deputy Chair):** Was that a new thing the PLA suddenly put on the table or was it specifically because of this new design?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We have always had ship impact protection within our designs. However, in the autumn of 2018 the PLA and ourselves agreed some additional detailed testing and they also brought harbourmasters who use this part of the river to really pressure test in terms of what happens if there is an incident on this part of the river. The outcome of that was that the ship impact protection that was previously proposed needed to be enlarged. Ship impact protection, in simple terms, is a sort of buffer that you need to put around the towers that are in the river. When the ship impact protection gets bigger in order to protect the size of the navigable channel you need to move the main spans further out of the navigable channel. The consequence of that is you have a longer middle opening section. That therefore requires strengthening in the amount of steel, you need stronger towers and therefore bigger foundations, and you need heavier mechanical and electrical equipment to lift it. All of that was what was driving up the cost at that point.

**Caroline Pidgeon MBE AM (Deputy Chair):** The PLA - in your discussions once they saw the preferred design that you had come up with, your lifting bridge - felt you needed more around the towers and therefore that ultimately led to increased costs?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes. As I say, that was done in association with harbourmasters. That is not to say the only thing we were looking at is what you would need to do to the bridge. We were also in discussions with them around things like what could we do around speed limits on this part of the river; what we could do around signing, lighting and various other mitigating factors. We did not want to move to an automatic solution being, "Right, this needs to get bigger". We wanted to try to employ as many methods as possible to try to keep that cost down.

**Caroline Pidgeon MBE AM (Deputy Chair):** One of the things in some of the IIPAG paperwork that we have seen that worried me is in July 2017 IIPAG was concerned that,

*"The normal sequencing of projects is not being followed. Early days but shortcuts seem to have been made and if they continue likely to lead to cost and timescale problems in the future."*

I am wondering how, David, you reacted to that and put in place measures that would have reassured IIPAG that we were not in the situation we have been in the past where a project, such as the Garden Bridge, saw lots of shortcuts and problems along the way.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** As part of this work we have assembled a really strong team from both within TfL as well as externally in terms of the skills and knowledge that were needed to take this forward.

**Caroline Pidgeon MBE AM (Deputy Chair):** Who externally, could you list them?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Externally our first engineering and design consultants were Arcadis, they were on board until the end of 2017. Then we went back out to the market and we brought in Atkins at that point to provide that support. We also have Marico, who are marine engineers, and they employ ex-harbourmasters so they are very experienced in terms of works within this part of the river. We have an organisation called Quod, who are planning consultants. We have Mott's, who are environmental consultants. Then there are some smaller consultancies that we also use in specialist areas, such as legal advice and other things. Where we did not have the right skills in house we have made sure we have supported the team in terms of bringing in that expertise.

What we have also done at various points is ensure that we use external organisations to challenge the way we have done things. We had Costain, for example, who were providing advice to us around constructability as well as some of the design factors. They looked at the design to ensure that we were taking a view on whether there were opportunities where we could further value engineer down some of the aspects of the bridge design.

When we also went through the process of that sort of design finalisation and costing we also brought in other organisations such as Cleveland Bridge, specialist steel bridge contractors, to provide advice on the costing and benchmarking of costs. We brought in the American Bridge Company, moving bridge specialists. We brought in steel specialists, foundation specialists and mechanical and electrical specialists.

**Caroline Pidgeon MBE AM (Deputy Chair):** You do not have any teams in house on those, do you?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We really tried to ensure that we were not missing anything in terms of what the opportunities were to either think about something

differently or ensure that we were being robust in terms of how we were costing the factors within the bridge design.

**Florence Eshalomi AM (Chair):** On that, you are saying you had everything in place so you did not miss anything but it clearly states in the IIPAG reports they had issues with the size of the Project Board that comprised 13 people. They state it was difficult to get accountability and decision makers. They also stated that,

*“IIPAG recommends that the Project provides a frank and honest assessment of the other options available and a realistic assessment of the cost to the Mayor and Board members.”*

Was all of this happening? We appreciate that, yes, this is a big project. As Assembly Member Pidgeon outlined, I very much want this. However, again, alarm bells and red flags were coming up as early as March 2017.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** All of the key decisions that were taken in terms of moving through the different stages – from the initial case for the Scheme through to whether it should be a bridge or a tunnel – have gone through our governance in terms of the Healthy Streets Portfolio Board and then on to PIC where appropriate. With any project you have a Project Board in place to oversee it on a weekly or monthly basis. We brought together the various people from within TfL to ensure that we had the right representation there. That is not to say we were not using the appropriate governance within TfL in terms of each of the key decision points.

**Caroline Pidgeon MBE AM (Deputy Chair):** In March 2017 they were flagging these issues. You came fresh to it then, David, and you took over this.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes.

**Caroline Pidgeon MBE AM (Deputy Chair):** I do not understand what changes you made to how you were managing the Project as a result of IIPAG’s comments to you.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is really where we brought in a much more extensive team with appropriate knowledge, both internally and externally, to ensure we had the right level of capability to be able to take this Project forward.

We were also very conscious around things like the programme that had been developed and challenging whether that was realistic, so we had programmers on board. For example, I know in one of the reports that was produced by IIPAG they said they thought the programme was ambitious. Therefore we ensured that the information that was shared made very clear what the challenges were in relation to each of the activities and what that might mean if that caused a delay. For example, negotiations with landowners can sometimes take longer than you might anticipate and therefore that can change the amount of time you might need in order to reach a satisfactory conclusion in terms of agreement on what the design needs to look like.

**Caroline Pidgeon MBE AM (Deputy Chair):** OK. Obviously one of the issues always has been the funding of the bridge. What other funding sources did you actively explore for the Project? You have British Land on one side and you have Canary Wharf Group on the other; big developers developing lots of home and this will benefit their residents and will benefit their businesses. How much were they going to put in?

**Heidi Alexander (Deputy Mayor for Transport):** Would you like me to start with the answer to that?

**Caroline Pidgeon MBE AM (Deputy Chair):** Yes.

**Heidi Alexander (Deputy Mayor for Transport):** My understanding is that there have been a number of discussions with the boroughs, looking at things such as the use of a Community Infrastructure Levy (CIL) on the Southwark side. Obviously there are competing demands for the CIL. On the northern side of the river, with Tower Hamlets, they have been clear and consistent that they did not want to fund this. I understand that TfL also worked with an organisation that looks at philanthropic donations. Whilst there may have been some opportunity around subsidising the operating costs in the same way there is currently that arrangement with the cable car – I am not necessarily saying the same organisation – there was limited scope around philanthropic contributions in this location with that bridge. I think a number of avenues were explored looking at third party sources of funding.

The point I would make is if that there had been a gap of £5 million – £10 million it may have been something that you could plug. If you were, at the very least, looking at a gap of £100 million – between the £350 million in the Business Plan and the £463 million midpoint estimate that TfL had arrived at – and possibly an additional £250 million, the quantum of funding that you are trying to find is very, very significant. I was also very clear with TfL officers that I wanted them to look at options such as a workplace parking levy and to look at whether there may be a way to implement charges for parking on the TfL road network that over time may provide some revenue, but none of those options were giving us any assurance that you could plug the gap that had emerged once the really detailed design work had been done.

**Caroline Pidgeon MBE AM (Deputy Chair):** What about with those big landowners, British Land and Canary Wharf Group, had you any indication from them that they would contribute to this transport --

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We had discussions with all of the big landowners, Hilton Hotel and various others as well as the ones you have mentioned. To be clear on how the process works, because the bridge is referenced in Southwark's CIL Register you cannot get a section 106 contribution through planning on top of CIL, which is why we were having discussions around SIL. We also did have discussions with Canary Wharf Group and it was very clear that whilst they were supportive of the principle of a bridge there was not going to be opportunity for them to provide financial support.

**Caroline Pidgeon MBE AM (Deputy Chair):** Thank you very much, I think that I will leave that there for the moment. Thank you. Assembly Member Prince.

**Keith Prince AM:** Thank you very much, thank you. Good morning. I am going to start with the Deputy Mayor for Transport. Could you let us know when the Mayor was actually informed about the increasing complexities and costs associated with the Project?

**Heidi Alexander (Deputy Mayor for Transport):** I think I have already answered that question in response to Assembly Member Pidgeon earlier. I can repeat it if you want me to.

**Keith Prince AM:** Yes, would you mind?

**Heidi Alexander (Deputy Mayor for Transport):** OK, no problem. Since I have been in post I know that on at least three occasions we have briefed the Mayor in person with senior officers from TfL. In September of last year there was a discussion about what the estimated costs were, about the emerging ideas around the

design concept and the alignment. He, and I, were aware at that time that this was a terrifically complicated project and that for any of the estimates that TfL was providing to us at that point in time as more work was done they could go up and we were also being told they might go down. The experience, however, between September and May of this year [2019] is that the costs were only ever going in one direction. Therefore the Mayor was personally briefed in April and May on what the latest position was.

**Keith Prince AM:** Whose decision was it to pause the bridge? I think that is a sensible position to take I hasten to add.

**Heidi Alexander (Deputy Mayor for Transport):** It was the decision of the PIC of TfL, as we have discussed already in this session. As I have also said already, in May we had a discussion with the Mayor where he asked TfL officers to go away and review the case for the bridge alongside the possibility of doing some additional work on getting a fast frequent ferry option in place there. However, it was the decision of the TfL PIC to go back to an early stage of project development around what the options were, bridge versus ferry. The Mayor and I agreed with that decision.

**Keith Prince AM:** The decision was actually a Chair's decision, wasn't it? It was not actually taken by any Committee, it was a Chair's decision.

**Heidi Alexander (Deputy Mayor for Transport):** Yes. As I explained to Assembly Member Pidgeon, the paper is drawn up by TfL officers. When a Chair's Action is taken, either as part of the PIC or Finance Committee, the paper will be circulated to all members of that Committee. They have an opportunity to comment on it. They have an opportunity to speak to the Chair, if they so wish. Then the decision was taken by the Chair through a Chair's Action, but it was a decision of the PIC.

**Keith Prince AM:** Where did the Mayor play a part in this?

**Heidi Alexander (Deputy Mayor for Transport):** As I explained --

**Keith Prince AM:** I know I seem to be making you repeat yourself. I do humbly apologise for that but perhaps I should be a little bit clearer. I am really interested in at what point the Mayor said, "OK, guys, I think we ought to put a halt to this", or did someone like your good self quite wisely say to him, "Mr Mayor, I think actually we need to put a brake on here because we are going to be spending £1 million a week"?

**Heidi Alexander (Deputy Mayor for Transport):** Given the briefings that had been provided to the Mayor in April and May, as I have talked about, and the discussions that we had we were concerned about the deliverability of the bridge in the short to medium term and I will not repeat the reasons for that.

**Keith Prince AM:** No, I have all that here.

**Heidi Alexander (Deputy Mayor for Transport):** At that May meeting the Mayor asked TfL to go away and do some more work and review the case. It culminated in a paper being circulated to members of the PIC, I think on Tuesday, 18 June. I was aware, shortly before that, a paper would be circulated to the PIC and the contents of that paper and you would expect me to brief the Mayor --

**Keith Prince AM:** I would.

**Heidi Alexander (Deputy Mayor for Transport):** -- and his senior team on the contents of a paper such as that going to the PIC. He is, at the end of the day, the Chair of the TfL Board. That was the precise chronology over that period of time.

**Keith Prince AM:** OK. We are saying really around about 18 June then, are we?

**Heidi Alexander (Deputy Mayor for Transport):** Shortly before that.

**Keith Prince AM:** Just before then.

**Heidi Alexander (Deputy Mayor for Transport):** Yes.

**Keith Prince AM:** I have a couple of other questions, if I may? I am sorry, I probably went about it in the wrong way and I apologise for having to make you repeat stuff you have already said.

There were a couple of concerns for the IIPAG. On more than one occasion they refer to the main driver of the Project being the commencement of the construction within the mayoral term and also the drive from the Mayor to get things moving more quickly. I respect that because he wants to get things moving along, and quite often these things do not happen unless you have the drive from the Mayor so I am not criticising him for that. I am wondering - if you read between the lines - whether that sense of urgency and drive to get spades in the ground, so to speak, could potentially add to the costs and if there is an inference that could add to the cost. Perhaps I should ask David, is there any truth in that and had we taken longer could we perhaps have found a cheaper way?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** It is true to say there is an ambition on both TfL's side and the Mayor's side to realise the benefits that a new crossing here could deliver as quickly as possible, undoubtedly. That is not to say that we were holding back on any information in relation to what the challenges were and the significance of those challenges.

As I mentioned before, when we put a programme up - it went into one of the Mayor's briefings - it would have clearly stated against each of the activities what the risks were associated with those activities and what that might mean in terms of the timescale to get a spade in the ground in terms of the start of work before 2020. Whilst 2020 was in our timetable in terms of being achievable, we also recognised that there are challenges along that way, what those might be and therefore what that might mean in terms of extending that timescale out.

**Keith Prince AM:** Either of you can answer this; was there ever a discussion around the fact that you could deliver the ferry a lot quicker if 2020 is the landing date?

**Caroline Pidgeon MBE AM (Deputy Chair):** We are moving on to that a bit later.

**Keith Prince AM:** I will withdraw that question. I do not want to tread on someone else's toes or flippers, or whatever it is. Fine, I will leave it at that. Thank you very much indeed, thank you.

**Caroline Pidgeon MBE AM (Deputy Chair):** I will just pick up from Assembly Member Prince; the mayoral briefing papers, could we see those please?

**Heidi Alexander (Deputy Mayor for Transport):** There will be no problem with that.

**Caroline Pidgeon MBE AM (Deputy Chair):** Thank you.

**Florence Eshalomi AM (Chair):** We are going to move on quickly - mindful of time, colleagues - looking at lessons learnt and the next steps.

As I mentioned, Deputy Mayor and David, there is still a lot of support for this in Southwark with a number of the residents and businesses. Currently there is sheer overcrowding in that part of the borough and trying to navigate your way out of Canada Water Tube Station in the morning is quite a challenge. Therefore we do need some provision around how we can get that part of London to promote active travel and help ease that transport congestion.

I will come over to my colleague, Assembly Member Copley, who will start on this section in terms of the estimates.

**Tom Copley AM:** Does TfL need to improve its initial cost estimates?

**Heidi Alexander (Deputy Mayor for Transport):** I think if you look back to what David Hughes [Investment Delivery Planning Director, TfL] said at the Budget and Performance Committee last week there is a recognition that this is an area we need to get better at. Clearly there is a big difference between whether it is a £150 million cost estimate up to a potential upper limit of £600 million. That is criticism that has been levelled at TfL, I think there is some merit in it and we need to get better at it.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** I mentioned how the initial estimate was produced, which was based on this cost model looking at the out-turn cost for different bridges across the world. Whilst that is extremely helpful in terms of giving us a cost per metre, clearly it was not adequate in terms of understanding the complexities on this part of the river and therefore what was necessary in terms of the challenges to overcome some of those constraints and the design that was appropriate there.

Yes, I would agree that we need to do more about that early stage planning in terms of ensuring there is more local information that is brought to bear alongside that cost benchmarking information from the out-turns from other projects.

**Tom Copley AM:** You mentioned this consultancy that you went to and it came up with a cost per metre because you did not have a particular design in mind. Presumably they look at the local circumstances as well. Is it that as you are going down the line you come across other challenges that you were not aware of at the beginning?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** It is both of those parts really. It is a model that is built, as I said, from bridges that are all over the world; rail bridges, road bridges, pedestrian and cycle bridges and different opening mechanisms, different lengths, different spans in terms of the number of supports in the river and some of these were in bays as well. All of that information is extremely helpful in giving us that range but it did not include enough around those local conditions. TfL is not experienced in terms of delivering these types of projects. It is innovative for us, which is why we tried to bring in the appropriate level of expertise and knowledge from external organisations that have been involved in it. However, it is only when you really go through that process in earnest, develop the design and robustly test it again and again and again that you can fully appreciate some of the challenges and therefore what you need to do in terms of adjusting that design to ensure that it is capable of being delivered.



We are now at a point, I believe, where we have a design that can be built, can be operated and can run for the next 120 years, and we have a construction methodology alongside that. The challenge with it is that, unfortunately, it is just unaffordable.

**Tom Copley AM:** You are saying that will now be on the shelf and can be taken off the shelf should funding become available?

**Heidi Alexander (Deputy Mayor for Transport):** Yes. For complete transparency, we will complete the work that has been done in a logical way, which will mean a little bit more of expenditure. That is to make sure that you can package it up so that if financial circumstances change in four, five or six years' time then we will be able to take that off the shelf, dust it down and take that concept design and the construction methodology, the operational arrangements that have all been prepared. This is not money wasted. This is a really important piece of work that could be dusted off and proceeded with at a future date.

**Tom Copley AM:** Heidi, in terms of other projects, do you have any concerns that cost estimates are wrong for other key Transport Strategy projects and they therefore may become undeliverable?

**Heidi Alexander (Deputy Mayor for Transport):** Sat here today, no, I do not. I think we do need to ask ourselves some tough questions about that initial estimate planning but I am not sat here with a list of schemes where I have those concerns.

I would reiterate the point that David has made though about the very unique nature of this project and that it is one where TfL has not had previous experience of doing these sorts of projects. If you think about some of the work at the big London Underground stations – be that the work at Victoria or Tottenham Court Road – we have seen those schemes come in on budget using exactly the same process that we have been using here in terms of our estimates of cost, our estimates around risk and construction inflation etc. Where we are doing projects that are novel, projects where there is not a comparator anywhere in the world, it is not to say we should not try because I think it would have been an incredible symbol. It would have been wonderful to have built a world first but we also have to be responsible and realistic.

**Florence Eshalomi AM (Chair):** Sorry, Assembly Member Copley. On that, Deputy Mayor, not to abuse my Chair's position but it seems as if a number of transport projects on this side of the borough, in the south, are being scrapped. Obviously we have seen the loss of the RV1 bus and this bridge being paused. The obvious one I am talking about, which I will come to, is the Bakerloo line extension that obviously has an impact on Lewisham. They are really big transport projects that would have made a big difference in helping to alleviate some transport issues. I would like to get your assurance that we will not be getting a letter in a few months to say that is now going to be paused.

**Heidi Alexander (Deputy Mayor for Transport):** You are talking about the Bakerloo Line [Extension]?

**Florence Eshalomi AM (Chair):** The Bakerloo line; I appreciate you do not have a magic pot of funding but just to make sure we continue to work and engage with Southwark and Lewisham on that really important extension.

**Heidi Alexander (Deputy Mayor for Transport):** I understand the level of disappointment and anger that will exist amongst residents and elected representatives around Rotherhithe, and some people on the north side of the river as well will be disappointed by it. What I would say in regard to the letter the Leader of the

Council sent to me, which I think you were a signatory to, is that we plan to be going out to another consultation on the Bakerloo line extension later this year. That is a real concrete sign of our commitment to moving forward with that project. However, as you rightly allude to, the funding and financing package for delivering the Bakerloo line extension is one where significantly more work needs to be done. Nobody should underestimate the scale or complexity of that project either but in terms of the benefits it could bring to that part of South London I am very, very familiar with them.

What I would also say is that we are making significant progress with walking and cycling investments in Southwark and in this part of London. Work has already started on Cycleway 4 that goes from Tower Bridge down to Greenwich and then will be extended to Woolwich. We are also working with Southwark on a new cycle route from Rotherhithe to Peckham. I have asked TfL officers to accelerate their work to expand the Santander Scheme further into Southwark so, when we get this fantastic new cycleway built between Tower Bridge and Greenwich, further along that route you can get Santander docked bikes. I know that is an aspiration that Southwark have. I understand why you make those points but there is a lot of good news for Southwark. There are lots of projects we are working on very well with them.

**Tom Copley AM:** Thank you. Sorry, Unmesh.

**Unmesh Desai AM:** I wanted to mention the Isle of Dogs as well in that context. Whilst the bridge may have been shelved for the time being, they have been very focused on the very necessary transport upgrades needed for the island because they are suffering from massive overdevelopment.

**Heidi Alexander (Deputy Mayor for Transport):** You are completely right to talk about the Isle of Dogs. We have worked very constructively with Hackney and Tower Hamlets Council on a new cycling route to go from Hackney all the way down to the Isle of Dogs. Of course, Canary Wharf will benefit from the new Crossrail station when it is opened. I know the leadership team at Crossrail are moving heaven and earth to get the line open there as soon as possible. There are a number of other transport projects we are working on in relation to the Isle of Dogs. I am happy to come and brief you on those separately.

**Tom Copley AM:** Can I ask about the funding that is allocated to this in the Business Plan, what happens to that now? Does it sit there until a future point where the Project might go ahead or are you going to allocate it to other schemes?

**Heidi Alexander (Deputy Mayor for Transport):** In this year's business planning cycle, which we are starting imminently - it is already underway internally within TfL and we will publish the 2019 Business Plan in December of this year - we will look at all the competing priorities for that money. Clearly we have a lot of money that we, to date, have been able to protect around the wider Healthy Streets Portfolio, investment in safer junctions and cycleways. I am keen that we do all we can to protect that budget but we will have to look at all the priorities in the round. We are not in a position, at this point in time, to say we will take that money and spend it on these projects. It does not work in that way, you have a much more holistic discussion over a number of months about what the priorities are.

**Tom Copley AM:** Will that be a TfL Board discussion?

**Heidi Alexander (Deputy Mayor for Transport):** The TfL Board are involved at an early stage. The Board members in that discussion and, as you would expect, myself and the Mayor are also briefed at various points along the process about what the thinking is. Ultimately, yes, it is the TfL Board that needs to sign off the Business Plan.

**Tom Copley AM:** Finally, do you think TfL needs to make the Mayor more aware of the complexity of flagship projects and the risks associated with them? I do not just mean this Mayor, I mean the mayors overall.

**Heidi Alexander (Deputy Mayor for Transport):** To be fair to the TfL team, since I was first briefed on this project back in July last year the challenges and the complexities have been highlighted to me and we have had a mature and reasoned discussion between City Hall and TfL. To be honest, it is an example of good governance. You can compare this to other projects such as the Garden Bridge where a previous Mayor, in my view, may have been throwing his weight around and not necessarily listening to advice being given to him. This is the exact opposite of that situation.

**Tom Copley AM:** Thank you very much.

**Caroline Russell AM:** I want to move on and look at how to go forward. I want to find out a bit about what the timeline of TfL is for the development and delivery of an alternative river crossing option like an enhanced ferry service.

**Heidi Alexander (Deputy Mayor for Transport):** Shall I start and then perhaps David could pick up the detail?

**Caroline Russell AM:** Yes.

**Heidi Alexander (Deputy Mayor for Transport):** My understanding is TfL would be looking to come back to us with some options by October this year for a fast frequent ferry service across the river between Rotherhithe and the Isle of Dogs. I would like to see, if possible, those ferries be electric but at the very least hybrid so we can gain some of the environmental benefits we have seen down in Woolwich with the new ferries there. Just to reiterate, it will be a quite new and exciting type of ferry service potentially. If you go to Amsterdam you can see huge numbers of roll-on-roll-off ferries with huge numbers of pedestrians and cyclists accessing them easily.

The river in London is obviously a tidal river and therefore we would have to be confident that any vessel could navigate a tidal river. That is the work that David and his team have been tasked with doing; looking at what the options are, looking at whether it would be a charged or an uncharged ferry, a free ferry. We need to do that work over the next couple of months and hope to be in a position in October to say some more.

**Caroline Russell AM:** Do you want to add to that?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Just to add to, we have seven work streams effectively that we are looking at to help inform that. We are looking at things like re-planning, both in terms of what sort of service is required across the river as well as services that already run up and down the river. Quite a number of them stop at Canary Wharf but they do not stop at Rotherhithe. Is there an opportunity there to think about how you could also service east-west travel along the river rather than just north-south?

The fare strategy; we need to do some further demand modelling around what happens when it is free, which is why the options that we put in the consultation back in 2017 to different options are around who would potentially charge for it. What are the vessels? The Deputy Mayor for Transport has referred to the fact that pure electric would be a preference. What we do not want to do is get it wrong in terms of the tides on this

part of the river and what is required in terms of propulsion here because it is quite a strong tide at this point. We are looking at what is out there.

We are also in discussions with organisations like Thames Clippers around the proposals they have come up with. Then the piers, Canary Wharf pier, Rotherhithe pier; what needs to happen there to ensure they can accommodate pedestrians and cyclists. I am sure with roll-on-roll-off cyclists one of the challenges is the piers go quite a long way up and down so you need to think about those ramp gradients, ensuring it is as seamless a journey as possible.

Then obviously how that ties in with complementary measures, as well as what that means for the demand of usage here and the cost associated with those different options. That work is already happening and the intention is we will complete that by October.

**Caroline Russell AM:** Thank you. Obviously this is instead of a bridge that would presumably have been free to use. Are you modelling this as a free service for pedestrians and cyclists to use?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** That is certainly one of the options we will test. As I am sure you would expect, we need to understand the cost implications of that and report back to our PIC. That would be part of a consideration around what the right solution is going forward.

**Caroline Russell AM:** In that decision-making process you will be thinking about the benefits in terms of delivering the Mayor's Transport Strategy. Presumably, if it is free, then more people will use it, you will enable more trips by walking and cycling and more people to get off the Tube as Florence [Eshalomi AM] was talking about earlier.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Absolutely. That will be part of what we call the demand sensitivity modelling that we do. You test different graduations of fares as well as different frequencies of service and other factors to help understand what that means in terms of the big picture.

**Caroline Russell AM:** At the moment, if you go by Tube from Canada Water to Canary Wharf it is £1.70 whereas a single crossing on the river bus is £4.40. If you want people to use a ferry service you very likely need to either subsidise it a bit or subsidise it completely, if you want to get those benefits for walking and cycling.

The problem is the gaps in the walking and cycling networks. We saw the video at the beginning where the woman was saying they like cycling, but you have to go all the way back to Tower Bridge to get yourself over the river. If you are looking at ferries at Rotherhithe, are you also thinking about them to fix other unidentified gaps like Canary Wharf to North Greenwich or relieving the Greenwich Foot Tunnel? Are you thinking about ferries not just on this alignment but on other alignments too?

**Heidi Alexander (Deputy Mayor for Transport):** One of the things that David and I have discussed in TfL doing this piece of work is if we are going to be building new piers, for example, whether there is an option for those piers to be movable as well. There is a whole range of different things we are looking at. If we can move forward with this, and it is proven to be a success, I would want TfL to be considering how you can improve connectivity across the river from the southern side to the northern side and back again. We need to get this work done first before we start committing to a whole series of different things. It is going to be an interesting couple of months awaiting this feedback from TfL.

**Caroline Russell AM:** You are expecting to have more information in October.

**Heidi Alexander (Deputy Mayor for Transport):** October, yes.

**Caroline Russell AM:** OK. Do you think TfL would consider revisiting the Bridge Project in the future?

**Heidi Alexander (Deputy Mayor for Transport):** From my perspective - knowing what I know about the various competing priorities there are, whether it is within the Healthy Streets Portfolio of funding or more broadly across the organisation around investment in better public transport - I find it difficult to envisage how in the next five years we will realistically be in a position to spend £0.5 billion on a walking and cycling bridge in this location. Whilst that work has been done and we talked about how it can be packaged up ready to be taken off the shelf and dusted down, at the moment it is difficult to see how you can make an investment of that size within the next five years.

**Caroline Russell AM:** What about the other option that was thought about at the beginning, the idea of the immersed tunnel which was £440 million? In the context of the bridge having gone up so much that starts to be a more interesting and potentially more doable option. Would TfL consider looking at that option again?

**Heidi Alexander (Deputy Mayor for Transport):** That might be one for David to answer in more detail.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** When we published the information back in 2017 on the options that we looked at you are right, the tunnel option was called an immersed tunnel. The reason we went for that solution is because you want to try to minimise the amount of land you require for ramps back up to ensure that is best usable for cyclists. Immersed tunnels have challenges in themselves. You have to effectively dredge a trench in the riverbed and then you are laying a tube in the riverbed. That has significant environmental implications. That is an important consideration, and for that reason we had quite significant concerns around the immersed tunnel option.

The other consideration, which impacts on demand, is it is challenging to create a pleasant and conducive environment within a tunnel for pedestrians and cyclists. Greenwich works quite well because there is a reasonably high level of footfall and activity in there but it is still challenging. We looked at examples from around the world and this was borne out by some research we did of potential users, both existing cyclists and pedestrians as well as potential people who could change their trips. When you ask them what there is their propensity to change, a bridge had a much higher level of attraction than a tunnel because of the concerns of people about personal security and other aspects.

Whilst you are right when you look at it in terms of the cost now compared with the tunnel option when we costed it in 2017, there are those other considerations which are very important in determining if that would be the right solution to take forward. I would suggest that it would not be.

**Caroline Russell AM:** That suggests the ferry option is the thing that seems to be giving the best potential future.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Yes.

**Heidi Alexander (Deputy Mayor for Transport):** Correct.

**Caroline Russell AM:** Can I just double check, have you ruled out making the ferry option a free ferry service?

**Heidi Alexander (Deputy Mayor for Transport):** No, we have not ruled that out.

**Caroline Russell AM:** Thank you.

**Tom Copley AM:** That point has been covered.

**Florence Eshalomi AM (Chair):** Do you want to come in?

**Unmesh Desai AM:** I was going to say I am glad about what you said about the ferry crossing because the one consultation meeting that I went to on the Isle of Dogs was a very well-attended meeting. The preferred option was a free ferry service. About 200 people were there.

**Florence Eshalomi AM (Chair):** Thank you. Assembly Member Pidgeon.

**Caroline Pidgeon MBE AM (Deputy Chair):** Yes, a couple of questions. Yesterday the Mayor said that you were looking to safeguard the route. I understand today you have talked about getting the package all ready, so you can take it off the shelf in the future. Are you doing work to properly safeguard the route as we think about projects like Crossrail 2?

**Heidi Alexander (Deputy Mayor for Transport):** On the southern side of the river at Durand's Wharf, which was the proposed landing point, is public open space. That is a slightly different question to the land on the northern side of the river at Westferry Circus. TfL will need to have some discussions with Tower Hamlets about their planning policies and how they classify that land. David may be able to say something more about whether those discussions have started.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** We are having discussions with Tower Hamlets officers in terms of how you could provide protection for a future bridge. With regard to the Deputy Mayor's point on the Southwark side, because it is metropolitan open land it has very strong protections around it already. It is the Tower Hamlets' side where we are doing a little bit of work to ensure we keep that.

**Caroline Pidgeon MBE AM (Deputy Chair):** You are being positive about that.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Certainly, the discussions we have had with their officers to date have been very positive. There is a bit of work we need to do with them to take that forward.

**Caroline Pidgeon MBE AM (Deputy Chair):** I was just reflecting on the PLA and their role in all of this because it is a slightly strange body. It is one that the previous Mayor tried to take over but we did not get very far on that. Clearly, right at the start they must have said to you, way back when you started this project, "This is the span we are looking at, this is the loadings and this is the height" and what the requirements were for a bridge. It sounds to me, potentially more recently that has changed. Are you able to provide in the information after this meeting to us what it was right at the start and then what it has become, just to understand whether their position has slightly changed along the route and which may have affected this?

Obviously we are looking at TfL and you have all these experts helping you, but what has the role of the PLA been, have they always been supportive of this or have they been rather more cautious?

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** There were three fundamentals when we started with the PLA. The first one was that there should be a 20 metre height clearance above what is called spring high water levels. We have come down from 20 to 15 to 12 metres. They also made it very clear that the navigable channel should be kept clear because of the way that boats move on this part of the Thames. The other one was that there needs to be absolute certainty when boats are coming down from Tower Bridge for the largest of the boats --

**Caroline Pidgeon MBE AM (Deputy Chair):** That it slows them.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Exactly, because there is nowhere to stop effectively between Tower Bridge and Rotherhithe. What we did with the PLA is we had vessel surveys that have been running for nearly two years now, gathering data around how vessels move on this part of the Thames and what the size and the other characteristics of those vessels were. That evidence has been absolutely crucial in terms of being able to get agreement of that lower height as well as what the appropriate width of the navigable channel is, what the adverse events are that you also need to be able to plan for and why you need to think about the size of the shipping and about protection and other considerations. They have been very good at taking a data led approach, as we have tried to do as well, in terms of determining, "That is where we started and this is where we are now".

**Caroline Pidgeon MBE AM (Deputy Chair):** It would be helpful if we could have the numbers in writing of the span, the loadings and the height just to understand that process as well. As I say, I know from the past that there have been concerns that the PLA may have been an obstacle rather than a fully engaged partner. That would be helpful. Thank you.

**Keith Prince AM:** Very quickly, I know you are in the very early stage but have you considered, in paying for the ferry, making it part of the bus system? If you are on a journey, like you would be on the Hopper Fare, if you go on it during one hour then it is free but obviously if it is your first journey of the day then it is £1.50, and it also benefits from the capping. Just make it like part of the bus system. I think that would be something most people would find acceptable because if you are coming off the Tube there would not be any extra cost and things like that.

**David Rowe (Head of Major Projects Sponsorship, Transport for London):** Your thinking is very much along the lines of our thinking in terms of one of the scenarios we will test. We will be testing free as well as what is the comparable cheapest alternative you might use on public transport in terms of fares, as well as what the difference is in terms of the fares that are charged today. One of the Assembly Members mentioned the capped fare and comparison of that with a Travel Card. Yes, there are a number of different tests we will do but, absolutely, that is a good one to do.

**Keith Prince AM:** OK, thank you.

**Florence Eshalomi AM (Chair):** All right, thank you for that. This is something we will continue to look at from the Committee and it will be helpful to get regular updates from you. We will look forward to that initial report back in October on the ferry options.

Just to thank our guests and can we note the report?