



Legislative Assembly of Alberta

The 28th Legislature  
First Session

Standing Committee  
on  
Alberta's Economic Future

High-speed Rail

Tuesday, December 3, 2013  
6:17 p.m.

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The 28th Legislature  
First Session**

**Standing Committee on Alberta's Economic Future**

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## **Standing Committee on Alberta's Economic Future**

### **Participants**

Ministry of Transportation

Rob Penny, Deputy Minister

Sara Wong, Director, Multimodal Transportation Policy



6:17 p.m.

Tuesday, December 3, 2013

[Mr. Amery in the chair]

**The Chair:** Well, good evening, ladies and gentlemen. It's 6:17, and I think we should start. I would like to welcome all the members, staff, and guests in attendance at today's meeting of the Standing Committee on Alberta's Economic Future.

At this time I would like to call this meeting to order. Also, I'd like to ask members and those joining the committee at the table to introduce themselves for the record. We also have Mr. Ian Donovan joining us via teleconference. If you are substituting for another member, please indicate so in your introduction.

I will start with myself. I am Moe Amery, MLA for Calgary-East and chair of this committee.

**Mr. Fox:** Rod Fox, MLA, Lacombe-Ponoka, vice-chair of this committee.

**Mr. Rogers:** George Rogers, MLA, Leduc-Beaumont.

**Mr. Bhardwaj:** Naresh Bhardwaj, MLA, Edmonton-Ellerslie.

**Mr. Quadri:** Sohail Quadri, Edmonton-Mill Woods.

**Ms Olesen:** Good evening. Cathy Olesen, MLA, Sherwood Park.

**Mr. McDonald:** Everett McDonald, Grande Prairie-Smoky.

**Mr. Luan:** Jason Luan, Calgary-Hawkwood.

**Mr. Dorward:** David Dorward, MLA for Edmonton-Gold Bar.

**Mr. Hehr:** Kent Hehr, MLA, Calgary-Buffalo.

**Ms Pastoor:** Bridget Pastoor, Lethbridge-East.

**Mr. Penny:** Rob Penny, deputy minister, Alberta Transportation.

**Ms Wong:** Sara Wong, director of multimodal transportation, Alberta Transportation.

**Mr. Xiao:** David Xiao, MLA for Edmonton-McClung.

**Mr. Rowe:** Bruce Rowe, Olds-Didsbury-Three Hills.

**Mr. Strankman:** Rick Strankman, Drumheller-Stettler.

**Mrs. Sarich:** Good evening and welcome. Janice Sarich, MLA, Edmonton-Decore.

**Mr. Cao:** Wayne Cao, Calgary-Fort.

**Ms Robert:** Nancy Robert, research services.

**Mrs. Sawchuk:** Karen Sawchuk, committee clerk.

**The Chair:** Thank you, all, very much.

Just a few housekeeping items to address before we turn to the business at hand. The microphones are operated by the *Hansard* staff. Please keep your cellphones, iPhones, BlackBerrys off the table as these may interfere with the audio feed. The audio of committee proceedings is streamed live on the Internet and recorded by *Hansard*.

Now we move to the second item on the agenda. I'd like a motion to approve the agenda for tonight's meeting. Mr. Rogers moved. All in favour? Opposed? Carried.

Now, the third item on the agenda is the approval of the minutes of the meeting of November 25, 2013. I'd like a motion. Mr. Quadri moved. All in favour? Opposed? Carried. Thank you very much.

Ladies and gentlemen, this evening the committee will be receiving presentations from the Ministry of Transportation on the issue of the potential of high-speed rail transit within Alberta, as discussed at our last meeting. Tonight we have with us two presenters from the Ministry of Transportation. We have Mr. Rob Penny, the deputy minister – thank you very much, Mr. Penny, for being here – and Ms Sara Wong, director, multimodal transportation policy. Again, Mr. Penny and Ms Wong, on behalf of the committee, thank you for accepting our invitations on such short notice to provide our committee with an overview of the feasibility of high-speed rail transit within Alberta.

As a starting point for our review we are on a very tight schedule here, so I will remind everyone of the process. Our presenters will have 20 minutes – and we will be using the timer to keep everyone on time – followed by questions from the committee. I understand that the presenters have a powerful PowerPoint presentation, which is being handed out to all members and has been e-mailed to the member teleconferencing. With that, I will turn it over to our presenters.

Mr. Penny, go ahead, please.

**Mr. Penny:** Thank you, Mr. Amery, and thank you to the committee for the opportunity to present to the standing committee this evening. We're pleased to provide you with an overview of the high-speed rail market demand study that the Alberta government released in July of 2009. Just for everybody's information, this report can be found on Alberta Transportation's website.

In our presentation we'll be providing an overview of the high-speed rail technologies that were studied, the projected traffic volumes by existing modes – meaning air, bus, auto – and the forecasted high-speed rail traffic volumes and the revenues, and some of the forecasted benefits of high-speed rail in Alberta.

Just to put it into context, the study was commissioned in 2006, but in 2006 the TD Bank had noted that the Calgary-Edmonton corridor represented 8.3 per cent of real Canadian GDP, a growth rate that was higher than Canadian or U.S. averages. At that time about 2 and a half million people lived in the corridor, representing about 75 per cent of Alberta's population.

Some of the characteristics of the corridor. Calgary and Edmonton are complementary cities. We have corporate offices located in Calgary and regulators located in Edmonton. The corridor itself has the highest trip generation in North American city pairs, about three to four times the Toronto-Montreal trip generation rate. Although the population of the Calgary-Edmonton corridor is around 2 and a half million – remember this is 2006, so they haven't been updated, okay? – travel in the corridor is equivalent to a population of 8 million to 10 million people. Aviation is the preferred mode for distances greater than 500 kilometres, and driving is the preferred mode for distances under 200 kilometres.

Based on some of this information from the TD Bank and our understanding of the corridor, in 2006 the Alberta government asked us and Alberta Transportation hired TEMS as the consultant to conduct a high-speed rail market demand study.

Now I'm going to turn it over to Sara to give sort of a more detailed presentation. She's the subject matter expert on the multimodal, and she'll be able to walk through the presentation, and then we'll be available to answer questions.

**Ms Wong:** The independent investment grade market assessment study included four components. The travel demand analysis examined the projected traffic volumes along the Calgary-Edmonton corridor using existing methods of air, road and bus. The second component was a market analysis, which examined the market demand and ridership for high-speed rail technologies. The third component was a revenue analysis, which examined the revenues forecasted for the various high-speed rail technologies. The last component was a financial and economic analysis, which analyzed the high-speed rail benefits to Alberta. TEMS surveyed almost 7,000 Albertans that used air, bus, and auto modes, and we'll be reviewing each of these four components of the study.

6:25

Before we do that, we'd like to kind of give a quick overview of the types of technologies that were studied as part of the market demand study. The first one was a 200-kilometre-per-hour Talgo-type technology, which originally was manufactured in Spain and is best known for their unconventional, articulated railway passenger car design in which the wheels are mounted in pairs but not joined by an axle and are between rather than underneath the individual coaches. Since the introduction of the Talgo Pendular in 1980, the train tilts naturally inwards on curves, making it a more comfortable ride for the passengers, and the system also allows the trains to run faster on some lines, especially on curves. The carriage-tilting system pivots around the top of the suspension columns, which has the effect of partially cancelling out the effects of the lateral acceleration when cornering.

The second type of high-speed rail technology examined was a 240-kilometre-per-hour Acela or jet train. Amtrak uses this technology along the northeast corridor in the United States between Washington, DC, and Boston via Baltimore, Philadelphia, and New York. It uses a tilting technology, which allows the train to travel at higher speeds on the sharply curved northeast corridor without disturbing passengers by lowering the lateral centrifugal forces based on the concept of banked turns. The Acela Express trains are the only true high-speed rail trains operating in North America. The highest speed that they can attain is 240 kilometres per hour, but they operate at only 120 kilometres per hour. The Acela Express is popular with business travellers and has captured over half of the market share of air and train travellers between Washington and New York. Between New York and Boston the Acela Express has up to 37 per cent of the combined train and air market share.

The third type of technology that was studied as part of this market assessment was a 320-kilometre-per-hour TGV or Shinkansen. France uses the TGV technology, and Japan uses the Shinkansen. TGV track construction is similar to that of normal railway lines but with a few differences. The radii of curves are larger so that trains can traverse them at a higher speed without increasing the centrifugal acceleration felt by passengers. The radii of the curves historically have been greater than four kilometres, but they are now being built with a radii of seven kilometres to accommodate for potentially higher speeds.

The last type of technology that was studied as part of the market assessment study was the 500-kilometre-per-hour maglev. This is a magnetic levitation technology that suspends, guides, and propels vehicles from magnets rather than using mechanical methods such as wheels, axles, and bearings. Maglev is a means of flying the train sets on a guideway by using magnets to create both a lift and a thrust only a few inches above the guideway surface. Only one maglev transportation system is in operation commercially today, and that's in Shanghai, China. It runs from the Shanghai Pudong International Airport to Pudong, which is

about a 30-kilometre distance, and can operate up to 431 kilometres per hour. The Japanese are currently planning a maglev system called the JR maglev, that would operate between Tokyo and Osaka, and that's about a 500-kilometre distance. They're planning to operate that at a 505-kilometre-per-hour rate. The complete line for the JR maglev would be in operation in 2045.

The first component of the market assessment study was the travel demand analysis. This slide provides an overview of the total projected trips for existing auto, air, and bus modes in the absence of high-speed rail. In the column of auto this would include short-segment trips in the corridor, so something from Edmonton to Leduc or Airdrie to Calgary, as well as the full-distance trips between Calgary right through to Edmonton.

The total projected auto growth in 2006 was 47 million, and it grows to 142 million, as you can see in that first column, in 2051. For air, in 2006 we saw 744,000 passenger trips. That can grow to 2.2 million in 2051. Then, of course, you can see Red Arrow and Greyhound and their trip forecast estimates. The key conclusion to draw from this slide is that for every existing mode we have today, whether it's auto, air, or bus, we can project that the trips will increase three times the level identified in 2006. If you take the total in that last column, in 2006 the total trips in all existing modes is approximately 50 million, and that triples in 2051 for all modes to 150 million. The projected trips take into consideration demographic growth only and assume no changes in current levels of service by each of the travel modes.

In this slide here, based on the traffic counts and the 7,000 licence plate surveys that were done by the consultant, it was estimated that of the 50 million trips in all modes taken in the corridor in 2006, we see about 10 million people eligible as high-speed rail passengers as they had a destination or origin of either Edmonton, Calgary, or Red Deer. In the case of the automobile, between Calgary and Edmonton what we're seeing is 5 million trips in 2006. Using that same mode, auto trips between either Red Deer and Edmonton or Red Deer and Calgary were about 3.8 million in 2006. For the air mode we see 616,000 air trips between Calgary and Edmonton. We don't see any air service. We see a zero beside the Red Deer-Calgary and the Red Deer-Edmonton because there was no air service being provided, so the volumes reflect that. For the bus we see 236,000 trips between Calgary and Edmonton and about 60,000 trips between Red Deer-Edmonton or Red Deer-Calgary.

Moving on to the second component of the study, which was the market analysis, in this slide we show some of the high-speed rail service characteristics based on technology. In that first row what we see is travel time between downtown Edmonton and downtown Calgary varying depending on the technology being used. For 200-kilometre-per-hour Talgo we're just under two hours – and that can decrease with the faster technology – up to a maglev, which is 500 kilometres per hour and just under an hour in length of trip.

You see the frequencies in terms of round trips per day, the fares, cents per kilometre. The average fare reflects the one-way trip between Calgary and Edmonton, and this was what the willingness to pay of Albertans was when they were surveyed. What was their willingness to pay based on time trade-off? What we saw was that the average fare that folks were willing to pay was \$56 for a one-way trip using a 200-kilometre-per-hour technology right up to a \$120 one-way fare for a technology like a maglev.

We also had the consultant look at what the one-way fare would be from Red Deer to Calgary or Red Deer to Edmonton, and the graph here reflects the prices there in terms of what folks were willing to pay. The bottom table provides a fare comparison with

existing modes, and these amounts, again, are all in 2006 dollars. For the auto mode what we were seeing at the time was that it did cost, believe it or not, \$35 from downtown Edmonton to downtown Calgary one way. You could buy a ticket on Greyhound one way from downtown Edmonton to downtown Calgary for \$53 dollars; for Red Arrow it was \$64. You could hop on an Air Canada plane, and it would have cost you \$140 one way from downtown Edmonton to downtown Calgary, and for WestJet the price was about \$131 one way. The key conclusion to draw here in this table is that high-speed rail would cost more than the auto and bus but certainly less than air.

6:35

This slide presents the projected high-speed rail ridership. I won't go into the details of this other than to say that what this graph is showing is that the faster the train technology, the greater the ridership and revenue you tend to start to see in the uptake of the service. For example, when you take a look at the maglev, which is the lighter blue-coloured bar in this graph, you see the demand increasing from about 4.2 million in 2011 right up to about 10.7 or so million in 2051.

The third component of the study was a revenue analysis. This graph shows what the forecasted revenues are using the base case assumptions. It was based only on a high-speed rail passenger fare in terms of developing the revenue projections. If we take the last column, for example, in the year 2051, between the 200-kilometre technology and the 240-kilometre technology we're seeing a difference in revenues of about \$130 million, so \$137 million for 200-kilometre per hour and \$269 million for the 240-kilometre. That difference is about \$130 million.

When you jump from the 240 technology to the 320, you're seeing a more than double revenue effect, so approximately a \$340 million difference. Then from a 320- to a 500-kilometre technology difference you're seeing, again, almost a doubling effect in terms of revenue streams. Now, again, these revenues were only based on the high-speed rail passenger fare.

This slide represents some of the work that the government wanted to do. They wanted to conduct a review of the forecasts with several other studies that were completed to determine the validity of the numbers that we were getting from the TEMS study. We have the TEMS study in the far-left column, the Van Horne study, which is in the middle column, and then the Oliver Wyman, which was a group that actually took the results of the survey that was done by TEMS and, using their own modelling technique, developed their own investment-grade analysis on the numbers to determine whether or not they were in synch with what TEMS was coming up with.

What we see here is that when you look at the TEMS study in terms of ridership and the Oliver Wyman in terms of ridership, they're very much similar in terms of forecasts. For the 200-kilometre-per-hour we're seeing ridership estimates from TEMS of about 1.7 million, potentially generating \$96 million in revenues. Similarly, Oliver Wyman for that same technology was looking at estimating ridership of exactly 1.7 million, too. They took a much more conservative approach in terms of the revenue generation and came up with \$67 million in terms of what would be generated for that particular technology. The Van Horne Institute had a very optimistic perspective in terms of their study, and you can see that that is reflected in terms of the ridership numbers as well as some of the revenue numbers that are coming forward in that table.

In terms of the evaluation of the revenue forecasts, the consultant TEMS used an annual population growth rate that was less than what was being used by Alberta Finance at the time.

TEMS used 2.8 per cent per annum while Alberta Finance was recommending 2.36 per cent per annum. The revenue forecasts were based on the lowest ridership numbers. You'll recall that we talked about 5 million trips eligible for high-speed rail with origin/destination of Edmonton, Calgary, and Red Deer. The survey found that if high-speed rail were provided, we would see ridership diverted from the other modes – from auto, air, and bus – at about 88 to 90 per cent, with less than 10 per cent induced demand, and that's demand that's generated and not diverted from any other mode.

We have a capture rate used for the car mode which was considered low to moderate. As you recall, in the earlier slide we had 50 million total auto trips in 2006, and of that, only 5 million would be considered eligible for high-speed rail, so we're looking at maybe a 10 per cent uptake.

There was a plus or minus 1.17 per cent margin of error on the travel preference survey. The high-speed rail fares were set lower than the maximum of what Albertans were willing to pay. The high-speed rail fares were seen as competitive with existing modes, and the revenues did not include any other ancillary sources, so that included, for example, food sales that might happen on the high-speed rail train as you're doing your commute.

The last component of the study was a financial and economic analysis. The next set of graphs are really just to try and demonstrate what were seen as benefits of high-speed rail. In this graph it talks about the benefits of high-speed rail to the Edmonton area. Here we are showing what are considered community benefits, so that's the number of jobs created over the lifetime of the project, depending on the technology that's used; the income that would be generated through the jobs created by the project; and the property value, which is the increased property value around the station stops that would be served by high-speed rail.

The lower part of the diagram shows the development potential of possible station sites. These station sites were not based on any technical review. They were just picked by the consultant as part of the study. They were not part of any technical review in terms of determining whether these were feasible station stops. What we're seeing in this graph is that the Edmonton area would capture about 30 to 35 per cent of the overall provincial community benefits of high-speed rail.

The next slide shows what the benefits are for the Red Deer area both in terms of jobs and income as well as property value and what the development potential might be for a station stop in Red Deer. What we were able to determine from the consultant is that the Red Deer area was able to capture 20 to 25 per cent of the overall provincial community benefits, with the city of Red Deer capturing more than 75 per cent of that amount.

For Calgary, similarly, community benefits were measured in terms of jobs, income, and property value. There was development potential for two station stops, one downtown and one near the airport. The consultant was able to determine that the Calgary area was able to capture 40 to 45 per cent of the overall provincial community benefits.

This diagram just basically summarizes the high-speed rail benefits that we just saw in the table for Edmonton, in the table for Red Deer, and in the table for Calgary. In terms of total benefits the four technologies can range from \$4.6 billion to \$33.4 billion. Depending on the technology implemented, it would result in various impacts, obviously, to the province, and you can see those numbers on the graph in front of you here.

Just in terms of a quick summary, the study did show that there was a market for high-speed rail, that ridership could be diverted from other modes, with a portion being induced. Congestion on highway 2 would not be solved by adopting high-speed rail as

total car trips would continue to grow. Most of the trips on highway 2 are local or interregional in nature. Air travel between Edmonton and Calgary would likely face the most serious challenge as airlines would not be able to compete effectively with high-speed rail. What we were able to see was that approximately two-thirds of air travelers would actually be diverted to using high-speed rail. For bus ridership we were seeing about half of Red Arrow's ridership possibly diverting to high-speed rail as well.

The study showed a strong preference for 320-kilometre-per-hour or faster trains, so something like a TGV or Shinkansen or a maglev. As I mentioned earlier, total user benefits range from \$4.6 billion to \$33.4 billion.

Just two more slides? I'm sorry. I apologize. I'll be really quick.

6:45

Just a couple of caveats on the market assessment study. The study was meant to do just that, determine what the uptake would be if high-speed rail was a travel choice for Albertans, so it focused strictly on ridership revenue as well as the benefits projections. The study did not include costs of the land acquisition or capital costs of construction.

This is the last graph. This is just to kind of give you an idea of what's happening, what high-speed rail systems operate, how they operate elsewhere in the world. Based on our research, there appears to be no high-speed rail system that operates today without having proceeded with some level of public funding. Just quickly, for example, in Japan high-speed rail is financed and built by the Japan Railway Construction company. In China they have a Ministry of Railways that fully finances and constructs the high-speed rail system. France, Germany, and Spain: those European countries set up subsidiaries, government subsidiaries, that fully fund and construct the high-speed rail systems and operate them as well. And in the U.S. the Acela Express is funded by the U.S. government to a tune of about \$1.5 billion to \$2 billion annually as an operating subsidy to operate that system.

That's it. Thank you very much.

**The Chair:** Thank you very much. This was a very enjoyable, informative, and interesting presentation. We let it go over the 20 minutes allotted by a few minutes, but now we would like to open the floor for questioning.

Before we do that, I would like to outline the process which we have followed during this committee. We will follow the schedule for questions and answers that the committee adopted during its previous review, starting with the Wildrose caucus for five minutes, followed by five-minute time slots each for the PC caucus, the Liberal caucus, and the NDP caucus, and so on. Five minutes or so will be left at the end for any outstanding questions to be read into the record, with a request that they be responded to in writing. Mr. Penny asked, "How soon?" and I said: well, hopefully, before the train gets going.

We will start with the Wildrose caucus. Mr. Strankman.

**Mr. Strankman:** Thanks for that. I, too, Mr. Penny, considering the colour of your hair and the colour of mine – it's skin coloured – would like to proceed with this.

If we could just do a back and forth. I'm a bit of a speed addict myself, sir, having gotten my pilot's licence in 1974, so I'm familiar with speed and safety in relation. I'd just like to do a few questions. You made mention that the city pairs in the study were North American. Was that correct? Were they North American or just in Canada? I see in the brochure here it talks about Montreal or some other location, but your co-presenter made some mention

of American examples, so I was wondering if some of the city pairs that you discussed there were in North America or just Canada?

**Mr. Penny:** It's across North America.

**Mr. Strankman:** Okay. Thanks for that.

Another interesting question I had. Certainly, with speed comes greater energy requirements. I was wondering if you could give me some comparisons between the three models. Is it three or four models that we had, including the maglev?

**Mr. Penny:** Of the energy consumption and cost?

**Mr. Strankman:** Yes, please.

**Mr. Penny:** I don't know if the study went into that kind of detail. As Sara outlined, the study itself didn't actually talk about what the actual costs of construction or the costs of operating were. All the revenue projections for these were done just by the willingness to pay of the residents. So we haven't done the studies as far as what the operating costs would actually be.

**Mr. Strankman:** So that would be something that we should be cognizant of as we go forward in our deliberations?

**Mr. Penny:** Yes.

**Mr. Strankman:** Okay. It seemed to me from the graphs that the higher speed models had greater uptake and potential for greater revenue return. Was that based off the saving of time for the riders, or was there some novelty to the speed that was involved?

**Ms Wong:** It was strictly a trade-off between time versus cost and the willingness to pay for that.

**Mr. Strankman:** Okay. With that speed, then, was there any allocation or consequence made for safety? As an aviator I know that the Concorde aircraft had a great uptake through its life, and there was only one serious accident. Was there any evaluation made to safety in relation to speed?

**Ms Wong:** No, not that I'm aware of.

**Mr. Strankman:** So that's also something that we should be cognizant of?

**Mr. Penny:** Well, yeah. I mean, the engineering for that kind of speed, to accommodate it, would have to be taken into account, yes.

**Mr. Strankman:** But it seems like in other jurisdictions like in China where they have similar climates to ours, they are using the highest-speed technology?

**Mr. Penny:** Yes.

**Mr. Strankman:** Okay. Any other greater observations as to the initial costs of any of these projects, of the total initial costs? Like you said, you hadn't included the land and some of that sort of thing. Have you given any of that any other consideration that's not necessarily presented here?

**Mr. Penny:** No, we haven't. We haven't been asked, so we haven't gone into the detail as to even finding the route that would take into consideration how much it would cost or the land that would be required for it or anything else.



**Mr. Strankman:** So it's quite preliminary at this stage, then?

**Mr. Penny:** Yes.

**Mr. Strankman:** Well, short answers like that certainly cut my time down.

**The Chair:** You have one minute left.

**Mr. Strankman:** I'll relinquish to the chair.

**The Chair:** Okay. Thank you. Anybody wishing to use the one minute? No.

Mr. Bhardwaj.

**Mr. Bhardwaj:** Thank you very much. I'll also be very brief. That's quite a detailed presentation. Obviously, I didn't see any real numbers, you know, of the actual cost. Has your department ever been involved in sort of any kind of estimation, what it would cost for land acquisition, to lay the track, the capital investment, and the rail itself? Any idea at all?

**Mr. Penny:** None, no.

**Mr. Bhardwaj:** It's never been contemplated what it would cost? You basically strictly worked on the revenue side? So when you looked at the feasibility study, what were some of the factors which were included in that?

**Mr. Penny:** You had asked about a feasibility study. I don't know if we've ever actually done the full feasibility study, which would show the benefits and the costs. We were just asked to see, like in the market demand study, whether there would be a demand for this type of technology or this type of facility. Based on that, we weren't asked to do any more work on it from when it was received by the government at the time.

**Mr. Bhardwaj:** So when the study was actually done or even today, if you were to sort of look at your existing research that you have, what do you see as some of the barriers in Edmonton-Calgary, as an example, because some of the stuff we talked about was just province-wide? What would be some of the barriers in this?

**Mr. Penny:** Barriers to constructing it or implementing it?

**Mr. Bhardwaj:** Yeah. Constructing it and implementing it, yes.

**Mr. Penny:** I mean, the largest barrier wouldn't be restricted to just Calgary and Edmonton, but it would probably be more magnified in Calgary and Edmonton. It would actually be acquiring the right-of-way to where the station would be and the track and the location of the train from downtown Edmonton to the outskirts and the outskirts of Calgary into downtown Calgary, let's say, if we were going north to south. It's the same problem even in the rural parts of the province as to where it would actually be located and acquiring the right-of-way.

**Mr. Bhardwaj:** Mr. Chair, that's all I've got. I had more questions regarding the capital investment, but that hasn't been done, so I'll leave that one alone.

**The Chair:** Okay. Thank you.

Mr. Cao.

**Mr. Cao:** Thank you, Mr. Chair. Well, thank you very much for the presentation. I know this is an assessment of the market,

whether there is a market for high-speed rail. On a personal note, a few times I rode the TGV in France. I like it. It's very good, smooth.

My question is really – it's not in your study, but it's more like a projection. When we build something, we talk about P3 – right? – ring roads and all the others. Do you see an opportunity for a P3 in here, the feasibility of it, when we talk about building it in the future? Just guessing.

6:55

**Mr. Penny:** You're asking for an opinion because P3 is a public-private partnership and I'm not sure as to the desire for the public contribution to it. Yes, it would lend itself if there was that desire for a public-private partnership, where the private consortium would build the rail, buy all the rolling stock, and then set the fares to recover their capital investment and their operating costs, potentially.

**Mr. Cao:** Okay. Probably a supplement to that. I would like to see it built between Calgary and Edmonton, but what about – again, this is kind of a future look. Is there potential to add on other chunks like Lethbridge or up north further? With a future outlook, can you see something?

**Mr. Penny:** I mean, it's possible. Again, going back to the distance between, let's say, Edmonton and Fort McMurray being around 500 kilometres, air would probably continue to be the more attractive option just because of the time. The time would be almost exactly the same for air as well as even the highest-speed rail. So it has potential, but the time savings versus the costs would be a wash, I'm thinking.

**Mr. Cao:** Well, thank you.

**The Chair:** Your time is up, Mr. Cao.

Now we'll go back to the Wildrose caucus. Mr. Rowe, do you have any questions?

**Mr. Rowe:** The only question I have is on the three alternatives that were given: the CPR alternative, the greenfield nonelectric, and the greenfield electric. The CPR alternative, why would they even put that in there? The land is owned by the CPR. I doubt they're going to give up that rail line for any purpose. It's a money-maker. The reason I'm interested in it is that three of the communities that it would have to go through are in my constituency, and we have an issue with the speed that the CPR trains go through there with, so that whole track would have to be moved out of those communities before it could even be considered.

You mentioned greenfield nonelectric and greenfield electric. What's the term "greenfield"? Where does that come from?

**Ms Wong:** Greenfield, essentially, just means that you're building on entirely new land that has not been developed.

Also, to answer your first question, sir, on the CPR alternative, the reason why that's in there is because the Van Horne study, which had the participation of CP on that team, looked at a CPR right-of-way as a routing option. So in this graph we were just trying to adjust for comparison purposes across all three studies.

**Mr. Rowe:** Okay. That's it. Thank you.

**The Chair:** Thank you.

Mr. Everett McDonald.

**Mr. McDonald:** Thank you, Chair. One number that I picked up on earlier was on the New York-Boston line. You said it was a \$2

billion net operating loss. I think I heard that somewhere on that particular project. It doesn't talk about revenue, but obviously it's a huge loss just for the operating. The ridership on that particular facility would be approximately five times what we would get from Edmonton-Calgary. Would that be stretching it, maybe?

**Ms Wong:** I don't know the numbers.

**Mr. McDonald:** Okay. I guess I'm just trying to compare. Some of the members were looking for numbers. Obviously, it's going to be at least a \$2 billion loss per year to operate a train. Now, there's some economic benefits on roads, you know, somewhere in the middle, and if it was a P3, there's obviously some advantages. But how would you see us moving forward, if we were going to move forward, to a study phase? Do we have the expertise to try to assemble a right-of-way? Obviously, we wouldn't be using the CPR or the CN. Is there a utility corridor? Has any work been done on a corridor?

**Mr. Penny:** No, there hasn't been.

**Mr. McDonald:** No. Okay. It just seems like this is a pretty rich – it's a wonderful idea. As soon as you get this far, you go: well, this is great, but it's probably out of our league until we get another 4 million or 5 million people.

I did see a calculation here on ridership, 17 cents per kilometre or something, and I didn't know what it was based on. If I could find it. Oh, it's just a fare in cents per kilometre, so 16 cents a kilometre, but that's not capital or operating. That's just probably the profit. Okay.

I guess I really don't have any questions. It's just a little complicated, and I needed to get through it.

**Mr. Penny:** Just to clarify, the cents per kilometre and all the fares that were generated through the market demand study were all based on, at the time, what Albertans would be willing to pay to do it. It had no reference to the actual costs of constructing or operating. It was just: this is how much they would pay to save that time or to ride the train at that speed.

**Mr. McDonald:** Of course, those numbers: that's seven or eight years ago. You'd probably double that very easily and still be comfortable with the rate of pay. I would imagine that airplane is \$250 now versus the \$130, so it's pretty near double.

**Mr. Penny:** Yeah.

**The Chair:** Are you okay, Mr. McDonald?

**Mr. McDonald:** Yeah. Thank you, Chair.

**The Chair:** Thank you.

Okay. Mr. Fox.

**Mr. Fox:** Thank you. Out of all of the lines that were studied in this, for comparison were any operated without a government subsidy?

**Ms Wong:** No. They all had some kind of contribution from the government at some level.

**Mr. Fox:** All right. Thank you.

**The Chair:** Mr. Luan.

**Mr. Luan:** Thank you, Mr. Chair. This is very exciting. I just have, actually, two questions if I may. This is a study from seven

years ago, so basically I am asking you for an opinion, obviously. Based on your professional expertise, when you read those numbers today, was there anywhere that jumped out at you that this will be way higher or way lower, that today will be way different than what we read in the report from 2006 in terms of the trend that is going up? Pretty much the same?

**Mr. Penny:** I would think it would be the same. I mean, I think the cost would be up, I think the ridership would be up, but I think the fares would be up as well.

**Mr. Luan:** Okay. That's one.

The next one. I was looking at this chart of the costs between different speeds. The 500 one brings the cost up way higher, from \$20 billion to \$33 billion. It makes me wonder about the one that China chose, obviously, the 500 one. I can appreciate that they must have had state investment in it. Any experience or any observation you can draw from beyond P3s, which we've already talked about? What about having foreign companies to build this for us? Would it be a lower cost?

**Mr. Penny:** The P3 would still have the private company building it and operating it. I'm not sure where the public contribution was. I could only imagine, if it was a public-private partnership, that the public contribution would be the purchase and the provision of all of the right-of-way with a private company building it. With the cost of the right-of-way, if a private company was buying the right-of-way, I'm not sure that there would be any difference.

7:05

**Mr. Luan:** Yeah.

Ms Wong, I see you have some . . .

**Ms Wong:** I was just going to add to what the deputy minister was saying, which is that, you know, from what we've been able to research so far in terms of the systems that operate across the world today, there is some level of government support, whether it's at a federal or a local level and either through a subsidiary being created by the federal government or direct operating subsidies, as you see in the U.S.

**Mr. Luan:** Okay. Last question, Chair?

**The Chair:** Please.

**Mr. Luan:** If you have a way to recommend to the committee – if we want to do the next step beyond this report, what would you recommend? I can tell you there is lots of interest from this committee, that wants to do something about it. But in the meantime it's a big undertaking. Where do you begin? How do you get it under control? What would you recommend? This is already very helpful from where we met last time. I can only imagine if we were going to ask you to commission something else to do instead of us jumping to an idea out of nowhere. Do you have any recommendations from your end?

**The Chair:** Probably not, and I think the committee will be making the recommendations after we're done.

We only have about less than five minutes left, and I have three more questions. We will move to Ms Pastoor.

**Ms Pastoor:** Okay. Thanks very much. I will try to be brief because the previous speaker has asked some of the questions that I was going to ask, specifically: what number could we use as an overlay to get these numbers up to 2013? When we spoke last week, one of the things that I was – up front I'm a huge, huge fan

of high speed and think that we should start tomorrow morning at 9 o'clock. Having said that, last we spoke, we said that our motion actually was for high speed in Alberta and to be built in phases, so perhaps looking at Fort McMurray, with the increased population and that sort of thing, may well be a better fit. Who knows? That's for the next discussion.

One of the other things is that, in my mind, this conversation has now come down to ideology or philosophy in terms of: should a government supply public transport? If the answer is yes, then let's do it. Yes, it's going to cost money, and if we put it off until we wait for the population, we'll never get it. We'll get the population, but we will be so far behind that by the time they build it – who knows? – we'll all not be riding it. That's for sure. I'm just very excited about this, but I would like to know if there was any way to project those numbers, if there was some kind of a percentage that we could put on, because 2006 numbers don't even come close to representing what Alberta is today.

**The Chair:** Ms Pastoor, your question, please. We're running out of time.

**Ms Pastoor:** Yeah, I know. Sorry. Those were a lot of comments, weren't they? Okay. I'll go back to if there is any number we could possibly use.

**Mr. Penny:** I don't think there is one number that you could use. You know, I would suggest to maybe, very simplistically, use year-over-year inflation, so what the inflation difference was between '06-07 and '07-08, and then just keep cumulatively adding it on the fares and everything else like that.

**Ms Pastoor:** Okay.

**The Chair:** Thank you.

**Ms Pastoor:** Thank you. Just quickly, I wanted to make one more comment. You spoke about that you think that air would be better going to Fort McMurray than rail. Rail is more comfortable, and you take more stuff with you.

**The Chair:** Yeah. That's good.

One more question. Mrs. Sarich.

**Mrs. Sarich:** Thank you very much, and thank you, Mr. Penny and Ms Wong, for your presentation this evening. Certainly, one of the observations I have is that the economic conditions today have changed considerably since 2006. Also, I am picking up from you that any opinion about technology, land, cost, infrastructure, and anything else that was detailed in the previous report is very difficult for you to answer any question about because it almost suggests that there has to be an in-depth study with different parameters so that we could take a comprehensive look. My question, just to bring us up to speed on your current mandate for the Department of Transportation, is: is the high-speed rail on the radar of a mandate or the business plan as you look into the future? Just give us an idea about that.

**Mr. Penny:** It's not on the current mandate for us to take a look at. We are embarking on an overall transportation strategy for the province of Alberta. We'll be going out to the public here fairly shortly – not only the public; well, I mean, they're the same – but industry experts and other experts as well around a whole multimodal, complementary transportation system. Out of those kinds of studies and consultations high-speed rail will be considered as we compile a longer term, 50-year transportation

strategy to see if it fits in and how it would fit into an overall transportation strategy for the province of Alberta.

**Mrs. Sarich:** Thank you.

**The Chair:** Thank you.

Again, Mr. Penny and Ms Wong, thank you very, very much for being here, for your presentations, and for answering questions from the committee members. Thank you very much.

**Mr. Penny:** Thank you.

**The Chair:** We're not done yet. We have one more item. It's the date of the next meeting. Colleagues, I would like to suggest that the committee meet next week to consider a draft stakeholders list as well as a proposal for a schedule of presenters. The date I'm suggesting is Thursday, December 12, from 10 a.m. to 11:30 a.m. It is really important for the committee to meet and decide these issues so that the staff can then follow through on scheduling presentations, starting around mid-January. This will also require a meeting of the working group prior to that date. I am confident that those members will accommodate the suggested meeting schedule in the interest of keeping this review on track.

Of course, teleconferencing is available for those who will not be able to travel and be here, but we really need to have that meeting on December 12.

**Mr. Rogers:** I move that date, Mr. Chairman.

**The Chair:** Great. Okay. We'll confirm it by e-mail.

**Ms Pastoor:** I'm sorry; I missed the time.

**The Chair:** From 10 a.m. till 11:30 a.m. on December 12.

**Ms Olesen:** I'm giving out firefighter awards.

**The Chair:** Sorry?

**Ms Olesen:** I said that I'm giving out firefighter medals, but you have to go with who you get.

**The Chair:** Well, you can send in a substitute.

**Ms Olesen:** I can do that.

**Ms Pastoor:** We're here on the 11th, anyway.

**The Chair:** Yeah. We're here on the 11th, but if you're not able to be here in person, you can either participate by teleconferencing or have a substitute.

We're okay with the 12th? Mrs. Sarich.

**Mrs. Sarich:** Yes. Mr. Chair, I was just wondering: is there any possibility that the meeting could start earlier?

**The Chair:** Well, we're trying to make it convenient for those people who will be travelling in from another location.

**Ms Pastoor:** We're all going to be here.

**The Chair:** Well, some might not be here. You know, other caucuses might not be here the day before, so 10 o'clock, I think, is a reasonable time.

Any other business?

A motion to adjourn? Mr. Cao. All in favour? Opposed? Good. Thank you very much. Thank you for being here.

[The committee adjourned at 7:14 p.m.]





