



**OFFICIAL REPORT**  
AITHISG OIFIGEIL

# Rural Economy and Connectivity Committee

**Wednesday 8 March 2017**

**Session 5**



The Scottish Parliament  
Pàrlamaid na h-Alba







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**RURAL ECONOMY AND CONNECTIVITY COMMITTEE**  
**8<sup>th</sup> Meeting 2017, Session 5**

**CONVENER**

\*Edward Mountain (Highlands and Islands) (Con)

**DEPUTY CONVENER**

\*Gail Ross (Caithness, Sutherland and Ross) (SNP)

**COMMITTEE MEMBERS**

\*Peter Chapman (North East Scotland) (Con)  
\*Mairi Evans (Angus North and Mearns) (SNP)  
\*John Finnie (Highlands and Islands) (Green)  
\*Rhoda Grant (Highlands and Islands) (Lab)  
\*Jamie Greene (West Scotland) (Con)  
\*Richard Lyle (Uddingston and Bellshill) (SNP)  
\*John Mason (Glasgow Shettleston) (SNP)  
\*Mike Rumbles (North East Scotland) (LD)  
\*Stewart Stevenson (Banffshire and Buchan Coast) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Keith Brown (Cabinet Secretary for Economy, Jobs and Fair Work)  
David Climie (Transport Scotland)  
Michelle Rennie (Transport Scotland)  
Lawrence Shackman (Transport Scotland)

**CLERK TO THE COMMITTEE**

Steve Farrell

**LOCATION**

The Mary Fairfax Somerville Room (CR2)







# Scottish Parliament

## Rural Economy and Connectivity Committee

Wednesday 8 March 2017

*[The Convener opened the meeting at 10:00]*

### Major Transport Infrastructure Projects (Update)

**The Convener (Edward Mountain):** Good morning, everyone. Welcome to the eighth meeting in 2017 of the Rural Economy and Connectivity Committee. I remind those present to turn off their mobile telephones. No apologies have been received.

Item 1 on our agenda is evidence on major transport infrastructure projects. I welcome Keith Brown, the Cabinet Secretary for Economy, Jobs and Fair Work. We received an update from Mr Brown on 14 December regarding various projects. The minister is joined by Michelle Rennie, the director of major transport infrastructure projects in the Scottish Government, and Graham Porteous, the head of special projects at Transport Scotland. Minister, you asked to attend the meeting and we would welcome an opening statement from you.

**The Cabinet Secretary for Economy, Jobs and Fair Work (Keith Brown):** Thank you very much, convener, and thanks to the committee for the chance to provide an update. At the last discussion that we had, committee members made it clear that they would like to be kept updated as frequently as possible and to take cognisance of any emerging issues, which is why I asked to come back to the committee. In particular, I will mention the Forth crossing—I know that members will hear about that subsequently—and the Aberdeen western peripheral route, but I will also mention where we are with most of our transport projects. It has been a busy time and significant works have been undertaken across all projects over recent months.

I will start with the AWPR. Since we last had a discussion about the 58km Balmedie to Tipperty project site, further progress has been made during 2016 and early 2017. I advised the committee previously that phase 1 of the project at the Aberdeen airport site opened in August last year, ahead of the contractor's planned autumn target, and it is already being used and providing benefit to local people. In November last year, the contractor, Aberdeen Roads Ltd, advised us that it was unable to complete the Balmedie to Tipperty

section by spring this year as originally planned—it is seasonally affected work. I alerted the committee to that change in December and I would like to provide a brief update on the progress that the contractor has made since then.

The Stonehaven southbound slip roads are expected to open in spring this year, which will bring early benefits to the people of Stonehaven by taking long-distance traffic away from the town. At the major bridge over the River Dee, the south pier is now complete and the north pier is in progress. Once the north pier is completed, the works to install the bridge deck will commence. Those works, which will include the slip forming of the concrete deck using a balanced cantilever approach, are due to begin by late spring. Road surfacing works recommenced last week in the southern section and the road foundation works are due to recommence this week. The fast-approaching spring season will also see the recommencement of the remaining earthwork operations.

There was some discussion and some press activity in the media last night about utilities, and it is worth mentioning that the project is unusual in as far as we were well aware of the pressure on utilities. Therefore, I asked all the utility providers to come to a meeting in advance of the contract being let so that we could discuss the ability to ensure that utility diversions, where necessary, were undertaken as smoothly as possible. That was an exceptional action; we have not done that in any other project. There are elements of commercial discussions with the contractor that I cannot divulge but, in addition, it is true to say that we have helped out with one or two substantial utility diversions—one in particular—at the contractor's request. I will not go into the details but, at the request of the contractor, I wrote to the utility provider—not a public utility provider—to help out. Utilities will always be a major feature of such contracts.

As I notified the committee in December, there was a delay in relation to completing the Balmedie to Tipperty section but, despite the revised programme for Balmedie to Tipperty, our advisers have independently confirmed that the overall programme of delivery for the works by winter 2017-18 remains achievable. There will be challenges with that, as there are with all successful major projects.

Sound project management and, of course, sufficient resourcing by the contractor are required in addition to a willingness to resolve any issues between the parties in a sensible way. We undertake discussions on those things, as we do in all major contracts. They can sometimes result in tensions, of course, but we and the contractor



are trying to do everything that we can to ensure that we complete the overall project on time.

In relation to Balmedie to Tippetty or any other delays, I think that I talked last time about whether a penalty was paid by the contractor, as that issue arose. It is worth repeating that that is not how it works; the contractor just does not receive any money. It will receive money for the airport section, which I mentioned earlier, as it is in use. Essentially, the penalty is that the contractor does not receive funding.

To conclude on the AWPR, Transport Scotland and I continue to work together with ARL to deliver the benefits of the project as soon as possible.

I will try not to anticipate too much of what members will hear from those who are involved in the Queensferry crossing, but I am sure that members will have seen that the final deck closure was completed on 3 February. Members will hear more evidence later about the progress that has been made, but I can say that things such as the waterproofing of the deck surface, the surfacing of the deck to take traffic, and work on the wind barriers are now being undertaken. Members will hear more about that work later, so I will move on to other projects.

Design work is well under way on the 11 road schemes that make up the 80 miles of the A9 dualling programme, which is one of the biggest transport infrastructure projects in Scotland's history. Members might be aware that some residents of Kindallachan, Guay and Dowally have had concerns about some of the proposed options for dualling, on the ground that there would be negative impacts on the villages and their properties. The preferred route for that section was made public in December, and the online option was chosen, but residents remain concerned. In fact, they made representations in the public meeting after the Cabinet meeting in Pitlochry on 6 February. I spoke to residents, and members of Transport Scotland's senior management team subsequently spoke to residents by telephone on 7 February to address concerns.

Residents of Birnam and Dunkeld remain in discussion with Transport Scotland on a co-creative process to capture community input into the route options design and assessment. We envisage that commencing after the local government elections in May to allow further progress towards identifying a preferred option.

On 31 January, the academy 9 programme launched a Scottish credit and qualifications framework module that will assist teachers who are involved in science, technology, engineering and mathematics to raise awareness of the A9 dualling programme in the areas of engineering,

ecology, geology and sustainability. The academy 9 glow blog, which recently went live, features extensive material on the A9 programme for use by teachers and pupils. We look forward to supporting its use in schools across the length of the A9 in the coming years.

On the Kincaig to Dalraddy section of the A9 dualling specifically, traffic is already using the southbound carriageway, which some members might be familiar with. We remain on schedule to fully open the 7.5km stretch this summer to improve the safety of the route and provide better access to and from the Highlands.

A prior information notice—or PIN—for the construction contract for the 9.5km section between Luncarty and Birnam has now been published, and we hope to hold an industry day in the coming weeks to discuss the scheme with potential bidders. Preparatory works to facilitate that construction will begin later this year, and the main works contract is scheduled to commence in early 2018.

Design work continues apace across the rest of the route between Perth and Inverness, and a series of exhibitions are under way, which allow local communities to view the preferred routes for the lengthy 24km section between Dalraddy and Slochd and the 16km Crubenmore to Kincaig scheme. That is a further 40km of the A9 dualling programme.

Finally on the A9, work is under way to identify contractors to carry out a series of advance works across the entire A9 route in preparation for future construction. It is expected that the opportunities will be of particular interest to small and medium-sized businesses, including locally based businesses that would like to be part of that innovative and ambitious programme.

Our other big programme is, of course, the A96 dualling. There has been a contract notice for design work. The estimated prices for the two projects—they can be only estimates at the early stages of both projects, given that many contracts are still to be let—were similar, at around £3 billion.

A contract notice for the design work on the 26-mile stretch of the A96 from east of Huntly to Aberdeen, also known as the eastern section, was published on 24 January. That major contract marks a further milestone on the road towards the dualling of the A96, with all the investment and improvements that that will bring to the north-east and the Highlands. Our timescale for that is 2030, with the A9 being done by 2025.

Transport Scotland has also completed the development and assessment of the preferred option for the dualling of the 31km stretch of the A96 from Inverness to Nairn, including the Nairn



bypass section, and it published draft orders for the scheme on 29 November for formal comment. The objection period ran for nine weeks, ending on 31 January.

Effective engagement with affected parties is a key part of the statutory process and it has been my experience that the more discussion that we have in the earlier stages of the process, the smoother the rest of the process will become. In many cases, that means that we can enjoy the support of those affected parties. As with all projects of that nature, we will engage directly with the objectors to resolve objections. I have spoken to some local members of the Scottish Parliament who have raised issues about the project. Only when the objectors have come forward will we be able to see whether a public local inquiry will be required to consider the objections that we have received and that have not been withdrawn. Ultimately, ministers will consider the outcome of all the consultations and objections that have been raised, including the recommendations of independent reporters, if that happens.

The objections that we have received so far are being assessed. However, in the event that we cannot resolve them all, we expect that a public local inquiry will happen late this year or early next year.

On the M8/M73/M74 motorway improvements project, the focus of construction has now shifted to completing the various structures across the project. We opened the 560m Raith underpass to traffic on 16 February. I do not know whether the committee has had a chance to look at it but it is an impressive development. It provides a direct link from the A725 Bellshill bypass to the A725 East Kilbride expressway. We have had substantial feedback from local people about the benefits that it has brought them. The development has received positive media coverage and is delivering benefits to the users of the A725.

The full benefits of the interchange will not be obtained until the works on the M74 are complete. We have now reached the stage of construction at which it is necessary to connect the new offline infrastructure, which is now almost complete, with the existing online road network. There is a significant height difference there, which is why we have had to put in place a 10-week diversion that is projected to add an average of 10 minutes' delay. That is unavoidable at this stage of the project but we are now two or three weeks into that 10-week period. Although there have been delays, the diversion has been effective. The diversion route allows the tie-in of the new M8 motorway. Traffic on surrounding roads has been heavier but the diversion itself is performing well and officials continue to work closely with the

Scottish Roads Partnership to ensure that traffic management measures are removed at the earliest opportunity, when it is safe to do so.

The last time that I came to the committee, members, including Mike Rumbles, expressed interest in the Laurencekirk bypass. That project is being taken forward by my colleague Humza Yousaf. The committee will have received an update after our previous discussion, so I will just say one or two words about that.

We announced the £24 million package for the design and construction of the new grade-separated junction at Laurencekirk. That was part of a package of additional investment alongside the Aberdeen city region deal. Transport Scotland appointed design consultants for the scheme in September, and is taking forward the next stage of design development for the junction improvement, which is the options assessment. Thereafter it will proceed through the relevant statutory procedures.

The on-going essential design and assessment process to identify the preferred junction layout is programmed to be completed in 2018. The detailed assessment of the preferred option will follow that, culminating in 2019 with publication of the draft orders for formal comment. Obviously there is still a lot of development work to be carried out but we will continue to push through the preparation stages to deliver the scheme as soon as possible. That will deliver improved road safety and economic benefits to road users and the local community in the wider north-east.

With that, convener, I conclude my remarks and thank the committee again for the opportunity to provide an update. I am happy to take questions on any of the issues.

**The Convener:** Thank you. The first question is from Peter Chapman.

10:15

**Peter Chapman (North East Scotland) (Con):** Thank you for the update, cabinet secretary.

The committee papers say that the AWPR scheme is to be finished by the winter of 2018. That could be read as the winter of 2017-18 or the winter of 2018-19. For the avoidance of any doubt, which is the date by which you are to complete the work?

**Keith Brown:** The winter that we are referring to is 2017-18. The work will go into the spring of 2018. That was the timescale that the former First Minister announced at the start. It is the winter that we are about to face—not the one that we are coming out of and not the one after that, but the winter of 2017-18.



**Peter Chapman:** Are you on target to meet that timescale, and are you on budget to do so? Anecdotal evidence suggests that the project is running well over budget. Can you give us any clarity on that?

**Keith Brown:** I can. I mentioned in my opening statement that we have had the project independently assessed as achievable on time. That is what we intend.

In terms of the budget, Michelle Rennie can say what we have actually spent so far. The project is paid for over a period of time through a unitary charge, which does not kick in until we have possession of the roads. Some expenditure will have been incurred on the roads that are already open, but the bulk of the expenditure will not begin until the remaining roads are opened. There is not an increase in the budget. We have not started to pay the charge yet.

**Michelle Rennie (Transport Scotland):** I do not have the figures for what we have spent to date, but we are still within the total scheme cost of £745 million at this point.

**Peter Chapman:** I am pleased to hear that.

There are one or two other issues that I need to bring up. I get complaints almost daily from farmers along the AWPR. Getting to the bottom of the compensation claims that they are putting in for damage done to their property seems to be an absolute minefield.

This issue was brought up with Humza Yousaf when he met the folks in the north-east but it has not gone away. No farmer expects to make money out of the scheme. Equally, no farmer should be left out of pocket because of the scheme, but that is exactly what is going on now. Relevant claims are being kicked into the long grass. It seems to be taking forever and a day to come to a conclusion and, in the meantime, serious amounts of money are outstanding.

The sad thing is that there was a real sense of good will between the farming community and the contractors at one time. That has completely and utterly disappeared. They do not want to work along with—

**The Convener:** Please come to a specific question, and, before you wrap up that question, please also make a declaration that, as I am sure that the cabinet secretary is aware, you are a farmer.

**Peter Chapman:** I need to make that declaration because I am speaking about farmers. I apologise for not doing so.

I have two questions. The fencing is completely inadequate. I have been fencing all my life and I know about it. I can assure you that sheep will not

be held in by the fences that are being provided along this road. The fences will hold in cattle, but they will not hold in sheep.

Second, we need to get the claims sorted out a lot more quickly than we are doing.

**Keith Brown:** I know that there are issues. I have talked to some landowners about this specific issue in the past and it is probably right that such issues come to me rather than to Humza Yousaf.

The process has been set for many years and has an element of independence built in to it. There are proper legal procedures in place, through the district valuer and the Land Tribunal for Scotland.

It is not the intention to delay compensation unnecessarily. I have made the same point that Peter Chapman has that people should not be left out of pocket. That should be the basic principle that applies. When there is a delay for perfectly understandable reasons involving either party, we will do whatever we can to help with that.

Peter Chapman can refer the individual cases that he knows about—I have probably seen some of them—to Transport Scotland and myself. If there is something that we can do that does not undermine the independent legal process that has to be gone through, we will undertake to do that on a case-by-case basis. I make that offer if he wants to get in touch about the cases.

**Mike Rumbles (North East Scotland) (LD):** Cabinet secretary, I welcome the final comment in your opening statement, which is not the least comment and was about the Laurencekirk junction. I appreciate it and I know that other committee members, particularly Mairi Evans, will also welcome it. It is really good news.

I will focus on the Aberdeen western peripheral route. We are in March 2017, so you are saying that we should expect the project to be complete by March 2018. Will you confirm that? There is always a little bit of uncertainty about what we mean by the seasons.

**Keith Brown:** I agree with the year but not necessarily the month. A season is a bit more elastic than a month but, as I said to Peter Chapman, we are talking about spring next year. We intend to finish by the end of the winter next year.

**Mike Rumbles:** That is great. I compare it to your forecast for the Forth bridge, for which we have a specific month. I get questions about what month we are looking forward to the AWPR opening. It is approximately March next year.

**Keith Brown:** Approximately, but it could be a month either side of that. Even May is sometimes



referred to as spring in some places. It is possible that it could be earlier or later than March, but we intend that it will be finished in that period.

**Mike Rumbles:** This time next year, we should be happy.

**Keith Brown:** Yes, I think so. That is our intention and the contractor's intention.

I know what you mean about the Forth replacement crossing. The December date that was mentioned was never the contract completion date but we hoped to have the bridge finished by then when we were told in 2005 that the state of the Forth road bridge's cables meant that we would have to stop HGVs travelling on the bridge by 2017. That is why we said that the new bridge would be finished at the end of 2016. As it turned out, because of the work that was done on the cables, that was not necessary and we still anticipate that we will finish the project by its contract completion date, if not earlier.

**The Convener:** We are joined briefly by a delegation from the Committee on Roads and Transport in the Senate of the Parliament of Kenya. We welcome the delegation to our committee. We will have some discussions later.

**Stewart Stevenson (Banffshire and Buchan Coast) (SNP):** I will focus on the Balmedie to Tippetty project. The reason that we were previously given for its rescheduling was, in essence, the weather. Are the works that are planned to be undertaken in the forthcoming winter as weather dependent as the ones that were delayed by the winter that is past, or are we at the stage at which there may be not zero potential impact but a substantially reduced weather impact on the project?

**Keith Brown:** It is probably unfair to blame the weather. It is more true to say that the works were not as advanced as planned before the winter came in. The earthworks were the specific problem and those will certainly have been completed before the next winter.

To ensure that I am getting that right, I ask Michelle Rennie to confirm.

**Michelle Rennie:** That is correct, cabinet secretary, but it would not be correct to say that the weather will have no impact on a 58km job in the outdoors in the north-east of Scotland. We need the right kind of weather for the activity that is under way at the time. For instance, heavy rain is detrimental to earthwork activities, so undertaking earthwork activities in the winter is risky to productivity. Equally, if we are laying road surfacing, very low temperatures can be problematic.

There is no particular weather risk at this point but we will be working outside and we are always susceptible to the weather.

**Stewart Stevenson:** What sort of activities are likely to be undertaken in that more adverse weather period that we occasionally call winter?

**Keith Brown:** As I mentioned in my opening statement, the earthworks are being recommenced. Beyond that, we would be into the preparation of the surface and the surfacing of the road.

**Michelle Rennie:** We will also be completing the structures over that period.

**Stewart Stevenson:** Is that in the winter of 2017-18?

**Michelle Rennie:** That is right.

**Stewart Stevenson:** There is still weather risk, but we are beyond the major impacts that would stop all the work when the earthworks cannot be done.

**Keith Brown:** I receive advice from Transport Scotland, which talks directly to the contractor. I would be firm about telling the contractor that it cannot say to me that, although it was quite close to doing so, it was unable to get quite as far as it hoped to before the winter and that the works would have to continue on substantially into next year, then use the same excuse the following year. I do not anticipate that happening, but it would not be acceptable to me; I would be very firm in that regard.

**The Convener:** After your previous appearance, I looked into the difficulties of doing earthworks in the winter. It made me smile to see that earthworks have continued apace up the A9. Indeed, they have been going on every week that I have been driving up and down the roads. Carrying out earthworks does not seem to be an issue on the A9, but it seems to be an issue on the Aberdeen road. Will you comment on that?

**Keith Brown:** That is absolutely what the contractor has said to us. Perhaps Michelle will comment, because she has a bit more experience in constructing roads than I have.

**Michelle Rennie:** We cannot make a general statement about earthworks. Obviously, some earthworks happen during the winter period.

The AWPR had a specific issue to do with its geographical location, the number of watercourses in that area and the impact on those watercourses of the previous winter and spring. The contractor and the various environmental bodies agreed that they would cease earthworks operations during the winter to mitigate the effect on the watercourses, so that we could avoid any of the incidents that we had previously experienced.



**Keith Brown:** If you have been travelling up the A9, convener, you will have seen there is one bit of earthworks still standing right next to the river—it was certainly there the last time that I was there recently. The burn runs through the area and the bridge has to go across it. That would suggest that that is the common factor.

**The Convener:** Watercourses are important. Obviously, the Spey and the Spey catchment are affected in the same way as other rivers. I just wondered whether there was a correlation.

**Rhoda Grant (Highlands and Islands) (Lab):** In your opening statement, you said that you got the public and private utility companies together ahead of the contract to try to iron out problems. Who is responsible for that? Is it a ministerial, Transport Scotland or contractors' responsibility?

**Keith Brown:** It is a shared responsibility. Transport Scotland has a role. I suppose that it exercises its powers on behalf of ministers. We have a different relationship with Scottish Water, because it is the public utility.

Given where the AWPR goes, especially when it comes close to urban areas, we knew that there would be utilities diversions. Actually, we knew that that would be the case from the Edinburgh trams project. If you think about the timing, we were looking at AWPR right in the teeth of that issue with the trams project, when people were digging up roads without knowing what was under the surface. Therefore, we took a very different, precautionary approach.

Michelle, do you have anything to add anything on the point about responsibilities?

**Michelle Rennie:** You are correct. As you can imagine, there are complex interfaces between utilities and all infrastructure projects. Planning work and preparing the projects, including agreeing the likely diversions that need to take place, is done over a period of years. All that work happens well before we ever award a contract.

At the point of award, the responsibility for managing those utilities falls to the contractor, because it is important that he is able to liaise directly with the utility companies and to make sure that their programmes tie in with his programme for completing the works.

**Rhoda Grant:** Cabinet secretary, you also mentioned an issue with one of the private utilities. That would appear to be a complex matter to sort out. For example, if Transport Scotland were doing the groundwork—for want of a better phrase—with the utility companies and an issue occurred when the contractor took over that added costs to the project, who would be responsible for those additional costs?

**Keith Brown:** The contractor. However, I am not sure that I would agree with the role of Transport Scotland in that example. Again, I have to caution that I am not able to be completely free with all the facts because there is a commercial relationship here. However, I will give my understanding of the issue and will hopefully not go too far in doing so—Michelle can correct me if I do.

The contractor had issues with a private utility when trying to achieve the diversion that was sought. The contractor came to me and specifically asked me whether I would intervene on its behalf regarding that one utility. We are not obliged to do that, as Michelle has said, but we did so. My understanding is that, if additional costs arise from elements to do with diversions, that would fall to the contractor. I am happy to be corrected, however.

10:30

**Michelle Rennie:** The issue here was not one of cost; it was one of timing. It was about ensuring that the utilities were adequately resourced in order to meet the programme that the contractor had set out. On that occasion, the contractor was given a bit of additional support from us and from ministers to assist with his discussions with the utility company.

**Rhoda Grant:** Was that financial support or back-up?

**Michelle Rennie:** No.

**Rhoda Grant:** If the work adds a financial cost, who would bear that, or are you not at liberty to say? If you are not, when will we get that information?

**Michelle Rennie:** There is no suggestion at this time that those diversionary works will generate additional cost.

**Rhoda Grant:** Okay. However, one imagines that, if they cause a delay, the cost will then fall to the contractor because it is not getting its payment for that part of the route. It is not online. It would expect a payment then. If the contractor feels that that is not their problem, and that it has done everything that it could to mitigate it, does it have recourse to the Scottish Government for additional funding?

**Keith Brown:** The short answer is no, it does not. The contractor who has signed undertakes to pay the unitary charge fee at that time. It is up to the contractor to manage its risks during the construction and the contract. Under different contracts, contractors can raise issues through different dispute or legal processes if they think that something is outwith their control, but that is not the case in this particular case.



It is the contractor's responsibility to manage its risks. As you have just said, its risk comes if it does not complete. Crucially, it comes down to when the road is available. We will only start paying for the road when it is available, and it is up to the contractor to manage the risks.

It is not quite as clear cut as us saying, "Just get on with it and get it done—it is your problem." As the example that you have mentioned highlights, we have that discussion with the contractor and we try to help out. The earlier example that I gave involved being proactive and getting all the utility companies together, telling them how we wanted to get the road done, and that there had been a long delay before the road was started, due to legal processes. We get involved in that, but it is the contractor's risk to manage. Would it be right to say that?

**Michelle Rennie:** Yes. The biggest risk for the contractor is time, because time costs money and whatever the contractor can do to mitigate the time effect on his programme is important to him. That is where the support that it has received from ministers comes into play. It is critical for the contractor that the utility diversions happen when they need to happen to allow it to proceed with the work, and that they do not hold the contractor up in any way.

**The Convener:** I wish to follow that up, so that I understand it. You are saying that there were discussions with the utilities and that there have been issues, but they are all resolved and they will not stop the project completing on time.

**Keith Brown:** I would not say that they are all resolved. The contractor will still have to talk to all the different utilities. Many of the diversions have taken place, but there will be further diversions still to take place through the contract. The contractor has to manage that process.

**The Convener:** Just to tie you down completely on that, are you anticipating, or are you aware, that any of the diversions that are required for the utilities will delay the project in any shape or form?

**Keith Brown:** I think I have now said two or three times that we expect the contract to be completed on time. I do not take a wee look at it and make a judgment myself; that comes from the independent assessors of the process, and they are saying that it can be achieved on time.

There will be further risks to manage. We are perhaps still in the most crucial phase of the project. We may consider the Forth crossing and, to some extent, the M8 bundle, although it seems to have got through that part of the process and is now coming towards the very end. This is a crucial part of the programme, but it is up to the contractor to manage the risks, and we will help it

to do that to complete the project on time. We currently expect it to be completed on time.

**Rhoda Grant:** Given that the project is in phases, do you expect any phase to be delayed, albeit that the overall contract should be completed on time?

**Keith Brown:** The Balmedie to Tipperty section has obviously been delayed. We brought ahead the airport junction one. There are no particular phases where we expect a change. Things can change over time, but we are not expecting any changes to phases. Is that right?

**Michelle Rennie:** That is correct.

**Stewart Stevenson:** As a matter of public policy, wayleave is granted to utility providers to facilitate their being able to put their utility connections over land and water. Is it a matter of public policy that the implicit deal is that, in exchange for that benefit, the utility companies have to play ball with public projects thereafter? Does that present opportunities for the longer term? I think that wayleave has been around for more than 100 years, so it is not new. That implicit deal exists, and utility companies should take close care to support public projects, given that they are in receipt of a public benefit.

**The Convener:** I do not want us to get into a big discussion on wayleave, or a debate about what we class as a public benefit—housing or whatever—and whether that should change. It would be good if you could answer Mr Stevenson as briefly as possible, cabinet secretary.

**Keith Brown:** It might be better to let Michelle Rennie speak about the implicit agreement.

**Michelle Rennie:** Utility companies have a number of statutory obligations arising from things such as the New Roads and Streetworks Act 1991, including a duty to engage. Difficulties always arise in situations in which one party is reliant on a third party's performance of its duties for it to perform its own duties. That will continue to be the case.

**The Convener:** We will now move on to questions on Prestwick airport.

**John Mason (Glasgow Shettleston) (SNP):** Most of us are positive about Prestwick airport. We want it to succeed as it provides jobs, carries freight and has potential to develop, given the size of the runway and so on. However, as we know, it made a loss of £8.7 million in 2015-16, which is covered by a loan. If it continues to make losses, for how long will the Government keep lending? Is there a limit to how much should be given in loans to the airport?

**Keith Brown:** Shortly after we purchased the airport, we made clear through the business plan



that was produced what we would do in terms of loans. We also said that our intention is to see the airport return to profitability and then to return it to the market, because we were not necessarily looking to look to add to our portfolio of airports. Of course, as you said, if we had not purchased the airport, the social and economic implications for jobs in Ayrshire would have been substantial, and those costs must be balanced against what we have invested in the airport.

I cannot speak to every part of what Prestwick is doing in terms of trying to turn around the current situation, because of commercial confidentiality, but we are satisfied that there is evidence that the airport is trying hard in that regard. For example, Chevron—a company from the north of England—has taken space at Prestwick, and some of the businesses that surround Prestwick are adding to a real aviation hub, which gives us some confidence in the ability of Prestwick, along with other airports, to bid to become a spaceport. If we were not happy with what the airport was doing, we would ask serious questions. We do not just hand over the money from a never-ending pot and leave it at that, and the management of Prestwick airport is well aware of that fact. A huge amount of work is going on. In the past two or three weeks, I have been talking to management about specific commercial opportunities.

It is true to say that there are real difficulties in terms of passenger traffic. That was a problem before the purchase of the airport and, because of events since then, it has proven difficult to boost that traffic. However, Ryanair still operates from the airport and there has been some success in terms of freight and the maintenance, repair and overhaul operations.

We always said that this was going to be a long process. There is not a never-ending pot of money. We analyse each request for finance, especially capital finance, and ensure that the taxpayers' money is being looked after. There are a number of irons in the fire, which we hope will bear fruit.

**John Mason:** It seems to me that if it were just to break even, that would be a huge success. Therefore the chances of it making a profit of £8.7 million to pay back the past loss and the loan do seem a bit remote. That surely has to be a doubtful debt. Has the Government made provision against that debt or is it being held at full face value?

**Keith Brown:** We made provision in the budgets going back for, I think, the past three years—on a three-year basis—for those monies to be handed over. Despite what you say about the difficult nature of that, we still hold to the original intention that the investment by the taxpayer will be paid back. There is no intention of our writing

off that debt at this stage; we intend that it will come back. We understood—and the record will show that in various committees of the Parliament we said—that that was going to be a long-term process and that it was not going to happen quickly.

**John Mason:** Thank you.

**The Convener:** Jamie Greene has a question.

**Jamie Greene (West Scotland) (Con):** John Mason has summed up the rationale behind our questioning, but I want to drill down into the numbers somewhat.

As part of this year's budget, loans of around £9.4 million are in line for Prestwick airport; anecdotally, though, we have heard that the airport will require around £40 million in total before 2021-22—or, some have suggested, even sooner than that. Cabinet secretary, I am intrigued by your terminology in that respect. You have said that it is "a long process" and that

"There is not a never-ending pot of money,"

but I think that we should be a bit more robust in our analysis. How long is "a long process"? Are we talking about a two-year, five-year or 10-year plan?

I can see that the cabinet secretary appreciates the management's efforts to try to turn the business around, but what is he doing to measure its success or lack of it? Are there specific measurable annual targets that the management has to hit in order to secure a further year's funding? Has the Government said, "Look, guys, you've got three years to turn this around"? It seems to me that there is a lot of loose wording but no very specific plan for Prestwick airport.

**Keith Brown:** We were very specific initially when we bought the airport, and secondly, when, at our request, a business plan was drawn up, which was submitted to the Parliament's committees. At that time, we made it very clear that it could well take more than 10 years for the airport to be turned around. This is not something new, and I am not making it up; that is what we have said, and we have been very clear about it.

We have also made it very clear that if an opportunity arises to take the airport back to the market beforehand, we will do that at the earliest opportunity. Even with the sums of money that have been used so far, there has been substantial benefit in having saved all the jobs that are there and with regard to the impact on the airport. I also note that the decision enjoyed cross-party support at the time.

As for the on-going scrutiny of the Scottish Government, I appreciate that the Parliament wants to have its own scrutiny of all this—and



quite rightly so—but I point out that we have officials from Transport Scotland on the holdco board, which examines these matters on a regular basis. If someone were to ask the Prestwick management whether they felt that they were getting sufficient scrutiny from me personally, what they would answer would be up to them, but I think that they would say that they were. I regularly have very robust discussions with them.

I should also say that I cannot allude to some of the efforts that the management are making, as some of them are commercially confidential. Members will know that, until a deal is done, we cannot make some of these things public, but believe you me, there is, on our part, absolutely close and robust scrutiny of what they are doing. Members will probably have seen a number of parliamentary questions on the subject; those questions also have to be answered, and indeed I will often use such questions as a basis for saying to the management of the airport, “Look, in addition to the questions that I am asking you, here are other questions that you have to be aware of.”

I accept that there is a real public interest in this, because a substantial amount of public money is being used. We are not doing that lightly; we examine every request for finance. We gave an undertaking, at the very start, that the process would be a long-term one, and I do not think that that has changed for us.

**Jamie Greene:** I appreciate that answer. Thank you.

**John Finnie (Highlands and Islands) (Green):** Good morning, cabinet secretary. With regard to the portfolio that you have mentioned, the Scottish Government owns a number of airports through Highlands and Islands Airports Ltd. Will you explain the rationale behind your comment that, if you were able to succeed in turning Prestwick airport around, you would take the airport to the market? If something in public ownership is profitable, why would you dispense with it? That makes no sense to me.

**Keith Brown:** We do not see our role as having that kind of ownership of such an airport. It is quite distinct from the Highlands and Islands airports that you mentioned, which are not profit making and which, as we have always accepted, require Government support. Certainly during my time as Minister for Transport, we have provided substantial additional funds to those airports to help improve them.

We never got involved in Prestwick airport by design. We were faced with very substantial job losses—not just direct jobs, but indirect ones—and the purpose of our investment was to prevent that. We made clear the basis on which we were going in,

as we were obliged to do under European state aid rules, which also oblige us to make a return on the investment. It was not part of our design to own that airport and we believe that if, as we expect, we can turn it around, it should be returned to the market. That has always been our intention, although I know that there will be different views on that.

10:45

**John Finnie:** I understand that. Is it your position that state aid rules compel you to return the airport to private ownership?

**Keith Brown:** I would have to check whether we are obliged to do that, because of the case that we made for taking over the airport at the time, but we are obliged under state aid rules to make a return on the investment. That might well be achieved by returning the airport to the market.

**John Finnie:** That return could, in turn, see investment directed elsewhere in the airport portfolio. That seems to be out of kilter with the Scottish Government's direction of travel in relation to ferries, the public sector bid for rail and the interesting announcement at the weekend on bus travel, which I and my party fully commend. Surely this should be about trying to maximise income for the public purse.

**Keith Brown:** It has been standard for Governments of different stripes in both Scotland and the United Kingdom to act when there is market failure, but if that market failure is corrected and there is a market case for somebody else to come in and make that investment, we can, apart from anything else, use that investment instead for the airports that Mr Finnie referred to.

There is only so much money to go round. If we want to spend our money on the airports that we wanted to be involved with in the first place, whether they be Stornoway, Shetland or other smaller airports in the Western Isles, we cannot spend it on other airports. We said that our intention was to save the jobs at Prestwick and return the airport to being a viable proposition for a private investor, and that is what I think we should do. We need to concentrate on the things that we have to do.

**John Finnie:** And all the public money expended on Prestwick will be recouped prior to its being returned to private ownership.

**Keith Brown:** No, I do not think that that is true; what we have said is that we have to make a return on the investment. If there was a prospect of the airport being taken over, any deal would have to allow us to repay the taxpayer for the investment. However, I do not know how that



would happen because that is not in prospect—we have no offer to take it over just now.

**The Convener:** It is a reasonable question, and we will need to develop it further to find out how the investment is worked out and what level of return we might expect. However, that might come later. The cabinet secretary's comment about his constant scrutiny of Prestwick airport's management team fits in neatly here, because it is our intention to ask that team to come and speak to the committee in May and help us inform our views on this matter.

I will leave that section of our questioning there and move to Stewart Stevenson for a very brief question on the Forth replacement crossing.

**Stewart Stevenson:** We have heard a bit about this already, so perhaps only a brief answer is required. We are close to completing the project. Are we still on time and on budget?

**Keith Brown:** I do not want to steal David Climie's thunder, but we are still looking at coming in around £245 million below budget. We have had discussions about the extent to which that is attributable to lower than expected inflation as well as good project management. Maybe David Climie can speak to this, but I would say that, to the extent that there has been any change, there has been no deterioration, and we are not expecting the budget to change for the worse.

As for timing, David Climie will be able to say more than I can about this, but the latest from the contractors—with whom we are in pretty regular dialogue, just as we are at Prestwick airport—is that they still hope to finish in May. It will be towards the end of May, which was the intention, and they are still confident of finishing before the contracted completion date, which I think was mid-June.

It is also true to say—and again David Climie can speak at greater length about this—that there have been higher than expected and more sustained wind speeds, which have caused particular problems with the removal of the cranes on the towers. That was probably not on the critical path before, but it is now. One crane has been either completely or partially taken down, and the other two will be taken down concurrently to make up for lost time.

Some of the other things that have to be done with regard to the windshield and the surface are not so susceptible to weather, unlike the lifting of the final piece of deck, which was somewhat delayed. As we have always said, the delays that we have had have been due to weather, not to any other reason that I am aware of, and there has been no deterioration in the budget position. I have made it clear to Transport Scotland and the contractor that I do not want this work to be done

at breakneck speed and that, if it is brought into question, health and safety should be the priority. David Climie will be able to give more information on this, but the latest position that we have from the contractor is that it expects to finish in May, although that will be challenging.

**Stewart Stevenson:** When I was minister, they told me that the figure would be £3.4 million or £4.3 million, so we are doing a wee bit better than that.

What can you tell us about the plans for opening the bridge, both formally and in practice?

**Keith Brown:** I cannot tell you much yet, other than that substantial discussions are going on in Transport Scotland. As Michelle Rennie is heavily involved in that, she might be able to say more. We have had a huge number of expressions of interest from members of the public and organisations, and there is a huge focus on it. The plans are being considered now and I assure Stewart Stevenson that we are undertaking that work with the same kind of diligence that we displayed for the arrangements for the Borders rail opening, which was a very substantial piece of work in its own right.

**Michelle Rennie:** As you can imagine, we have had a number of suggestions and requests from the public about the sort of thing that they would like us to consider and the sort of people that they would like to be involved, and we have had a number of requests from charities. We have had a whole plethora of options. We are well under way with things and we hope to arrive at, and come forward with, a conclusion in the next wee while.

Suffice it to say that we want something that involves as many people as possible, because we accept that this is a major iconic structure and a new Scottish landmark. People want to be involved and they are very enthusiastic about it; indeed, we have had, to date, about 68,000 visitors to the site in one form or another. We want to be as inclusive as we can about opportunities.

**Stewart Stevenson:** You will be aware of one suggestion that I passed on, which would involve an interest from the north-east of Scotland. I commend it to you without providing any particular details at this stage.

**The Convener:** I am very concerned that that “interest” is suggesting that you be at the opening, Stewart. I am sure that that would not be the case, cabinet secretary.

Your use of the word “hope”—I think that you said it twice—caused me concern, cabinet secretary, and I am sure that the committee will want to pick that up with the team as part of the next item. Mike, did you have a quick question on that?



**Mike Rumbles:** My question is more for the cabinet secretary than for David Climie, who is here to talk about matters on a more technical level. I am concerned about the estimates for the number of vehicles using the two bridges in the first year compared with the current level. Has there been any reconsideration at a political rather than technical level about allowing cars and HGVs to use both bridges? I am a bit concerned about congestion levels.

**Keith Brown:** Returning to the previous point about the opening, I think that a lot of people will want to be able to commemorate the final time that they took their car over the Forth road bridge, as it is currently constituted.

A number of people have written on the very issue that Mike Rumbles has asked about. The proposal for having the public transport corridor on the existing bridge was written into the act that the Parliament agreed. We have always looked at—and will continue to look at—how quickly and efficiently we could bring it into operation in certain circumstances and in the event of a problem on the new bridge. Of course, we are not anticipating any problems and I hope that none will arise. We should also bear in mind that additional wind protections have been put in place to ensure that there are no closures to high-sided vehicles.

**Mike Rumbles:** Would a new act of Parliament be needed if you wanted to do that regularly?

**Keith Brown:** I will let Michelle Rennie answer that question, as it is a bit more technical, but the original act, as Stewart Stevenson will know, was very clear about the basis of the public transport corridor. It might well be—at least, I think that it is the case—that we can satisfy that requirement but potentially still use the existing bridge in certain circumstances. There has been some examination of that issue.

**Michelle Rennie:** That is correct. I do not have a lot to add to what the cabinet secretary has said.

**The Convener:** I think that we should leave the bridge, as our next item is an evidence session on it.

Richard Lyle has a question on motorways further south.

**Richard Lyle (Uddingston and Bellshill) (SNP):** Good morning, cabinet secretary. Under your stewardship, there have been many excellent projects over the past number of years, including the dualling of the A9 and the A96 and the M8, M73 and M74 motorway improvements.

I would like to get some short answers to some short questions. First, it is expected to take up to eight years to finish dualling the A9. Could we have done it any quicker?

**Keith Brown:** No. There has been some discussion about whether we put this timescale in place because we had to get the resources—the money—to do it. However, when you examine the project and consider some of the processes that I have talked about such as public inquiries and design consultations, the answer to your question is no, I do not believe that it could have been done any quicker than that.

**Richard Lyle:** The A96 dualling is not expected to be finished until 2030, which is 13 years from now. Could we have done that any quicker?

**Keith Brown:** I would like the officials to answer that, but I should say that there is no space to truncate things, given the correlation between the work on the A9 and the A96. Apart from anything else, if we had done the two projects at the same time, things would have got a bit too crowded. As I have said, Michelle Rennie might be able to answer that question.

**Michelle Rennie:** A major factor is the availability of the supply chain. When you go to the market to construct these projects, you do not want to flood it. If you can avoid that, you can achieve a value-for-money construction cost for the projects. It is important for the civil engineering industry in Scotland that we are able to provide a pipeline of projects when we can. With three big projects finishing shortly—the AWPR, the Queensferry crossing and the M8, M73, and M74 motorway improvements—we feel that it is a timely moment to bring forward the A9 project and, after that, the A96 project. Taking that approach works in a variety of ways and sustains the industry in Scotland.

**Richard Lyle:** It has certainly been fantastic to see over the last number of years the amount of work that has gone on and the number of construction jobs that have been created. I have been to some of the projects; I had the distinction of going under the M74 at the opening of the new Raith underpass, and it was quite marvellous. At least, it was marvellous for a few days before it flooded. Why did that happen?

**Keith Brown:** There was a snagging issue. You will know the Raith underpass better than me; it is substantially under the water table and a big part of the project was the installation of water pumps to allow the construction works to take place. As you know, the underpass is substantially below ground and, essentially, a large structure—not, I should say, a pail—was put in place to prevent water from coming in. As you have rightly said, a few days after the opening, there was an issue with water ingress, which they have stopped. They are now doing further work to find the source of that. The structure itself remains under the water table. The pumps have gone, but, as I have said,



the water ingress has stopped and further investigations will be carried out.

Each project is different; if you remember the M74 project, you will recall that a lot of that project was on stilts and that some parts of the surface collapsed. That was not at all unusual. You get snags, but the important thing was that at Raith, the problem was fixed very quickly.

**Richard Lyle:** Again, on anticipated timescales for finishing work, when do we expect the M8, M73 and M74 project to be finished? What is the anticipated timescale for getting it all cleared away?

**Keith Brown:** The answer to both questions is the same: I think that we said that it would be finished this spring, and that is what we intend to do.

You have quite rightly mentioned the number of projects that have been undertaken—and you could also have mentioned the Haggs to Stepps project as well as the M74 itself. Those projects, like the Borders rail project, have been done on time. Yesterday I was in Berlin, where the airport is six years overdue and hugely over budget. We have a pretty remarkable record. Huge infrastructure projects, especially rail projects, are hard to bring in on time, but we have a pretty good track record in that respect.

11:00

**Richard Lyle:** I can see that the end is in sight, and I must say that the new projects have helped me, my constituents and the people of Scotland tremendously. A couple of days ago, I had to use a diversion, which was quite interesting. However, I could see the point of it. Does anything else have to be done to ensure that the projects are completed?

**Keith Brown:** We can never take our foot off the accelerator with such projects. A lot of work has been required with the contractor to ensure that the M8 project is completed on time—indeed, that is true for all contracts. It is pleasing to see the project coming on in the way that it has, and it has provided a lot of employment. As I think I said the last time I came before this committee, the M8 project has perhaps not had the attention that it deserves; it will mark a major transformation in central Scotland. Of course, the Queensferry crossing has dominated the agenda.

**Richard Lyle:** May I ask a final question, convener?

**The Convener:** We still have more questions to ask. If I may continue with the cabinet secretary's analogy, Richard, please check in your rear-view mirror before you launch into your question and make it short.

**Richard Lyle:** Yes, convener.

Peter Chapman asked about complaints. Cabinet secretary, have you had many complaints from people who operate alongside the projects, and how are we doing in resolving them?

**Keith Brown:** We have had complaints, not least from you and from others. We cannot undertake huge projects without concerns arising, especially with regard to diversions during a period of construction, when people cannot take the route that they are used to taking. We have tried to be as sympathetic as we can be, and we will continue to do so.

**Richard Lyle:** Thank you.

**The Convener:** I want to get all members' questions in, so I encourage short questions and answers.

**Rhoda Grant:** I will make my questions as short as I can, convener. First, are there plans to dual the A9 north of Inverness? The current plan is to dual only as far as Inverness.

Secondly, the public inquiry on the Berriedale braes project has concluded. When will that work start, and when will it be completed?

**Keith Brown:** On your first question, we currently have no plans to dual that road. We always examine trunk roads to see where we can improve them, but I think that the road usage is such that it would be hard to justify such a level of investment. The road should certainly be improved, but not to dual standard.

I do not know the answer to your second question, because my colleague Humza Yousaf has taken over that project. It is not one of the major projects, but it is important locally and I was pleased to be able to bring it forward when I was transport minister. Either we can talk to Humza Yousaf and ensure that we provide the committee with a written update on where we are now that the public inquiry has concluded or Humza himself can come to the committee.

**The Convener:** He is coming on 29 March. We can make sure that we ask that question then.

**Mairi Evans (Angus North and Mearns) (SNP):** Cabinet secretary, you mentioned the Laurencekirk junction. A couple of weeks ago, an engagement event was held in Laurencekirk with Transport Scotland and Amey, and I understand from talking to people who were there that it was well attended and well received. Indeed, I think that Mike Rumbles attended it. The event went a long way towards addressing a lot of the concerns that people have contacted me about, including, for example, the project length and its different stages. What plans are there for future engagement with the community in Laurencekirk



and the wider community in Aberdeenshire and Angus, who will be affected by the junction?

**Keith Brown:** That will be for Humza Yousaf to take forward. My involvement was due to the issue being worked into the Aberdeen city region deal, in which I have been involved. Michelle Rennie might say something about the issue, but what I can say is that having been involved in such matters for a number of years now, I take the view that, although it is sometimes difficult, the more engagement we have, the better the final result and the more people accept it.

**Michelle Rennie:** Over the next year or so, we hope to undertake more work on an options assessment for the junction, and as we do that, we will continue our consultation with local residents and communities. That will allow us to start the statutory process during that period. Built into the statutory process is a process for engaging with local communities, which enables us to receive formal and informal feedback to help us to adjust our designs and make them more acceptable to the communities.

**The Convener:** John Finnie has a question, and Stewart Stevenson might be able to get one in at the end if he is quick. John, I must ask you to brief.

**John Finnie:** Cabinet secretary, you will not necessarily have this information to hand but if you do not, perhaps you or your officials can provide it. With the A9 and the A96, we have £6 billion-worth of projects. Although rail lines roughly mirror the general route of both those roads, only very modest expenditure has been made available to upgrade them. Has a timeline been prepared with the projections of modal shift from rail to road—unfortunately—and its implications for the road and rail networks?

**The Convener:** That sort of ties in to another question on railways. Stewart Stevenson, can you add your question to that? Perhaps they could be answered together.

**Stewart Stevenson:** My question is quite simple: in planning for the Inverness to Nairn dualling, are you interfacing with the planned new railway station at Inverness airport?

**Keith Brown:** The short answer to Stewart Stevenson's question is yes, that is being taken into account.

On John Finnie's question, Humza Yousaf will take that forward, although obviously there is a relationship with the major projects that I am involved in. In relation to the city deal, the improvement works for the Inverness to Aberdeen line are meant to be complementary. I think that the investment is around £270 million but, as I have said, Humza Yousaf is taking that forward.

I am more than happy to come back to John Finnie and the committee about the extent to which we are taking modal shift into account. For example, two new stations have been proposed for one of the lines at, I think, Kintore and Dalcross, obviously with the intention of encouraging people to use trains rather than roads in those locations. Modal shift has been taken into account, and I or my colleague Humza Yousaf will come back to you in writing, if that is okay.

**The Convener:** I am under pressure to allow one more question, and I am minded to let Mike Rumbles ask it.

**Mike Rumbles:** My question is about Laurencekirk. I know that you have been on top of this issue for many years, and I know that you have to go through the process of options, but the fact is that there is only one practical option for drivers approaching the road from Fettercairn: the southern junction. Everyone knows that that is the one, and it is where all the Government's junction activity has been focused. Is there any way of speeding up the process?

**Michelle Rennie:** I assure Mike Rumbles that we are going as quickly as we can. In order to complete the statutory processes in a robust way that ensures that we do not have to revisit them and add more time to the programme, we need to give proper and due consideration to the options.

**The Convener:** I am definitely going to end the session there. Thank you, cabinet secretary. Would you like to say anything else before you leave, or are you happy that you have made all the points that you wanted to put across?

**Keith Brown:** I am happy, convener. If it is okay with you and the committee, I will come back to you when we have substantial updates. We cannot always be as open as we would like to be about developments, as some of them are commercially confidential, but we are not trying to keep anybody in the dark. Sometimes we are not able to say as much as we would like, but we want to keep the committee as aware of things as possible, especially with regard to the projects in which you have previously expressed an interest. I see giving evidence to the committee as the preferred method for doing that—although of course if there was something substantial, we would go to Parliament, and that is what I will continue to do.

As I did the last time that I asked to speak to the committee, members should not think that there will be some great revelation. However, we will try to keep the committee as updated as we can, especially now that some substantial projects are coming to their conclusion.

**The Convener:** I thank the cabinet secretary, Michelle Rennie and Graham Porteous for



attending the meeting, and I suspend the meeting briefly to allow for a changeover of witnesses.

11:08

*Meeting suspended.*

11:11

*On resuming—*

## **Forth Replacement Crossing (Project Team Update)**

**The Convener:** Item 2 is an update on the Forth replacement crossing. I welcome David Climie, the project director, and Lawrence Shackman, the project manager for the Forth replacement crossing team. David, would you like to make an opening statement on how things are progressing?

**David Climie (Transport Scotland):** Yes. Thank you, convener. We are pleased to be here this morning to update the committee on the progress that has been made since our previous appearance on 14 December. I can confirm that the project outturn cost range remains £1.325 billion to £1.35 billion and that we continue to target May for the bridge opening to traffic. We expect to make an announcement on the precise date and the opening events that are being planned in the next few weeks, following a further programme review of all finishing activities by Forth Crossing Bridge Constructors, which is the contractor.

Although it has been a relatively mild and dry winter, we have regularly encountered windy conditions that have continued to affect the stay cable installation, tower crane removal and tower falsework removal in particular. However, FCBC has continued to make significant efforts to mitigate the effects of the wind by resequencing, reprogramming and using additional resources as and where possible.

In the past 12 months, the site workforce has averaged 1,282 and it is currently running at nearly 1,350. Due to the changing nature of the works that we are now undertaking to completion, over 600 new workers have received a site induction since we returned to work in January.

I will now focus on progress on the principal contract. On the south side, the road works are substantially complete, with final landscaping and planting works continuing. Work on the local roads around Queensferry has also been virtually completed in the period.

On the Queensferry crossing itself, all the deck units have now been lifted into place, the last one having been lifted on 3 February. I am sure that you will have noted that the media coverage on that day focused very much on the site workforce. It showed clearly that they are highly dedicated, motivated and enthusiastic and want all of Scotland—indeed, all the world—to know about the success of their bridge and to celebrate it.



The final 400mm gap between the south approach viaducts and the cable-stayed bridge was jacked closed on 27 February on the southbound side and on 1 March on the northbound side. Final welding of those joints is in progress, after which the final four deck concrete pours will be carried out to complete the main bridge deck. That will allow the inside of the deck boxes to be made weathertight and the installation and commissioning of the deck dehumidification equipment, as well as the on-going installation of electrical, mechanical and plumbing systems throughout the structure.

11:15

On the deck finishing activities, all the stay cables have been installed on the south and centre towers and only two stay cables remain to be lifted at the north tower. Work on installing the vehicle restraint barriers and the wind shielding has progressed well, with 80 per cent of the posts having been erected and 8 per cent of the acrylic louvres having been positioned.

Deck waterproofing commenced on 5 January on the central reservation and on 27 January on the main carriageway, and 8 per cent of the surface area has been completed so far. An initial delivery of deck asphalt was laid on 15 February, followed by 400 tonnes on 17 February, which was laid in about four hours and covered a 350m length of the southbound carriageway. That was the first of two layers of binder course, which will be covered by the final surfacing immediately prior to the bridge opening. Three out of four of the bridge expansion joints have been installed.

Work started on removal of the first tower crane at the north tower on 21 January and it is now well progressed, but it was particularly frustrating for FCBC that no work was possible due to wind between 11 and 27 February, as we needed a 48-hour window in which winds were below 25mph to remove the supports that were attached to the towers and to remove the crane mast sections. The temporary trestles and platforms on either side of the north tower were removed on 29 and 30 January and 23 and 24 February. Once the tower crane is removed, the remaining concrete section of deck where the crane's mast was located can be cast. Those activities will be repeated at the centre and south towers over the next two months.

On the north side road works, the mainline A90 was diverted over the new emergency crossover alignment just before Christmas for northbound traffic and on 20 January for southbound traffic. That released the area for the construction of the new southbound slip roads from the new Ferrytoll junction to the Queensferry crossing and the public transport link to the Forth road bridge. Work

on Hope Street in Inverkeithing and the reconfigured park-and-ride facility at Ferrytoll should be completed by the end of this month.

Works on the intelligent transport system—the ITS—and the bridge control room fit-out continue to be progressed. Regular handover meetings have been taking place with Amey, which is the Forth bridges operating company, to prepare it for the operation and maintenance of the bridge and the approach roads after their opening.

Community relations continue to be extremely good, with the north and south community forums having met as a single entity for the second time in February. We have now had over 70,000 people attend an event relating to the FRC, with nearly all the meetings having been held in the project's contact and education centre. Over 20,000 of those people have been pupils from schools throughout Scotland.

**The Convener:** Thank you, David. That was a very comprehensive briefing. Mike Rumbles will ask the first question.

**Mike Rumbles:** I would like to focus on the budget for the project. After your previous appearance before the committee, you sent a very helpful letter to the convener on 23 January. You confirmed in your opening statement that the current budget is £1.35 billion. In your letter, you say that the reduction of £245 million in the project budget is due to two things:

“The saving due to lower than expected inflation is ... £192 million. The remaining saving of £53 million is a reduction in the allowance for risk and optimism bias”.

That brings the budget down to £1.35 billion, which you have confirmed today. Your letter says that that budget of £1.35 billion includes a new estimate for inflation of just £45 million. Now that inflation is rising again, is that sufficient? Is the £1.35 billion now fixed because it is a fixed-price contract?

**David Climie:** You are asking two questions. First, you are correct to say that inflation is starting to rise, and we are starting to see that in the construction indices. Traditionally, we have initially had provisional indices that are then made into final indices about three months later. Over the past four years, we have seen a blip in the summer, when the provisional indices have kicked up; subsequently, when they have been made final, they have dropped back again. However, we have not seen that this time—the indices are continuing to rise and there is an upward curve for the first time. The benefit that we have is that, because the project is over 95 per cent complete, very little of the money that remains to be paid is exposed to inflation. Therefore, we are very confident that the £45 million that we are talking



about will not change and that the budget can be achieved.

Will you remind me of your second question?

**Mike Rumbles:** Is it the case that the £1.35 billion budget has not increased because it is a fixed-price contract?

**David Climie:** That is correct. We still firmly believe that the figure of £1.35 billion is a ceiling.

**Mike Rumbles:** That is the ceiling and the reduction is down to lower inflation and, as you said in your letter,

“a reduction in the allowance for risk and optimism bias”.

**David Climie:** Correct.

**Mike Rumbles:** Thank you.

**John Mason:** You mentioned that the weather has had a bit of an effect. There were 16 days when you could not work on the cranes because of the wind. Has that been the only major problem? I do not think that we have had severe frost or snow.

**David Climie:** That is true. The winter could be characterised as being reasonably favourable. However, even though it appears—if we look out of the window—to be a beautiful sunny day, at present the wind is blowing at 40mph out on the bridge deck, which means that a number of operations cannot go on. That is quite typical of the situation over the winter: it has been bright and sunny, but the wind has been quite an issue.

We have focused on the areas that the wind affects—the tower crane removal and the stay cable installation. It is the stay cable installation at the top—at the tower end—that is the issue. Down at the deck level, as members have seen for themselves, work can continue even when it is significantly windy. The more wind shielding we can install, the more benefit it provides for the workers on the deck in carrying out their activities. The work on the deck is becoming progressively less wind sensitive, although that does not take away from the fact that there is still an issue with the trestles underneath the deck, which need to be lowered on to barges, and with the removal of the tower cranes.

I would like to expand on the issue with the removal of the tower cranes. We started dismantling the north tower crane on 21 January. The key issue is that, up until now, the main jib of the tower crane has been above the level of the tower. That means that, when the wind blows, the crane acts like a weather vane, so once the wind speed gets above 40mph, the crane cannot operate. The crane jib points in the direction that the wind is blowing in, which minimises the load on the mast. Once we start to lower the crane, the crane jib is prevented from being able to rotate by

the tower. The crane mast has to be locked in its set position, which runs parallel to the bridge deck. If we get significant winds, that puts much more load on the crane mast than would normally be the case.

Therefore, when we started to lower the tower crane, there was a constraint. Once we were below the top of the tower, before we could take out the next tie section to the tower and take down the next mast sections, we needed a 48-hour window with no winds above 25mph. We were ready to start that operation on 11 February, but we did not get that 48-hour window until 27 February. When we got it, which was nine days ago, we progressed very quickly. We have now got three of the ties out and all of the jib has been removed from the crane so work can progress, but a similar issue could arise with the centre and south tower cranes. We are not saying that it will happen, but it could.

FCBC has taken action to mitigate that risk. Originally, it was going to dismantle the cranes sequentially—the north tower crane, then the south tower crane, then the centre tower crane—but it has now mobilised in such a way as to enable work to be done on the south and centre tower cranes simultaneously so that, if suitable weather comes along, we can make the most of it. Mitigation is in effect for those items.

**John Mason:** As a layperson, I do not know much about this, but I presume that the cranes have to be completely out of the way before you can open the bridge.

**David Climie:** Indeed they do.

**John Mason:** You said that the relevant parts of the deck will get filled in with concrete.

**David Climie:** That is right.

**John Mason:** Does the continuation of winds that restrict the removal of the cranes present the biggest weather risk? If it is very wet, will that cause a problem with the road surfacing?

**David Climie:** That is an issue, although wet conditions are more of an issue for the waterproofing that will go on to the deck than for the road surfacing. The key to road surfacing is that all the various layers have to stick together well—we do not want the surface to start splitting apart and creating potholes.

The issue with the waterproofing is that it is necessary to have a dry surface before it can be applied. It is a spray-applied rubber membrane, and we must guarantee that the surface is dry before the rubber membrane is applied, so we must have dry conditions for that. If the surface is not dry when the waterproofing is put down, what happens is that, because the asphalt is very hot, when it is applied on top of the waterproofing, it



vaporises any moisture that is trapped underneath the waterproofing, which creates a bubble. The fact that such bubbles will push up and crack the asphalt straight away means that we can check immediately after we have put down the first layer of asphalt to make sure that that is not an issue. Although there is a check within the overall process to make sure that the surface was dry when the waterproofing was applied, it is extremely important that it is dry.

**John Mason:** So the two biggest risks in the next two or three months are the wind and the rain.

**David Climie:** Correct. Waterproofing goes at a significantly slower rate than the laying of asphalt. We laid 350m of a single carriageway in about three or four hours. The asphalt can be placed much more quickly than the waterproofing can be applied.

The two rate-determining factors are getting the tower cranes down so that we can close the holes in the deck, which is wind related, and then applying the waterproofing, which is water related.

**John Mason:** So you are 99 per cent certain that we are on target for time.

**Gail Ross (Caithness, Sutherland and Ross) (SNP):** Perhaps 99.9 per cent?

**John Mason:** I see that you do not want to put a figure on that.

**The Convener:** When the cabinet secretary was talking to us about the bridge, he used the word “hope” three times. That was fine at that stage, but we are quite keen to tie you down to a time. Will it be ready before the end of May?

**David Climie:** That continues to be our target, and I expect that to be achieved. I cannot give you a guarantee as there are no guarantees.

Let me quote the long-term weather forecast for the period from Sunday 12 to Tuesday 21 March—the next two weeks—that I received from the Met Office first thing this morning. It says:

“Remaining unsettled for much of the UK on Sunday, it'll be rather windy with showers or longer spells of rain. However, conditions are likely to become drier, brighter and less windy as we head into the new working week, particularly across southern and eastern areas. During this time, we will probably still see occasional bands of rain moving in from the west to affect mainly the north of the UK though. Later in the period it may well gradually become more unsettled and windy again across the country with gales in the northwest at times. Temperatures will probably be near of slightly above average, but still with the risk of night frosts, especially in central and southern parts.”

**The Convener:** That is certainly a first—I do not think that a committee has ever had the weather forecast read to it. However, perhaps that was a distraction method, so I will try to pin you down

one more time. Do you have an expectation that is more than a hope? If things go well, is completion by the end of May a realistic option?

**David Climie:** Yes, it is still a realistic possibility to get traffic on to the bridge in May. If it was not, I would tell you that. However, I will not guarantee it, for the reasons that I have just outlined.

**The Convener:** Gail Ross has a question on more mundane things than the weather.

**Gail Ross:** I would not say that.

It is worth mentioning that, along with showing the fantastic picture of the last segment being lifted into place, the front page of your update notes that we now have the tallest bridge in the United Kingdom and the longest three-tower cable-stayed bridge in the world. That is quite something. Do not take this the wrong way, but I do not think that I have ever been as excited about a bridge as I am about this one. It is absolutely beautiful.

You mentioned landscaping in your opening statement, and we spoke about that when we visited at the end of October. The update says that, last year, you planted 40,000 trees and shrubs, with a further 50,000 being planted this year, and that the target is for 400,000 trees and shrubs to be planted. Will you tell us a little more about what kinds of trees and shrubs those are and where they were sourced? Further, considering that you have quite a bit more planting to do, is there a timescale for the work? Obviously, it will continue once the bridge is open.

**David Climie:** We wanted to ensure that all the trees and plants that were supplied had Scottish provenance, so we did not leave that up to the contractor. We placed a direct order with a company—it is an England-based company, but the provenance of its materials is Scottish. It is a call-off contract, which means that we said, in outline, what we wanted and the contractor calls off what it wants, with the company being paid for what it plants. There are rates for planting trees, shrubs, grass and so on. That guarantees that what we plant has the right provenance.

The planting season runs from October to March, in general, because that is the time when we will not be putting things into dry ground. Inevitably, that means that not everything will be done by March 2017, so further planting will have to be done in the next planting season, from October 2017 through to the end of the year. A relatively small amount of planting will still be needed in the limited areas where final road changes will be made on the north side.



11:30

**Lawrence Shackman (Transport Scotland):**

The contractor, FCBC, is responsible for maintaining the planting through the five-year defect notification period. The plants and shrubs that were planted during the two earlier contracts that were completed four years ago have been maintained through that period; if there were any failures, the plants were replaced through the contract that we competitively tendered some years ago.

**Richard Lyle:** Good morning, gentlemen. Have any new issues of concern been raised by local residents or businesses during the past couple of months? If there have been issues, how have they been resolved?

**Lawrence Shackman:** Community engagement is still on-going, on an individual level and with the community forums; our last meeting with them was on 28 February. The forums are where the local community groups and previous objectors to the scheme come together to represent the views of colleagues and the residents of Queensferry, Inverkeithing, Rosyth and other places. Engagement now focuses more on what will happen post-opening. I touched on the road users—or the bridge users—guide at the last meeting. We have shared that with them so that they know, to some extent, how the road network is going to work. Residents are keen to know how the area will be maintained once the bridge is open and who will be responsible, so we are setting up meetings to let them know the roles of the operating company, Amey, and the local authorities for local roads maintenance. FCBC will have contractual obligations for a period, such as for the landscaping. Those are the main issues raised.

Residents are keen to understand the remaining activities and when they will be completed, including the obligations in the Forth Crossing Act 2011. An example is the footpath cycleway that is being constructed from the A904 to the south abutment of the bridge and back up the other side to form a bypass of the Queensferry junction; I am trying to give an indication of when that work will be finished. We have said that we will undertake additional works to improve footpaths on Society Road as the clear-up from the south side of the Forth progresses southwards as the contractor tidies up the site; that will be undertaken during 2017.

That is a brief flavour of the issues that we are discussing with the local communities.

**Richard Lyle:** As a child, I was fortunate enough to go to see the new Forth road bridge. How will we continue to work with Amey and local communities to ensure that people can once again

commemorate one of the most iconic buildings? The three bridges together are fantastic.

**Lawrence Shackman:** The contact and education centre is key—we touched on it the last time we were in front of the committee. We intend to keep the centre going well into 2018 and to keep our engagement with schools—David Climie mentioned that more than 20,000 pupils have attended events in the centre since January 2013. We will put forward a case to try to make sure that the facility—or a similar one—keeps going well into the future; a bit of work is to be done to flesh that out.

Richard Lyle is right. The bridge is iconic, and three bridges from three different centuries in the same location is a world first. We are talking to VisitScotland and EventScotland about marketing the area for the local economy and for Scotland as a whole. There is a lot of potential, such as for the education legacy—I could go on.

**Richard Lyle:** Thank you for the work that you have done, gentlemen.

**John Finnie:** Thank you for your update. We have had an update on public transport, and I know that there has been engagement with the bus operators and that some training has already been undertaken. Are you able to indicate what the likely changes to bus service operations will be?

**Lawrence Shackman:** The bus operators came in for a training day on 28 February and we gave them a comprehensive run-through of all the bus facilities, including hard-shoulder-running facilities, a look back on what we had built as part of the two original contracts and a look at all the new facilities that are being built around the Ferrytoll park and ride. The bus operators will be able to use the hard shoulders on the Queensferry crossing when buses are affected by wind on the existing bridge. They seemed to be pretty impressed with the facilities that they will be given.

In the future, we hope that the bus operators will provide more services. We are looking to have an education programme to make the public as informed as possible about the potential for using bus as opposed to car transport to get, in the main, to Edinburgh. We will be setting up a programme to encourage people out of their cars and on to buses. That will help to stimulate bus use in the future.

**John Finnie:** We are aware of the strategy and the fact that there is a public transport group. On previous occasions when you have been at the committee, I have asked about the wider implications of that. I understand that there was engagement with the local authorities in the Lothians. Is that on-going?



I appreciate that your obligation is to the crossing but, clearly, if you funnel people quickly into an area, there are potentially significant implications for the wider road network.

**Lawrence Shackman:** The public transport working group met in the middle of December and another meeting is planned for April. A large proportion of the group, including all the relevant local authorities, came to the bus training day. We envisage the life of the public transport working group extending a fair bit after the crossing is open, because we are keen to see how all the bus facilities work and whether they are meeting the requirements on reliability of bus journeys. We hope to stimulate further growth in the bus sector.

We will monitor the project as a whole on journey-time reliability. We will try to capture patronage in our before and after reporting, with reports at intervals of one, three and perhaps five years after opening. We will get feedback about how the measures have been implemented, how successful they have been and how, we hope, they have stimulated further journeys.

**John Finnie:** How will foot traffic and cyclists fit into the new arrangements?

**Lawrence Shackman:** They feature to some extent in the users guide that I mentioned. We will want to encourage people to continue to use the Forth road bridge for cycling and walking. We mentioned before that that bridge will be free from all the motorway traffic, which will be on the Queensferry crossing. The Forth road bridge will be a much nicer environment for those activities. We hope that they will be self-perpetuating because the surroundings will be so much more pleasant.

We have built in a lot more cycleway and footpath facilities on the connecting roads at either end of the bridge and links to the Ferrytoll park and ride and North Queensferry on the north side and to South Queensferry on the south. Wherever possible, we have tried to improve the cycle and footpath facilities.

**Jamie Greene:** I wanted to move on from the information on the build progress, which has been very helpful and useful.

As we look beyond the opening, there are questions on some of the what-if scenarios. The main one is this: given we do not have a definitive opening date, what is the thinking on the notice period that users will need? At what point will you take a view on that? I am not asking whether you will hit the deadline—that is a different discussion—but, from a practical point of view, at what point will you be able to say, “Right. We’re confident that we’re going to open four weeks from now,” and ensure that users will be aware of that?

**David Climie:** To be honest, I think that we are getting very close to that point; indeed, I expect that we will be very close to it in the next three to four weeks.

You say that people need to know, but I think that it is all going to be fairly self-explanatory. Because we have built the emergency crossovers at either end of the bridge, it is not quite like shifting a set of points on a railway line; as far as the main A90 is concerned, we will change the barriers literally overnight, which will divert traffic on to the new alignment. As a result, all motorway traffic will be diverted from the Forth road bridge on to the Queensferry crossing. For 99.5 per cent of traffic, therefore, it will be a case of moving the barriers at either end of the bridge, and the traffic will then go on to the Queensferry crossing.

As for public transport—in other words, the buses, the taxis and so on that will still be able to use the Forth road bridge—the road users guide has been specifically directed at giving them more help. Our intention is that in the four weeks before the final date we will have extensive publicity on what will happen with traffic management, when the changeovers are going to take place and what they will look like. We have done that sort of thing very successfully during the works in the Ferrytoll area, and we intend to do exactly the same thing for the main opening.

**Jamie Greene:** It sounds from your answer as if, from the point of view of cars and that kind of road traffic, the whole thing should be quite self-explanatory. Once the change happens, drivers should be able to follow the relevant signage, which I presume will have been user tested beforehand.

However, for all the other users, I note that on your last visit to the committee you said that you would produce a guide. Do you have any update on when that will be produced, what content it will have, how it will be distributed and what type of users it will go to? Such an update will, I guess, give us comfort that all the other users, aside from car traffic, will be comfortable with this new travel method.

**David Climie:** We actually sent a draft of the road users guide to the committee after our last appearance. Since then, we have had some feedback from various people, and the final version has now been produced. As I have said, we intend in the four-week period before the final date to distribute the guide very widely and to make it available on our website, too. I think that we are looking at a print run of 10,000, and we will distribute it through the various associations, local authorities, bus companies, taxi firms and so on that we deal with. We have a good plan for ensuring that we distribute this information; indeed, the guide is very comprehensive and will



ensure that no matter what type of vehicle you have or whether you are a pedestrian, cyclist, motorcyclist or whatever, you will be able to identify clearly where you have to go.

**Jamie Greene:** So 10,000 copies of the guide are being printed and distributed not to everyday households but to specific user groups.

**David Climie:** That is right, although we will probably distribute the guide to individual households in the local area, given that they will probably be most affected by what is happening on the local roads. We will make that very clear in the guide.

**Jamie Greene:** Does your public awareness campaign include some above-the-line media spend to let people know about the change? Have you set aside some of your budget for that?

**David Climie:** Yes. It is very much built into our overall communications budget. Indeed, a fundamental part of our comms strategy is to ensure that this is well publicised. As I have said, what we did with information about Ferrytoll gives us a good template, and we intend to expand and build on that.

**Jamie Greene:** That is great. Thank you.

**Lawrence Shackman:** I should say that we will also have drop-in sessions for the public. They can call into the contact and education centre if they need further information, and we will certainly be having some public meetings. If anyone has any particular queries, we will be able to answer them.

**The Convener:** I believe that Peter Chapman has a small question.

**Peter Chapman:** It is just on that point, convener. You have made it fairly clear that all of this should be pretty obvious, but some confusion can often arise when new roads open. How will you enforce things if someone gets it wrong and, for whatever reason, lands up on the road bridge? Will there be any penalties for folk who get it wrong in the first few weeks?

**David Climie:** Inevitably, there will have to be a transition period, because people can clearly make mistakes when faced with new things. However, there will be very clear signage on the slip roads to the Forth road bridge showing what is and what is not allowed, and all this will be monitored by automatic number-plate recognition system—Big Brother, to a degree. The Forth road bridge also has an existing closed circuit television system, which is monitored regularly to make sure of that. In the initial stages, we also intend to have an enhanced police presence. That will be as much about directing people as anything else. The intention is not to be overzealous at the start, but we anticipate that things will happen.

11:45

The Queensferry crossing is a motorway, so the normal speed limit will be 70mph. We are considering the possibility of running the limit at 50mph initially. When people are driving over the crossing for the first time, they will probably want to look around and see what is going on instead of focusing on where they are going. We have been talking to police about that, and it may well be that, for an initial period and until people get used to the crossing, we will have a 50mph limit. That would seem to be sensible.

**The Convener:** Peter, I am pretty sure that that does not give you the right to a last nostalgic trip over the bridge and to ignore the ANPR.

**Richard Lyle:** What about people who do not know the area? What about updating satnav systems when the bridge opens? Satellite navigation seems to take you where it wants to go.

**David Climie:** That is true. I will make sure that, as part of our communications strategy, we are in contact with the satnav companies to ensure that the issue is dealt with.

**Richard Lyle:** Thank you.

**Rhoda Grant:** I have a supplementary question on traffic diversions. Unlike the old bridge, the new bridge is able to cope with high wind. Given that the old bridge will be used by public transport and the like, can traffic be easily diverted on to the new bridge? Any diversion would create delay, so would any priority be given to public transport?

**Lawrence Shackman:** Yes. A lot of thought went into how we would safeguard public transport and keep the journey times as reliable as possible when there are high winds.

Single and double-deckers are affected by the high-wind strategy on the Forth road bridge when the wind speed gets up to 50mph. In those situations, we have variable message signs that will indicate to buses that they should use the Queensferry crossing. In normal traffic conditions, they would just use the normal running lanes on the crossing. Should it become congested and the variable speed limits are reduced, buses can use—and will be directed to use—the hard shoulders, so that they can bypass the slower moving traffic, just as they do on the Fife ITS bus lane. That would preserve as much as possible the routing and journey-time reliability for buses. Southward traffic will be directed from the Ferrytoll junction to use the hard shoulders on the Queensferry crossing, to come off at the other end and to travel on to their desired destination, thereby minimising disruption.

**Rhoda Grant:** If there is an accident on the new crossing, will it similarly be the case that traffic can be diverted to the old bridge? If there were a wide



load that was likely to slow traffic, could that be diverted, too?

**Lawrence Shackman:** There are hard shoulders on the Queensferry crossing. Therefore, we have a much better facility for providing resilience, should a vehicle break down or should there be an incident. Indeed, there is a lot more room for vehicles to get past in the first place. Obviously, there are no hard shoulders on the Forth road bridge, and any incident culminates in a tailback pretty quickly. We also have all the variable message signs, the lane-control facilities to close a lane by displaying a red cross—you have probably seen that on the motorway network elsewhere—and we can control speed limits.

If there were an incident of a long duration—I cannot definitively say what a “long duration” is, but it would be of reasonable length—it would be possible, as David Climie has mentioned, to reopen the emergency crossovers so that the traffic could use the Forth road bridge.

**Jamie Greene:** I probably should know the answer to this, but is there a central reservation on the crossing? You talked about variable lanes. Does that refer to traffic flow, too? Could you have four lanes going in one direction and two lanes going in the other? What variation parameters do you have?

**Lawrence Shackman:** The Queensferry crossing has a central reserve, but all the stay cables are there, so there is no means of crossing over the carriageways. The bridge has two lanes in each direction, with hard shoulders. There are lane-control units over each lane at regular intervals and variable message signs at regular intervals all the way through the project corridor to control the traffic. However, we cannot do four-plus-two or tidal-flow conditions.

**Mike Rumbles:** My question comes back to money. This morning, the end date of the end of May has been heavily caveated, both by you and by the minister. What happens if the bridge is not completed by the contractual date in June? Will there be any more cost to the public purse if that is missed, or does the contractor pick up the bill on a fixed-price contract?

**David Climie:** On your first point, that the date is heavily caveated, I took up my post nearly seven years ago, in April 2010, and if someone had said to me then that, seven years later, I would be sitting in front of a committee discussing a two or three-week variation in the opening date for the crossing and an overall budget that compares favourably to what it was when I joined the project—when it was £1.7 billion to £2.3 billion—I would have bitten their hand off. You say that we are caveating the date, but we are talking

about a very small window of time on a seven-year project.

**Mike Rumbles:** Maybe I am being unfair, but are you therefore saying—I will be very relieved if you are—that you are 100 per cent certain that the opening will not go beyond the contractual date in June?

**The Convener:** It is quite difficult to ask somebody to be 100 per cent certain. The question that Mike Rumbles asked and that David Climie can answer is whether there is an implication for the budget if there are unforeseen circumstances. It is unfair to ask him to be 100 per cent certain—we can never be 100 per cent certain on most things in life.

**Mike Rumbles:** Except that David Climie said that the variation will be two or three weeks, which means that he would be certain.

**The Convener:** I would prefer that David Climie answers the question about the money.

**David Climie:** If there is an overrun on the contract completion date, there is no risk to the public purse of an extra cost. Any work that runs past the contract date will be entirely down to the contractor. There is no risk at all to the budget of going past the contract completion date. That is categorically 100 per cent the case.

**Mike Rumbles:** Thank you.

**The Convener:** Thank you for that 100 per cent guarantee.

Once the bridge is opened, the first year will be critical. I would like some assurances about the process of handing it over to the operator and about the maintenance. What work is on-going on that and will there be a period of hand holding to make sure that everything works and that people understand?

**David Climie:** The committee will be aware that there is a Forth bridges operating contract. Amey is currently the holder of that contract, led by Mark Arndt—I think that he has appeared in front of the committee on a number of occasions. We have had a very close relationship with the Forth bridges operating company and, before that, with the Forth Estuary Transport Authority, going right back to the design stage of the bridge. We involved FETA in discussions about maintenance and what it wanted built into the bridge. That has been an on-going process since day 1.

Since Amey came into position, about two years ago, we have worked closely together, and Amey's technicians and operators have come and looked at what we are building as we build it, so that they can see exactly how it is being put together. They came out within the past couple of weeks and went inside the bridge deck to see all



the various structural health monitoring, mechanical and electrical equipment that is being installed. FCBC's contract includes an obligation to undertake the training of all the Amey operatives to make sure that they are fully familiar with everything and how it links into the bridge control room—how the structural health monitoring system works.

It is not a case of the bridge being opened to traffic and us just handing over the keys and walking away, or of FCBC, the contractor, doing that. There is an on-going obligation and, in fact, we anticipate that, in the first six months after opening, there will be a need for a significant amount of tweaking and adjustment of various things, including items on the bridge itself. If the structural health monitoring showed up some odd readings, we would get all that checked out and verified, and if a sensor is not working, it might need to be replaced—that sort of thing.

There is a whole period of handover—not just one day but about six months. We have worked that through in a great deal of detail. In relation to the governance of that, Mark Arndt came to our project board last week to give an update on how he felt things were going. We have been telling him how it is going from the project side of things and we asked him to come along and give Amey's side of the story. He gave a very similar picture to the one that I have just given—that there is very good engagement and we are working closely together. That will increase over the next few weeks and continue beyond the opening to traffic.

**The Convener:** We have no other questions. Is there anything further that David Climie would like to bring to our attention, or have we covered the majority of issues already?

**David Climie:** We have covered the majority. Thank you.

**The Convener:** I thank David Climie and Lawrence Shackman for coming. I hope that we do not see you before May, because if we do, that will be because there is a problem. I can guarantee 100 per cent that we would like to see you later in the year to pick up on the project, and to see whether there are items that could be of relevance to future projects for Scotland. I thank you and your team, and hope that May is when we get to drive over the bridge.

**David Climie:** Thank you very much.

**The Convener:** That concludes the public part of the meeting.

11:56

*Meeting continued in private until 12:36.*



This is the final edition of the *Official Report* of this meeting. It is part of the Scottish Parliament *Official Report* archive and has been sent for legal deposit.

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