

## MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA PUBLIC INSURANCE CORPORATION (MPI)  
GENERAL RATE APPLICATION FOR  
2017-2018 INSURANCE YEAR  
HEARING

Before Board Panel:

Robert Gabor, Q.C. - Board Chairperson  
Karen Botting - Board Member  
Anita Neville - Board Member  
Alan Morin - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
October 25, 2016  
Pages 1184 to 1419



“When You Talk - We Listen!”



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## APPEARANCES

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Michael Triggs ) Insurance  
Byron Williams ) CAC (Manitoba)  
Jared Wheeler (student-at-law) )  
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Harris Kaplan ) Julianna  
Spiropoulos

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4		interest rate forecast	1254
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7		measures that exist for programs	
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1 --- Upon commencing at 9:00 a.m.

2

3 THE CHAIRPERSON: Okay. If we're  
4 ready to begin, Mr. Ghikas.

5 MR. MATT GHIKAS: Thank you, Mr.  
6 Chairman. With us this morning to my immediate right  
7 is Julianna Spiropoulos from Aon Hewitt. And to -- to  
8 her right is Harris Kaplan. He's the senior counsel  
9 at Aon and is joining us today.

10 MS. KATHLEEN MCCANDLESS: And if I may  
11 -- pardon me -- just to mention that we have Mr. Pelly  
12 listening in from Toronto this morning. Thank you.

13 MR. MATT GHIKAS: Great. Okay. Is it  
14 -- is it muted or --

15 MS. KATHLEEN MCCANDLESS: Mr. Pelly,  
16 can you hear us?

17 MR. BRIAN PELLY (BY PHONE): Yes, I  
18 can.

19 MS. KATHLEEN MCCANDLESS: Thank you.  
20 Is it possible for you to mute things on your end for  
21 now? Because there's a bit of feedback coming  
22 through.

23 MR. BRIAN PELLY (BY PHONE): Yes, I  
24 have it on mute. Thank you.

25

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: Okay. Let's try it  
4 that way.

5 MR. MATT GHIKAS: Mr. Chairman, the --  
6 Ms. Spiropoulos is an associate partner at Aon Hewitt,  
7 and she was the author of the Aon Hewitt reports, the  
8 -- responsible for the Aon Hewitt reports that were  
9 performed and the asset-liability matching study that  
10 was performed for MPI. And so she's here to speak to  
11 those.

12 The main documents that are applicable  
13 to this portion of the hearing, the -- the Aon Hewitt  
14 reports that were prepared were attachments to PUB-1-  
15 20. And that also included a brief version of Ms.  
16 Spiropoulos's biography, but there is also a CV on the  
17 record.

18 And if we can have that brought up,  
19 Diana, to start with, that is Exhibit 44, MPI-44. And  
20 there is also an opening presentation by Ms.  
21 Spiropoulos which is MPI Exhibit 43, and we'll be  
22 coming to that shortly.

23 So I'll just have a few questions for  
24 Spiropoulos, and then -- and then we'll get underway.

25 So, Ms. Spiropoulos, I'll ask you first

1 of all whether the biography you provided in the  
2 response to PUB-1 -- sorry.

3 MS. KATHLEEN MCCANDLESS: Has the  
4 witness been sworn in?

5 THE CHAIRPERSON: I believe the  
6 witness needs to be sworn in.

7 MR. MATT GHIKAS: Thank you.

8

9 MPI PANEL 3:

10

11 JULIANNA SPIROPOULOS, Sworn

12

13 MR. MATT GHIKAS: Thank you, Mr.

14 Christle.

15

16 EXAMINATION-IN-CHIEF BY MR. MATT GHIKAS:

17 MR. MATT GHIKAS: Now, your biography -

18 - your summary biography at -- included at -- in the

19 response to PUB-1-20, does that accurately set out

20 your qualifications and experience in a summary form?

21 MS. JULIANNA SPIROPOULOS: Yes.

22 MR. MATT GHIKAS: And as I -- and your

23 curriculum vitae that was included at Exhibit 44, and

24 that is up before you here, does that also provide an

25 accurate description of your qualifications,

1 experience, and education?

2 MS. JULIANNA SPIROPOULOS: Yes.

3 MR. MATT GHIKAS: So just to walk --  
4 walk you through some of those elements Ms.

5 Spiropoulos, you've been working in the financial  
6 industry for over twenty-two (22) years, correct?

7 MS. JULIANNA SPIROPOULOS: Yes.

8 MR. MATT GHIKAS: And you joined Aon  
9 Hewitt in 2011?

10 MS. JULIANNA SPIROPOULOS: Yes.

11 MR. MATT GHIKAS: And currently you're  
12 an associate partner there.

13 MS. JULIANNA SPIROPOULOS: Yes.

14 MR. MATT GHIKAS: And you also are the  
15 investment consulting market lead for Alberta.

16 Correct?

17 MS. JULIANNA SPIROPOULOS: Yes.

18 MR. MATT GHIKAS: Can you first just  
19 provide a very brief synopsis of what Aon Hewitt is?

20 MS. JULIANNA SPIROPOULOS: Aon Hewitt  
21 is a consulting firm that provides clients with a  
22 investment consulting advice -- advice from an  
23 actuarial perspective, and advice from benefits  
24 consulting.

25 MR. MATT GHIKAS: Okay. And can you

1 just summarize the nature of the work that you do in  
2 your current role with Aon?

3 MS. JULIANNA SPIROPOULOS: So I work  
4 with a variety of clients, and I help them with a  
5 variety of investment consulting needs. I do  
6 specialize in delivering asset liability projects to  
7 clients in western Canada. And also I am responsible  
8 for business development in Alberta and Saskatchewan.

9 MR. MATT GHIKAS: And have you worked  
10 with property and casualty insurance companies  
11 previously?

12 MS. JULIANNA SPIROPOULOS: Property  
13 and casualty, MPI was my first client.

14 MR. MATT GHIKAS: Thank you. And your  
15 biography indicates, and you referred to doing asset  
16 liability studies, can you just briefly describe what  
17 an asset liability study is?

18 MS. JULIANNA SPIROPOULOS: So in an  
19 asset liability study, what we do is we do a  
20 projection into the future of a client's or a fund's  
21 assets. We also project their liabilities, and we  
22 measure how those two move together.

23 From that information we can look at  
24 ways to -- we -- we look to help understand -- help  
25 clients understand the risks of their fund, as well as

1 look for ways to improve any risks that they find that  
2 they want to mitigate.

3 MR. MATT GHIKAS: And prior to your  
4 work at Aon you managed a number of pension plans.  
5 Correct?

6 MS. JULIANNA SPIROPOULOS: Yes.

7 MR. MATT GHIKAS: And in terms of your  
8 education, you have a bachelor of science in actuarial  
9 science?

10 MS. JULIANNA SPIROPOULOS: Yes.

11 MR. MATT GHIKAS: And you have an MBA?

12 MS. JULIANNA SPIROPOULOS: Yes.

13 MR. MATT GHIKAS: And you're a  
14 chartered financial analyst?

15 MS. JULIANNA SPIROPOULOS: Yes.

16 MR. MATT GHIKAS: Now, Mr. Chairman,  
17 just pausing there briefly just to ensure that we're  
18 all on the same page here, MPI is putting Ms.  
19 Spiropoulos forward as a fact witness, the fact that  
20 she did the studies, and that she's here to speak to  
21 the studies that she did. And, you know, explain the  
22 analysis and -- and the conclusions of that study.

23 I wasn't going to seek to have her  
24 qualified as an expert in that sense, and I believe  
25 that's appropriate in the circumstances.

1 THE CHAIRPERSON: Mr. Williams...?

2

3

(BRIEF PAUSE)

4

5 MR. BYRON WILLIAMS: I'll have to  
6 ponder that for a moment, and I might ponder it out  
7 loud. I -- I had presumed that Manitoba Public  
8 Insurance would be proffering the witness as having  
9 some expertise in the management and assessment of  
10 pension plan risk but -- and personally I think that  
11 her opinion -- or the ability to present her evidence  
12 depends upon that expertise.

13 From our client's perspective, I don't  
14 think we would have an issue if she was presented in  
15 that way but I leave that to -- to counsel.

16 MR. MATT GHIKAS: Well, I can provide  
17 you with a bit of background, Mr. Chairman. The --  
18 for -- for one (1) thing, Aon has a firm policy. And  
19 -- and that's part of the reason why -- why Mr. Kaplan  
20 is here, as well, is Aon has a firm policy that they  
21 do not act as a consultant expert in the sense of  
22 providing expert witness testimony in the sense that  
23 Mr. Viola has done, simply, you know, being retained  
24 to comment on matters of that sense.

25 Aon is obviously -- in my submission,

1 Ms. Spiropoulos is obviously qualified based on what  
2 I've taken her through to have performed the study.  
3 She -- if -- but in terms of having her qualified,  
4 that would go against Aon's policy of having her -- of  
5 having her appear as an expert witness.

6                   So, in my submission, she -- she is  
7 here. And -- and My Friend should feel free to go  
8 through her qualifications in the ordinary course of .  
9 . . And if he wants to argue that her -- the asset  
10 liability study was in some way flawed due to -- due  
11 to the way it was performed or who performed it or  
12 anything of the like, that he should feel free to do  
13 that but that it would occur in the normal course  
14 simply as he would with any other -- with any other  
15 witness that -- that would be a witness that prepared  
16 work.

17                   So it's -- it's an asset liability  
18 study that was done for MPI in -- in the normal  
19 course, effectively, to -- to assess the portfolio.  
20 Just simply they would come forward just like if -- if  
21 an auditor were to appear to say that I'm the auditor  
22 of MPI. It's -- it's essentially what you did and why  
23 you did it.

24                   And -- and I think you'll find that if  
25 you -- if you look at the rebuttal to Mr. Viola's

1 evidence which was largely provided by MPI, in fact,  
2 it was entirely provided by MPI, that -- that Mr.  
3 Viola's critique is -- is essentially with the  
4 parameters of the study, which were imposed by MPI,  
5 not by -- not by Aon. And so MPI was speak -- would  
6 be speaking to those.

7                   And Ms. Spiropoulos was asked as part  
8 of a response to a pre-ask to comment on the  
9 recommendations of Mr. Viola. I think you'll find if  
10 you look at that that those comments are limited to --  
11 that -- that Aon has provided are limited to whether  
12 they did Mr. -- you know, what is suggested, whether  
13 they had considered that and what the implications of  
14 that are.

15                   So it's -- it's factual, it's not an  
16 expert opinion in the -- in the abstract sense.

17                   THE CHAIRPERSON:    Okay. Mr. Oakes,  
18 have you got any position on this?

19                   MR. RAYMOND OAKES:    I would very  
20 briefly weigh in on the topic. And I think Mr. Ghikas  
21 is making the distinction between someone -- a witness  
22 who comes today as the maker of a report whose  
23 testimony should be received. And Mr. Williams has  
24 taken some issue, as I understand it, with whether  
25 that's an expert.

1                   Certainly this witness has considerable  
2 experience in private and public sector pension plans.  
3 Asset -- asset liability studies would be a large part  
4 of that. And I think it -- it is not necessary to  
5 qualify this witness as an expert. She's the maker of  
6 the report and the Board will weigh the evidence. If  
7 there's objections by any of the parties to certain  
8 parts of the report, then the Board will weigh the  
9 weight that's given to that evidence.

10                   THE CHAIRPERSON:     Okay. Thank you,  
11 Mr. Oakes. You know what, we're going to proceed with  
12 her as being the maker of the report. We will  
13 determine the weight. It will be -- the panel won't  
14 view her as an expert. And we'll just proceed with  
15 her testimony.

16                   MR. MATT GHIKAS:     Thank you, Mr.  
17 Chairman.

18

19 CONTINUED BY MR. MATT GHIKAS:

20                   MR. MATT GHIKAS:     Now just a few more  
21 followup questions before I have you turn to your  
22 presentation, Ms. Spiropoulos. You were the project  
23 lead for the -- the work that Aon Hewitt performed for  
24 MPI in 2014, right?

25                   MS. JULIANNA SPIROPOULOS:     Yes.

1 MR. MATT GHIKAS: And that was the  
2 work that culminated in the two (2) reports that are  
3 attached to the response to PUB-1-20?

4 MS. JULIANNA SPIROPOULOS: Yes.

5 MR. MATT GHIKAS: And in this  
6 proceeding were you involved in the preparation of  
7 responses to Information Requests that were  
8 specifically directed to Aon?

9 MS. JULIANNA SPIROPOULOS: I was  
10 involved in that, yes.

11 MR. MATT GHIKAS: And the -- you were  
12 also involved in the response prepared to the question  
13 put to you by the Board to comment on -- on Mr.  
14 Viola's presentation, correct? Or --

15 MS. JULIANNA SPIROPOULOS: Yes.

16 MR. MATT GHIKAS: And are the contents  
17 of the reports and responses to Information Requests  
18 true and accurate to the best of your ability?

19 MS. JULIANNA SPIROPOULOS: Yes.

20 MR. MATT GHIKAS: Okay. And you adopt  
21 those as your evidence in this proceeding?

22 MS. JULIANNA SPIROPOULOS: Yes.

23 MR. MATT GHIKAS: Okay. Now, in terms  
24 of your presentation, if we could, Diana, have that  
25 pulled up. That's -- thank you. MPI Exhibit 43. And

1 I'd ask Ms. SPIROPOULOS if you could just walk us  
2 through that, please.

3 MS. JULIANNA SPIROPOULOS: So if we  
4 start on page 2, in terms of the study that we were  
5 engaged by Manitoba Public Insurance to complete, this  
6 was in 2014, there were several phases to the study.

7 So the first phase was really to look  
8 at the duris -- duration matching program that was in  
9 place -- that MPI had in place and recommend an  
10 appropriate interest rate risk mitigation strategy  
11 strictly on the program.

12 Then the second phase had two parts to  
13 it. The first part took a look at alternative asset  
14 allocations for MPI's investment portfolio and to  
15 determine a recommendation. And then Part 'B'  
16 discussed implementation considerations.

17 So in Phase 1, the purpose of that  
18 phase was really to study the hedging strategy and the  
19 focus was solely on how the value of the bond  
20 portfolio tracks that of the liability. So only the  
21 bond portfolio and how that sort of matches the  
22 liabilities was looked at.

23 And it was looked at at a static point  
24 in time, so it was a point in time assessment of how  
25 the assets and liabilities move together. In Phase 2

1 we added to the analysis in Phase 1. And in that  
2 phase we took a look at the portfolio in its entirety.

3                   So what I mean by that is that MPI has  
4 a growth portfolio as well as its bond portfolio. So  
5 the growth portfolio, which is made up of the real  
6 estate infrastructure and equities was considered in  
7 Phase 2, as well as the situation that MPI is in in  
8 terms of setting its rates.

9                   So specifically the mechanism for  
10 managing the rate stabilization reserve was  
11 considered. The other difference in Phase 2 was that  
12 we modelled both the assets and the liabilities under  
13 various scenarios. So we have a economic scenario  
14 generator at Aon that we have developed that takes a  
15 look at each asset class and models a variety of  
16 scenarios over the projection period. So in this case  
17 it was ten years.

18                   And so those scenarios range from very  
19 good scenarios, to very poor scenarios, and everything  
20 in between. So there were a wide variety of different  
21 scenarios that we looked at in Phase 2.

22                   If we could move on to page 3, please.  
23 Before we started the study we discussed with MPI the  
24 objectives and the situation that they operate under.  
25 And here I list three assumptions that we conducted

1 the study under.

2                   So the first one is that the Basic  
3 compulsory program is required to break-even rather  
4 than target profits. Second, that MPI must apply to  
5 the PUB annually for approval of premiums. And third,  
6 that the PUB approves both the rates and the capital  
7 targets for the Basic program and that these  
8 assumptions could change at any time as a result of a  
9 PUB order.

10                   So this context did contribute to the  
11 framing of the -- of the analysis.

12                   If we could move to page 4. Thank you.  
13 So I'll start with explaining what occurred in Phase  
14 1. So this was the analysis of the interest rate risk  
15 hedging strategy. And, you know, at the beginning at  
16 every stage of the analysis we feel it is important to  
17 ensure that we discuss with each client what their  
18 objectives are and what their situation is, and  
19 conduct the analysis to be specific to those  
20 objectives.

21                   And in discussions with MPI, we  
22 determined that that short-term volatility of the  
23 premium rate is a primary concern, so that it's not a  
24 liquidity concern, but really of a short-term relative  
25 value between assets and liabilities, which is

1 primarily driven by interest rate changes in the  
2 context of the assets that match those claim  
3 liabilities.

4                   And so in that context, or with those  
5 assumptions, MPI would benefit from a bond portfolio  
6 whose behaviour matched that of liabilities. So if  
7 you, you know, think of the way that liabilities move  
8 and the way that asset -- assets moved, if assets and  
9 liabilities moved perfectly together, then there would  
10 be no mismatch between them. So in an ideal, perfect  
11 world, that's what we would be trying to achieve.

12                   So in that context, we focussed the  
13 analysis on looking at MPI's current practices in  
14 building their portfolio bonds, and also how they  
15 value liabilities, and identifying any opportunities  
16 to improve that asset-liability match, so the extent  
17 to which assets and liabilities move together.

18                   If we could move to page 5. Thank you.  
19 So to do this, we looked at three (3) strategies that  
20 are commonly used by institutional investors for  
21 addressing interest rate risk. So if you think of two  
22 (2) ends of a spectrum, you think of -- the  
23 liabilities have a certain duration, and there are  
24 different ways that you can match that duration with a  
25 portfolio of bonds in your assets.

1                   So the first, which is 'A' on this  
2 slide, is a duration match which strictly involves  
3 constructing a bond portfolio where the duration  
4 equals that of the liabilities. So that could be one  
5 (1) bond, or ten (10) bonds, or a hundred (100) bonds,  
6 but you're just looking at matching the duration of  
7 assets to the duration of liabilities. So that's  
8 really one (1) end of the spectrum that's the simplest  
9 to implement.

10                   On the other end of the spectrum would  
11 be what we would have here as point 'C', which is a  
12 cashflow match. The liabilities are staggered in each  
13 year. There's a different cashflow in every year out  
14 into the future.

15                   And so in theory, you could purchase  
16 bonds that match every single cashflow in every single  
17 year. And so that would be a, you know, perfect year-  
18 by-year match of bonds to each cashflow.

19                   That would be the most -- if --  
20 theoretically, if it were possible, that would be the  
21 most precise matching, and your duration would then  
22 obviously match, because you have bonds that look  
23 exactly like your liabilities.

24                   In between these two (2) approaches is  
25 what we call here 'B', the hybrid solution, which is

1 really a compromise between the two (2). And what it  
2 does is, instead of having every single cashflow or  
3 just, you know, one (1) bond in a duration, it has  
4 several buckets, duration buckets.

5                   And then it tries to approximate the  
6 liabilities by having several buckets of bonds that  
7 then match the duration on a portfol -- on -- sort of  
8 for the whole asset portfolio.

9                   And so those were the three (3)  
10 strategies that we compared. When we sort of looked  
11 at that, we had a couple of recommendations. One (1)  
12 was that we took a look at the formulation of the  
13 margin for adverse deviations and how the portfolio  
14 yield was calculated. And we suggested some  
15 improvements for those two (2) -- the way that MPI was  
16 determining those two (2) elements.

17                   We also suggested that MPI work with  
18 its investment manager to see if it was possible to  
19 adopt a tighter hedging strategy.

20                   So then we moved on to phase 2, which,  
21 as I mentioned before, was an integrated modelling.  
22 So it was the full modelling that had all of the  
23 assets, including the growth portfolio, as well as the  
24 mechanism that MPI uses for setting premium rates.  
25 And it had the variety of the different economic

1 scenarios.

2                   So the first step in part A was what we  
3 call a risk diagnosis. And this really is a base-case  
4 analysis. So what we did is modelled the ten (10)  
5 year. We projected the assets and we projected the  
6 liabilities over ten (10) years under all of the  
7 different scenarios that we have in our economic  
8 scenario generator, assuming that nothing changed, so  
9 under MPI's current asset mix and -- and current sort  
10 of mechanisms, with the exception as stated here that  
11 we applied based on our discussions with MPI desired  
12 state rules for the rate stabilization reserve.

13                   So that was 100 percent. The targets  
14 being 100 percent of the minimum capital test for the  
15 upper bound, and 65 percent for the lower bound. And  
16 we assumed to follow sort of a hybrid approach in  
17 terms of the matching strategy, the bond matching  
18 strategy, when we did this base case.

19                   So we projected out the assets,  
20 projected out the liabilities, and we sort of showed  
21 the metrics for returns, basic net income, retained  
22 earnings, and net cash flow. So each of these items,  
23 there was a range of results that ranged -- because of  
24 the different scenarios from very, very poor results  
25 to very good results, and everything in between and at

1 the median. So that provided a sense of -- for MPI of  
2 assuming nothing changed how could the assets and  
3 liabilities evolve over the next ten years under  
4 different economic scenarios.

5                   So once we had that base case, then we  
6 moved on to the optimization which was looking at  
7 opportunities to improve the asset mix with different  
8 alternatives. So the first step compared the impact  
9 of the three hedging strategies that we looked at in  
10 phase 1.

11                   And so this was an add-on, or it as  
12 more -- it built on the phase 1 analysis because it  
13 did consider the entire portfolio, so it included the  
14 growth assets as well as those bonds -- the bond  
15 portfolio, as well as the mechanism for managing the  
16 Rate Stabilization Reserve and premium rate setting.  
17 And, you know, again it was done under the variety of  
18 economic scenarios.

19                   And so with that more integrated  
20 modelling, we concluded that the cost of more precise  
21 matching is too high compared to the amount of risk  
22 reduction that it achieved. And this really is  
23 because more precise matching has a higher cost  
24 because the portfolio yields are lower. So what I  
25 mean by this is that if you have a cash -- if you

1 think of the one end of the spectrum with the cash  
2 flow matching where very single cash flow is matched,  
3 you're going to have to match cash flows all the way  
4 from the very short term to the longer term.

5           With a bucket approach, or even a  
6 duration approach, you have the flexibility to have  
7 your bonds in different parts of the yield curve. So  
8 with the precise matching, you are going to have more  
9 bonds in that shorter end of the yield curve. And so  
10 if you have an upward slopping interest rate  
11 environment those shorter bonds are going to have a  
12 lower yield than your longer term bonds in that type  
13 of environment.

14           And so at a portfolio level, that yield  
15 is lower under the more precise strategies. And so  
16 what we did in this stage is we compared the trade-off  
17 between that cost and the amount of risk reduction  
18 that you get from being in a more precise strategy,  
19 and we concluded that it -- it isn't really worth it.  
20 It isn't worth reducing the yield for the amount of  
21 risk reduction that you achieve.

22           So after we took a look at the bond  
23 strategy, then we looked at the split between that  
24 bond strategy, so the -- the fixed income matching  
25 portfolio, and the growth assets. So how much were in

1 each portion of the portfolio, along with we looked at  
2 within that growth portfolio what assets you have in  
3 that portfolio.

4                   So, you know, we -- as with all clients  
5 we discussed the asset classes with MPI and, you know,  
6 chose which asset classes were going to be modelled  
7 based on the input from MPI. You know, this was done  
8 -- the information that was -- was part of this  
9 decision was some risk and reward information on an  
10 asset-only basis of the various asset classes. As  
11 well implementation issues, such as cost and  
12 complexity, were considered.

13                   We do believe that it is important for  
14 every client to, you know, make sure that any asset  
15 class that they model is implementable, you know, in  
16 order to make sure that the results of the study are  
17 practical and can be actually used in -- by the  
18 client. We also, you know, recognize that a model is  
19 a, you know, mathematical beast. And, as such, we  
20 want to make sure -- to make sure that these  
21 portfolios are practical for implementation.

22                   We want to make sure that we put some  
23 constraints on each asset class so that the output is  
24 -- is practical for implementation.

25                   So there were several minimum

1 constraints that were imposed. And this was based on  
2 discussion with MPI. A fixed income minimum  
3 allocation was imposed to reflect that MPI does have  
4 an objective to match the -- you know, the -- the  
5 assets -- to match its claims liabilities with assets,  
6 so there is that matching objective, and a minimum --  
7 a fixed income is required to achieve that.

8 MPI also felt that it was important to  
9 have a minimum in Canadian equities, and so that was  
10 incorporated into the study. For real estate and  
11 infrastructure, these asset classes are less liquid.  
12 They are harder to build up and they are harder to  
13 sell. MPI had an allocation to each of these. And we  
14 reflected that in the study, as well.

15 You know, when we -- with all -- with  
16 the constraints and the, you know, reality under which  
17 MPI operates, the minimum constraints did leave little  
18 room for other asset classes, especially when there  
19 were large levels of fixed income.

20 So with the order in terms of the  
21 modelling, how the asset classes were favoured, US  
22 equities were favoured, then Canadian equities, then  
23 international equities, and then timberlands. More of  
24 these different asset classes were included as you had  
25 a greater percentage of growth assets. And at lower

1 level of -- lower levels of fixed income there were  
2 fewer of these asset classes.

3                   So in looking at all of the modelling  
4 and -- and the results that came out of it, we  
5 provided some considerations for MPI. One (1) was  
6 that we suggested that surplus distributions could be  
7 spread over time. One (1) of the items that we noted  
8 when we did the projections is that the volatility of  
9 the rate stabilization reserves caused a lot of sort  
10 of volatility and frequent rate adjustments and the  
11 surplus distributions could be quite large in any  
12 given year.

13                   And so if there was some spreading of  
14 that over time there would be less of a liquidity drain  
15 on the portfolio at any given point in time. We also  
16 suggested that the rate stabilization reserve targets  
17 could be looked at, or could be considered, because  
18 with these -- the volatility of the portfolio it was  
19 causing frequent large rate adjustments.

20                   And, as I stated earlier, one (1) of  
21 the objectives that MPI stated that they had was to  
22 have premium stabil - premium rate stability. To do  
23 that, the distance between the targets could be  
24 revised to reflect the volatility of the RSR.  
25 Smoothed rate adjustments could be considered. But we

1 indicated that a further study would be required to  
2 determine the most attractive approach.

3           From a portfolio perspective, the -- as  
4 I mentioned before, the hedging strategy that we  
5 looked at was duration matching precisely because the  
6 more precise cashflow matching strategies were too  
7 expensive relative to the risk reduction.

8           In terms of the asset mix, based on the  
9 objectives that we discussed with MPI, they -- we  
10 perceived that their risk tolerance was low given that  
11 they do have the mandate to breakeven instead of  
12 targeting a profit. There is an extensive process to  
13 change the targeted levels of reserve. And MPI does  
14 not have direct control over the premium rates.

15           So we recommended adopting portfolio 2  
16 in the study because it is at the lower end of the  
17 risk spectrum. It still does have a significant  
18 allocation to real estate and infrastructure which  
19 does provide inflation -- some inflation protection  
20 over the long-term. But it also has a balance of more  
21 liquid equity allocation because we wanted to ensure  
22 that that growth portfolio was not entirely in  
23 illiquid assets, that it had some diversification into  
24 more liquid asset classes.

25           The second part of phase 2, the part B,

1 reviewed a variety of implementation considerations.  
2 These included observations on asset class ranges,  
3 discussion of tactical fixed income opportunities,  
4 observations on style investing and alternative  
5 indexing, and commentary on MPIs withdrawal policy and  
6 investment policy.

7

8 (BRIEF PAUSE)

9

10 MR. MATT GHIKAS: Thank you, Ms.  
11 SPIROPOULOS. And just -- just for the -- the record,  
12 the responses that Aon and Ms. SPIROPOULOS provided to  
13 the -- the comments on -- on Mr. Viola's report in  
14 pre-ask 2 are found at MPI Exhibit 39.

15 And with that, I'll -- Ms. SPIROPOULOS  
16 is available for questions.

17 THE CHAIRPERSON: Sorry, Ms.  
18 McCandless.

19

20 CROSS-EXAMINATION BY MS. KATHLEEN MCCANDLESS:

21 MS. KATHLEEN MCCANDLESS: Thank you.  
22 Hello, Ms. SPIROPOULOS. So we heard this morning that  
23 you were the project lead with respect to the ALM  
24 study, which is found at PUB/MPI 1-20(a); that's the  
25 report. And I'd like to start by discussing with you

1 the objectives for Phase I.

2                   So, Diana, could you please pull up  
3 page 3? Under the heading titled "Objectives" it's  
4 noted that MPI indicated that the short-term  
5 volatility of the premium rate requirement is a  
6 primary concern.

7                   Is it fair to say the premium rate  
8 requirement is the average Basic rate MPI needs to  
9 charge in order to achieve its break-even objective  
10 and that stability in this is preferred over  
11 volatility?

12                   MS. JULIANNA SPIROPOULOS: Yes.

13                   MS. KATHLEEN MCCANDLESS: Is upward  
14 volatility of equal concern to downward volatility?

15                   MS. JULIANNA SPIROPOULOS: Yes.

16                   MS. KATHLEEN MCCANDLESS: Thank you.

17 And there's the inclusion of the -- of the term in  
18 there, short-term, with respect to volatility.

19                   Can you explain why short-term is used?

20                   MS. JULIANNA SPIROPOULOS: Yeah, so  
21 short-term reflects the experience that MPI will have  
22 on a year to year basis and the reality that that is a  
23 direct input into the premium rate setting process.  
24 So if a premium rate volatility is a concern, it's  
25 important that we considered the mechanism on a short-

1 term basis of how that premium rate volatility is set.

2 MS. KATHLEEN MCCANDLESS: Thank you.

3 The first bullet under the heading "Objective" states  
4 that MPI's main concern is not one of liquidity, but  
5 one of short-term relative value between assets and  
6 liabilities which is driven by interest rate changes.

7 Can you just explain what this means?

8 MS. JULIANNA SPIROPOULOS: Sure. So  
9 in the short-term the assets are valued every year and  
10 the liabilities are valued every year and this is  
11 driven by the interest rates. And this is the direct  
12 input into the premium rate setting.

13 So with that requirement of -- or the -  
14 - the objective of managing the short-term volatility  
15 of the premium rate, that is the main concern that MPI  
16 faces. Liquidity is always something we look at, but  
17 we need to prioritize which objectives are most  
18 important relative to others.

19 MS. KATHLEEN MCCANDLESS: Thank you.

20 Would it be fair to say that MPI would like the  
21 financial statement value of certain assets and  
22 liabilities to respond similarly to changing interest  
23 rates?

24 MS. JULIANNA SPIROPOULOS: Yes.

25 MS. KATHLEEN MCCANDLESS: And again,

1 there's the inclusion of the term short-term within  
2 this -- this bullet here.

3           Could you just again explain the reason  
4 for the inclusion of short-term?

5           MS. JULIANNA SPIROPOULOS:    So it's --  
6 it's based on the way that the premium rate is -- is  
7 set, which is on a short-term basis.  So you need to  
8 align the -- the way that you're looking at the assets  
9 and liabilities with the way that the rates setting  
10 process is looking at the assets and liabilities.

11           MS. KATHLEEN MCCANDLESS:    Thank you.  
12 Then the second bullet under the "Objective" heading  
13 states:

14                            "In that context, MPI would benefit  
15                            from a bond portfolio whose  
16                            behaviour matches that of the  
17                            liabilities.  The analysis,  
18                            therefore, focusses on assessing  
19                            current MPI practices in building  
20                            the bond portfolio, valuing  
21                            liabilities, and identifying  
22                            opportunities to improve the asset-  
23                            liability match."

24                            Is this essence of the ALM, to immunize  
25 against interest rate risk?

1 MS. JULIANNA SPIROPOULOS: No, not the  
2 full ALM. It was -- the objective of this phase was  
3 to specifically look at this element. Phase 2 looked  
4 at the entire portfolio which was the full ALM.

5 MS. KATHLEEN MCCANDLESS: So in that  
6 case, what is being immunized, net income or total  
7 comprehensive income, retained earnings, or total  
8 equity?

9 MS. JULIANNA SPIROPOULOS: In this  
10 phase, all we looked at was the behaviour of the  
11 assets and the behaviour of the liabilities with  
12 respect to changes in interest rates. The net income  
13 was looked at in phase 2.

14 MS. KATHLEEN MCCANDLESS: Thank you.  
15 Is the term "hedging strategy" from the report's title  
16 a reference to seeking a better approach to building  
17 the bond portfolio to achieve this immunization?

18 MS. JULIANNA SPIROPOULOS: Yes.

19 MS. KATHLEEN MCCANDLESS: Now, at the  
20 time that the study was completed, MPI used a  
21 duration-match strategy?

22 MS. JULIANNA SPIROPOULOS: Yes.

23 MS. KATHLEEN MCCANDLESS: And that was  
24 subject to a duration gap tolerance of plus or minus  
25 one (1) year?

1 MS. JULIANNA SPIROPOULOS: Yes.

2 MS. KATHLEEN MCCANDLESS: And at the  
3 time, the claim liabilities were fully interest-rate  
4 sensitive, but the supporting bond portfolio was only  
5 about 60 percent interest-rate sensitive?

6 MS. JULIANNA SPIROPOULOS: I'm not  
7 sure how much -- exactly the percentage, but there was  
8 a portion that was not in -- interest-rate sensitive.

9 MS. KATHLEEN MCCANDLESS: And that was  
10 because it included non-marketable MUSH bonds --

11 MS. JULIANNA SPIROPOULOS: Yes.

12 MS. KATHLEEN MCCANDLESS: -- and  
13 categorized as held to maturity?

14 MS. JULIANNA SPIROPOULOS: Yes.

15 MS. KATHLEEN MCCANDLESS: Can you  
16 explain how the significance of the MUSH bonds in the  
17 portfolio complicates achieving the objectives of the  
18 ALM process?

19 MS. JULIANNA SPIROPOULOS: So the MUSH  
20 bonds are not valued at -- by the market, so they do  
21 not have the same sensitivity to changes in interest  
22 rates as any other bonds that would be in the  
23 portfolio such as federal bonds or provincial bonds.

24 MS. KATHLEEN MCCANDLESS: Can you  
25 please, Diana, pull up page 8? Thank you.

1                   And on this page it's noted that Aon  
2 compared three (3) strategies commonly used by  
3 institutional investors for addressing interest-rate  
4 risk: duration match, hybrid solution, and cashflow  
5 match.

6                   Is that in front of you?

7

8                   (BRIEF PAUSE)

9

10                   MS. KATHLEEN MCCANDLESS: You can just  
11 disregard my question for the moment and I'll -- I'll  
12 move on. We may come back to that in a minute.

13                   Diana, could you please jump ahead to  
14 page 14? At the third bullet on this page, it's noted  
15 that:

16                   "The estimated annual tracking error  
17 between MPI's liabilities and fixed-  
18 income portfolio for the three (3)  
19 strategies were as follows."

20                   Can you explain what "tracking error"  
21 is?

22                   MS. JULIANNA SPIROPOULOS: Tracking  
23 error is the extent to which the asset return does not  
24 match the liability return.

25                   MS. KATHLEEN MCCANDLESS: How does a

1 consideration of tracking error affect the ALM study?

2 MS. JULIANNA SPIROPOULOS: So what we  
3 were looking at was how theoretically possible it was  
4 to have the asset return match as closely as possible  
5 to the liability return. So the higher the tracking  
6 error, the less closely the assets match to the  
7 liabilities.

8 MS. KATHLEEN MCCANDLESS: And how do  
9 we interpret the different levels of estimated annual  
10 tracking error for each hedging strategy ranging from  
11 one hundred and twenty (120) basis points for duration  
12 match down to fifteen (15) basis points for cashflow  
13 match, as you see in front of you.

14 MS. JULIANNA SPIROPOULOS: So when  
15 interest rates change under a duration match, the  
16 difference between the return on assets and the return  
17 on liabilities will be a hundred and twenty (120)  
18 basis points. Under a cashflow match, which is more  
19 precise, the difference would be fifteen (15) basis  
20 points.

21 MS. KATHLEEN MCCANDLESS: Thank you.  
22 Then the final bullet there which states:

23 "Assuming liabilities of \$1 billion,  
24 two (2) standard deviations, adverse  
25 event, 2.3 percent chance or once in

1                   forty-three (43) years would  
2                   respectively result in funding  
3                   deficiencies."

4                   And then there are ranges there below.

5                   How do we interpret the different  
6 levels of estimated funding deficiency arising from  
7 that adverse event?

8                   MS. JULIANNA SPIROPOULOS:    So the  
9 adverse event looks at the -- what MPI would  
10 experience under a more extreme scenario, and it is  
11 strictly based on those tracking errors.  So when you  
12 have more of a mismatch between assets and  
13 liabilities, when you have an adverse event, the  
14 difference will be sort of as stated here.

15                  MS. KATHLEEN MCCANDLESS:   Thank you.  
16 Diana, could you just, please, for -- go forward to  
17 page 15, so scroll down.

18                  And the first bullet, it's noted here  
19 that in the current yield curve environment, it is  
20 estimated that the yield reduction to go from  
21 duration-matching to cashflow-matching is in the forty  
22 (40) to fifty (50) basis points range.

23                  Can you explain why there is a yield  
24 reduction, and why the yield reduction is dependent on  
25 the shape of the yield curve?

1 MS. JULIANNA SPIROPOULOS: So in an  
2 upward sloping yield curve environment, your short  
3 term rates are lower than your long term rates. In a  
4 more precise cashflow-matching strategy, you have more  
5 bonds in that shorter end of the curve than you do  
6 under the other strategies where you have the  
7 flexibility to have more bonds in other parts of the  
8 curve.

9 So when you're forced to have more  
10 bonds in the short end of the curve, you're forced to  
11 hold more bonds that have a lower yield in an upward  
12 sloping environment. If the yield curve were flat,  
13 the yield would be the same for every maturity, and  
14 would be the same for every strategy.

15 MS. KATHLEEN MCCANDLESS: Thank you.  
16 Is this yield reduction an ALM consideration, or  
17 outside the scope of the ALM Study?

18 MS. JULIANNA SPIROPOULOS: The yield -  
19 - the yield is part of -- it wasn't -- it was  
20 incorporated, or considered, in the study.

21 MS. KATHLEEN MCCANDLESS: Thank you.  
22 And how does the yield curve today compare to that of  
23 2014 when the report was written?

24 MS. JULIANNA SPIROPOULOS: I don't  
25 have that exact information with me.

1 (BRIEF PAUSE)

2

3 MS. KATHLEEN MCCANDLESS: Okay. Thank  
4 you. Diana, could you, please, jump forward to page  
5 17? And at the third bullet there, it's noted that a  
6 portion of the liabilities is indexed.

7 Can you explain the consequence and the  
8 financial significance of the fact that a portion of  
9 the claim liabilities are indexed for inflation?

10 MS. JULIANNA SPIROPOULOS: With the --  
11 when inflation changes, then the liabilities will  
12 change accordingly with that inflation.

13 MS. KATHLEEN MCCANDLESS: And for  
14 Basic, how does inflation risk compare in significance  
15 to interest rate risk?

16 MS. JULIANNA SPIROPOULOS: I -- I'm  
17 not sure.

18 MS. KATHLEEN MCCANDLESS: What is the  
19 preferred solution to addressing inflation risk in ALM  
20 studies generally?

21 MS. JULIANNA SPIROPOULOS: There is no  
22 preferred solution. We look at different assets that  
23 can provide inflation protection, and assess them  
24 accordingly.

25 MS. KATHLEEN MCCANDLESS: Why are real

1 return bonds not the answer to immunize against  
2 inflation risk in this instance?

3 MS. JULIANNA SPIROPOULOS: I wouldn't  
4 say that they're -- they don't -- they can't play a  
5 role, but they do not provide good year-to-year  
6 inflation protection. They are valued based on the  
7 market, whereas the inflation assumption that is used  
8 to value the liabilities is based on a survey from  
9 Cana -- of Canadian banks. That is not a investable  
10 rate, essentially.

11 MS. KATHLEEN MCCANDLESS: Thank you.  
12 So essentially, to address inflation risk, it's all in  
13 the choice of assets?

14 MS. JULIANNA SPIROPOULOS: Yes.

15 MS. KATHLEEN MCCANDLESS: Thank you.

16

17 (BRIEF PAUSE)

18

19 MS. KATHLEEN MCCANDLESS: Does one  
20 asset class provide better inflation risk protection  
21 than another?

22 MS. JULIANNA SPIROPOULOS: Not  
23 specifically.

24 MS. KATHLEEN MCCANDLESS: Thank you.

25

1 (BRIEF PAUSE)

2

3 MS. KATHLEEN MCCANDLESS: At the  
4 bottom of the page there's a reference to -- again to  
5 the short-term inflation risk. And in accepting and  
6 not trying to immunize against inflation risk, why  
7 would you describe MPI's resulting inflation risk as  
8 short-term considering some index benefits can involve  
9 payouts over many years?

10 MS. JULIANNA SPIROPOULOS: It's  
11 related to the way that the assets and liabilities are  
12 valued on a year-to-year basis and how this relates to  
13 MPI's primary objective of managing the premium rate  
14 volatility.

15 So on a year-to-year basis, the  
16 liabilities are valued based on the survey of Canadian  
17 banks. And for precise inflation protection they  
18 would need an asset that's also valued in that -- on  
19 that basis.

20 Over the long-term, assets can provide  
21 some inflation protection, but there is -- the focus  
22 of this study was looking at the short-term, year-to-  
23 year protection.

24 MS. KATHLEEN MCCANDLESS: Thank you.  
25 Diana, can we please move ahead to page 20? This is

1 just a summary of the recommendations made in phase 1  
2 which you discussed in your presentation this morning.

3                   And then if we scroll down to page 20.  
4 At the first bullet there with respect to  
5 implementation of recommendations for phase 1, it's  
6 noted:

7                   "Assuming the manager's capabilities  
8                   are aligned satisfactorily, we  
9                   recommend adopting a tighter hedging  
10                   strategy."

11                   I just ask you to highlight or describe  
12 the key characteristics of the particular hybrid  
13 solution that was proposed in phase 1.

14                   MS. JULIANNA SPIROPOULOS: I would  
15 have to look that up.

16

17                   (BRIEF PAUSE)

18

19                   MS. JULIANNA SPIROPOULOS: I don't  
20 believe we specifically outlined a strategy. We just  
21 recommended that MPI assess -- or discuss with their  
22 manager, opportunities to improve the matching of the  
23 assets and liabilities.

24                   MS. KATHLEEN MCCANDLESS: Perhaps then  
25 you could just explain what the main considerations

1 were that gave rise to that recommendation?

2 MS. JULIANNA SPIROPOULOS: So when  
3 looking only at the asset and liabilities of the bond  
4 portfolio and the claims liabilities when we weren't  
5 looking at the entire portfolio, based on the tracking  
6 errors that were discussed previously, it looked as  
7 though there could be an opportunity to improve the  
8 tracking error of the assets relative to the  
9 liabilities.

10 MS. KATHLEEN MCCANDLESS: With respect  
11 to the key characteristics of the particular hybrid  
12 solution, would it not be the third sublet under the  
13 first bullet there that starts with, "we favour a more  
14 flexible approach where key rates 1, 2, 3," et cetera?

15 MS. JULIANNA SPIROPOULOS: Yes, we put  
16 that forward as an option based on our discussion of  
17 the practicalities of different strategies with MPI.

18 MS. KATHLEEN MCCANDLESS: And would  
19 that not be a recommendation for a hybrid solution?

20 MS. JULIANNA SPIROPOULOS: It was --  
21 yeah, we -- we did say that they could consider a  
22 hybrid solution because a cashflow matching solution  
23 was deemed to be difficult to implement.

24 MS. KATHLEEN MCCANDLESS: Thank you.  
25 I'm going to move to some questions on phase 2 of the

1 study, and that is attachment 'B' to PUB-MPI-120.

2 Thank you, Diana. And so this phase, as we heard this  
3 morning in your presentation, was entitled,  
4 'Optimization of the Investment Portfolio.'

5 And, as we heard, this phase was  
6 seeking to determine an appropriate asset allocation  
7 for MPI's total investment portfo -- portfolio?

8 MS. JULIANNA SPIROPOULOS: Yes.

9 MS. KATHLEEN MCCANDLESS: Diana, could  
10 we please move forward to page 5. Under the heading  
11 entitled, 'Objective,' the objective remains the same  
12 as it was in phase 1, namely, that MPI has indicated  
13 that the short-term volatility of the premium rate  
14 requirement is a primary concern?

15 MS. JULIANNA SPIROPOULOS: Yes.

16 MS. KATHLEEN MCCANDLESS: If we could  
17 move to page 9. And through 10 is an explanation of  
18 the risk diagnosis stage of the analysis and what was  
19 learned from it.

20 Could you just, at a high level,  
21 summarize the risk diagnosis phase and what was  
22 learned as a result of that?

23 MS. JULIANNA SPIROPOULOS: Sure. So  
24 the risk diagnosis projected out MPI's assets and  
25 liabilities under their current situation, so their

1 current asset mix and applying the desired state rules  
2 as indicated here. We also assumed a bucket approach  
3 to liability matching for this analysis.

4                   So the key takeaways are on page 9 and  
5 then the following pages. So from a return  
6 perspective we looked at both the mean return; both in  
7 nominal and real terms, which are stated here the --  
8 of the liability discount rate, and the return.

9                   And also we looked at the worst case  
10 scenarios. So to provide some context on that, when  
11 we model out all of our different scenarios they range  
12 from very good to very poor. And in the poor  
13 scenarios we look at the worst 5 percent of those  
14 scenarios and average those and that is a measure of  
15 the downside risk, or a measure of in the worst case  
16 scenarios on average what would happen. So here for  
17 the returns we said that in those worst 5 percent of  
18 scenarios on average, the portfolio could lose about 9  
19 percent or 11 percent real.

20                   Did you want me to go through the other  
21 items too?

22                   MS. KATHLEEN MCCANDLESS: Just on a  
23 high level with respect to what -- what follows.

24                   MS. JULIANNA SPIROPOULOS: So in Basic  
25 net income, which is on page 10, we showed the sort of

1 mean level and then the -- in the bad years how much  
2 volatility MPI could expect and then provided some  
3 commentary in terms of retained earnings.

4                   And, you know, this is where we noted  
5 that the volatility of the retained earnings caused a  
6 lot of frequent hitting of the upper and lower RSR  
7 targets, so a lot of premium rate adjustments. In  
8 terms of net cashflows we noted that because of large  
9 surplus distributions there could be significant  
10 outflows in any given year, which could require  
11 significant liquidity.

12                   MS. KATHLEEN MCCANDLESS: Thank you.  
13 Why was the fixed income portfolio assumed to follow a  
14 hybrid solution bucket approach in the base case  
15 rather than the Corporation's actual duration match  
16 strategy?

17                   MS. JULIANNA SPIROPOULOS: This was --  
18 we needed to set one approach in order to have an  
19 apples to apples comparison in terms of the risk  
20 diagnosis. And from Phase 1 there was some thought  
21 that there may be -- a bucket approach might be of  
22 interest and so we used the bucket approach.

23                   MS. KATHLEEN MCCANDLESS: Thank you.  
24 Can you describe the desired state rules as they apply  
25 to the RSR in the base case?

1 MS. JULIANNA SPIROPOULOS: So the  
2 target was 100 percent of the minimum capital test  
3 value for the upper bound and 65 percent of the  
4 minimum capital test value for the lower bound.

5 MS. KATHLEEN MCCANDLESS: And what  
6 elements in the ten year integrated projection are  
7 derived stochastically?

8 MS. JULIANNA SPIROPOULOS: Everything.  
9 Well, we -- we have a -- stochastic scenarios that are  
10 projected and then all of the different assets and  
11 liabilities are projected under all of those  
12 scenarios.

13 MS. KATHLEEN MCCANDLESS: Are any  
14 assumptions made with respect to expected movement in  
15 market bond yields over the forecast period?

16 MS. JULIANNA SPIROPOULOS: There are  
17 assumptions with respect to interest rate movements,  
18 yes.

19

20 (BRIEF PAUSE)

21

22 MS. KATHLEEN MCCANDLESS: Are you  
23 deriving stochastic estimates to the claim  
24 liabilities?

25 MS. JULIANNA SPIROPOULOS: So the

1 baseline projection, so this is the present value of  
2 cashflows, was done by MPI. And we adjusted this  
3 baseline given specific inflation and interest rate  
4 changes in each scenario. The pension liability we  
5 did protect -- project ourselves.

6

7

(BRIEF PAUSE)

8

9

MS. KATHLEEN MCCANDLESS: So it was  
10 only interest and inflation that was stochastic?

11

MS. JULIANNA SPIROPOULOS: In terms of  
12 the liabilities, those are the elements that affect  
13 the liabilities.

14

15

(BRIEF PAUSE)

16

17

MS. KATHLEEN MCCANDLESS: Moving onto  
18 page 11...

19

20

(BRIEF PAUSE)

21

22

MS. KATHLEEN MCCANDLESS: We heard  
23 this morning about the optimization phase, and perhaps  
24 you could just summarize at a high level the three (3)  
25 steps of that phase of the analysis?

1 MS. JULIANNA SPIROPOULOS: Sure. So  
2 the first step we looked at the three (3) hedging  
3 strategies that we looked at in phase 1. This time it  
4 included the entire portfolio, including the growth  
5 and liability hedging assets, as well as the mechanism  
6 for managing the RSR and premium rate setting. And  
7 this is where we concluded that the cost of precise  
8 matching is too high given the reduction in risk.

9 The second step looked at the split  
10 between the liability matching portfolio and the  
11 growth assets, and we also looked at the optimization  
12 of the growth assets, so those assets included within  
13 that portfolio.

14 MS. KATHLEEN MCCANDLESS: Thank you.  
15 If we go to the first bullet on page 14, there's a  
16 recommendation here that states:

17 "Provide in the policies that  
18 surplus distributions be spread over  
19 time."

20 This relates to rebating of excess RSR  
21 balances to policy holders?

22 MS. JULIANNA SPIROPOULOS: Yes.

23 MS. KATHLEEN MCCANDLESS: How  
24 significant is the risk of potential liquidity issues  
25 if rebates are not spread over time?

1 MS. JULIANNA SPIROPOULOS: I can't  
2 speak to the significance but we noted that the  
3 surplus distributions could be large in any given  
4 year.

5 MS. KATHLEEN MCCANDLESS: At the  
6 second bullet there's a recommendation under 'revise  
7 the RSR targets' that the distance -- a larger  
8 distance between the lower and upper RSR targets would  
9 reduce the likelihood of rate adjustments -- pardon  
10 me, prior to that there's a recommendation -- sorry,  
11 under -- under the larger distance it says:

12 "The distance between targets should  
13 reflect the volatility of the RSR."

14 In practical terms, how wide is wide  
15 enough?

16 MS. JULIANNA SPIROPOULOS: That would  
17 be something that would need to be determined by MPI  
18 in conjunction with its stakeholders. We noted that  
19 the RSR targets were being hit very frequently, and  
20 that was causing large rate adjust -- frequent rate  
21 adjustments.

22 MS. KATHLEEN MCCANDLESS: Thank you.  
23 If we move forward to page 15, there are  
24 recommendations here for total portfolio composition.  
25 The first is hedging strategy, use duration matching,

1 and then at the bottom of the page is a recommendation  
2 of adopting a portfolio 2, and then the reasons are  
3 given.

4                   How does the recommended investment  
5 portfolio represent a change from the base case? And  
6 perhaps we can move to the -- the second -- or page  
7 16.

8                   MS. JULIANNA SPIROPOULOS:    So in the  
9 base case, the fixed income or liability hedging  
10 portion was 60 percent. It increased by 10 percent to  
11 70 percent in the recommended portfolio. Canadian  
12 equities were reduced from 15 percent to 10 percent.  
13 US equities were -- the mix of US equities was changed  
14 from large cap to a mix of large cap and small cap.

15                   And the targets for real estate and  
16 infrastructure were reduced from 13 percent to 10  
17 percent for real estate and 7 percent to 5 percent for  
18 in -- infrastructure.

19                   MS. KATHLEEN MCCANDLESS:    How does the  
20 allocation to equities or alternatives impact the  
21 modelling of Basic net income or volatility in the  
22 RSR?

23                   MS. JULIANNA SPIROPOULOS:  
24 Alternatives and equities are expected to have higher  
25 returns than the fixed-income portfolio in the

1 matching strategy, but it is also expected to have  
2 higher volatility.

3 MS. KATHLEEN MCCANDLESS: Thank you.

4 Could we jump ahead to page 25 of the document? I  
5 just have some questions on interpretation of the  
6 chart of base case Basic net income.

7 MS. JULIANNA SPIROPOULOS: M-hm.

8 MS. KATHLEEN MCCANDLESS: What gives  
9 rise to the model deviations from the mean forecast of  
10 Basic net income? You'll see that in the fourth row  
11 from the bottom.

12 MS. JULIANNA SPIROPOULOS: Sorry, can  
13 you repeat the question?

14 MS. KATHLEEN MCCANDLESS: What gives  
15 rise to the model deviations from the mean forecast of  
16 Basic net income?

17 MS. JULIANNA SPIROPOULOS: So this  
18 chart represents the range of results under all of the  
19 different scenarios. The mean is at the average. The  
20 standard deviation is the variation from that mean.

21 MS. KATHLEEN MCCANDLESS: So that's  
22 reflected on the col -- on the colour shaded areas on  
23 the chart?

24 MS. JULIANNA SPIROPOULOS: The  
25 coloured shaded areas represent the range of the

1 outcomes, and then the percentiles at which they fall,  
2 which is in the top portion of that chart.

3 MS. KATHLEEN MCCANDLESS: So the  
4 source of the deviations is changes in the interest  
5 rate?

6 MS. JULIANNA SPIROPOULOS: It would be  
7 anything, changes in the interest rates, changes in  
8 equity markets, changes in the alternatives. This is  
9 integrated with all of the factors that affect net  
10 income.

11 MS. KATHLEEN MCCANDLESS: And that's  
12 from the stochastic modelling?

13 MS. JULIANNA SPIROPOULOS: Yes.

14 MS. KATHLEEN MCCANDLESS: Can you  
15 explain why the deviations appear to become more  
16 significant as one moves farther out in the forecast?

17 MS. JULIANNA SPIROPOULOS: In each  
18 given year, there are a thousand simulated outcomes.  
19 As you move forward, you're building on those thousand  
20 outcomes. So in the -- the next year, you would have  
21 a -- a range of a thousand different outcomes, and the  
22 year after, you're building a thousand on a thousand,  
23 so as you get further out, there's more uncertainty in  
24 terms of the path of which the different variables can  
25 go.

1 MS. KATHLEEN MCCANDLESS: Is it fair  
2 to say that there is more downside risk than upside  
3 risk?

4 MS. JULIANNA SPIROPOULOS: I'm not  
5 sure I would say that, no.

6

7 (BRIEF PAUSE)

8

9 MS. KATHLEEN MCCANDLESS: It appears  
10 the shaded area is larger below the median line than  
11 above. Would you agree with that?

12 MS. JULIANNA SPIROPOULOS: This  
13 represents the range of outcomes, so it depends on how  
14 you determine downside. It -- it really depends on  
15 the definition of 'downside'.

16 MS. KATHLEEN MCCANDLESS: Below the  
17 median?

18 MS. JULIANNA SPIROPOULOS: There are  
19 more -- well, the median is at that fiftieth percent.  
20 So from a percentage point of view, there are 50  
21 percentile below and 50 percentile above.

22

23 (BRIEF PAUSE)

24

25 MS. KATHLEEN MCCANDLESS: But it would

1 appear that the dollar impact is more adverse  
2 downwards?

3 MS. JULIANNA SPIROPOULOS: So there is  
4 -- this represents what the dollar impact is at each  
5 level. You know, you'd have to -- it would be -- how  
6 you view that dollar impact would be your  
7 interpretation of whether or not it's more adverse or  
8 not.

9

10 (BRIEF PAUSE)

11

12 MS. KATHLEEN MCCANDLESS: It does  
13 appear, though, that the range of outcomes upwards  
14 does not go as far as the range of outcomes downward.

15 Would you agree that that's what is  
16 depicted on the graph?

17 MS. JULIANNA SPIROPOULOS: Yeah. I  
18 would have to look at the actual numbers, but...

19 MS. KATHLEEN MCCANDLESS: Would you  
20 like to look at the numbers?

21 MS. JULIANNA SPIROPOULOS: I think one  
22 (1) thing to note, though, is that even at the -- out  
23 in 2025, even at the 25th percentile, the number is  
24 still positive. That's why I'm concerned about saying  
25 -- because it depends how you define "downside."

1 MS. KATHLEEN MCCANDLESS: Thank you.  
2 Why does the mean Basic income gradually climb, and  
3 how is this consistent with the Basic break-even  
4 objective for rate-setting purposes?

5 MS. JULIANNA SPIROPOULOS: This is the  
6 way under the stochastic scenarios that the net income  
7 just evolved. It's a result of the different  
8 scenarios. It provided information, as we were  
9 looking at choosing a portfolio, based on the  
10 objective to break even of whether or not that was  
11 necessary net income or not. So it formed information  
12 for the second part of this phase.

13 MS. KATHLEEN MCCANDLESS: Doesn't a  
14 pattern of increasing Basic net income imply a need  
15 for Basic rate reductions to achieve break-even  
16 outcomes?

17 MS. JULIANNA SPIROPOULOS: Not  
18 necessarily. It could -- there are many ways to deal  
19 with that, and one, as we looked at in the second  
20 phase, was to reduce the risk of a portfolio to avoid  
21 undue risk in the portfolio.

22 MS. KATHLEEN MCCANDLESS: But assuming  
23 that were the case, would that in turn mean creating  
24 volatility in the premium rate requirement?

25 MS. JULIANNA SPIROPOULOS: Would what?

1 MS. KATHLEEN MCCANDLESS: Assuming  
2 that a pattern of increasing Basic net income implied  
3 a need for Basic rate reductions to achieve -- to  
4 achieve break-even outcomes, would that in turn then  
5 mean creating volatility in the premium rate  
6 requirement?

7 MS. JULIANNA SPIROPOULOS: Sure, yes.

8 MS. KATHLEEN MCCANDLESS: Diana, could  
9 we please go to page 79. And this is a chart of  
10 surplus distribution. And perhaps you could just  
11 provide an overview or explanation of what this  
12 depicts.

13 MS. JULIANNA SPIROPOULOS: So this is  
14 similar in terms of the projection of what a surplus  
15 distribution would be in any given year under all of  
16 the different scenarios. So where there's a line, it  
17 means that there's no surplus distribution.

18 And where there is a positive, it means  
19 that there is money flowing out. Where there's a  
20 negative, it means that money will be coming in. So  
21 this is reflecting what the cashflow would be under  
22 that range, from very good scenarios to very poor  
23 scenarios.

24 MS. KATHLEEN MCCANDLESS: And what is  
25 the significance of what's depicted here to the

1 findings of the ALM study?

2 MS. JULIANNA SPIROPOULOS: We noted  
3 that large surplus distributions in latter years at  
4 the median would, you know, potentially cause  
5 liquidity issues. So we noted that for MPI to  
6 consider.

7 MS. KATHLEEN MCCANDLESS: Thank you.  
8 And then if we move to page 80, this is a chart  
9 depicting basic return to earnings as a percentage of  
10 the RSR upper target. And perhaps you could just  
11 again provide an explanation of what's depicted here.

12 MS. JULIANNA SPIROPOULOS: So this is  
13 the same methodology where we look at the Basic  
14 retained earnings as a percentage of the RSR upper  
15 target and project it out over each year from very  
16 poor scenarios to very good scenarios.

17 The horizontal lines represent  
18 different thresholds. The green line represents the  
19 surplus distribution threshold. The purple line  
20 represents the rate surcharge threshold. And the red  
21 line represents the special contribution threshold.  
22 So this provides a sense of, under the different  
23 scenarios, which thresholds are expected to be  
24 triggered.

25 MS. KATHLEEN MCCANDLESS: And the

1 significance of what's depicted here in -- to the  
2 findings of the study, could you explain that?

3 MS. JULIANNA SPIROPOULOS: So at the  
4 median out in the latter years, you will see that the  
5 surplus distribution threshold, it -- it's right at  
6 that line. The median is right in the middle of those  
7 scenarios. So we noted that in the median scenarios,  
8 which would be right in the middle of the very good  
9 and very poor scenarios, it was expected that there  
10 would be surplus distributions.

11 We also noted that, you know, even  
12 under -- it -- it wasn't just the extreme scenarios  
13 that were causing these thresholds to be triggered but  
14 they were being triggered in -- in many different  
15 scenarios.

16 MS. KATHLEEN MCCANDLESS: Why is the  
17 surplus distribution threshold set at about 125  
18 percent of the RSR upper target?

19

20 (BRIEF PAUSE)

21

22 MS. JULIANNA SPIROPOULOS: I'm going  
23 to just take a look and see if that's in our report.

24

25 (BRIEF PAUSE)

1 MS. KATHLEEN MCCANDLESS: Would it not  
2 be the light green line?

3 MS. JULIANNA SPIROPOULOS: It is the  
4 light green line but you're asking why it is that for  
5 a specific --

6 MS. KATHLEEN MCCANDLESS: Right, yes.

7 MS. JULIANNA SPIROPOULOS: -- number.

8 MS. KATHLEEN MCCANDLESS: Yes, the  
9 reason for that specific number.

10

11 (BRIEF PAUSE)

12

13 MS. KATHLEEN MCCANDLESS: Mr. Chair,  
14 I'm noting the time and perhaps if the witness needs  
15 some time to review her report, this might be an  
16 opportunity for the morning break?

17 THE CHAIRPERSON: Okay. We'll --  
18 we'll resume at 10:30.

19 MS. KATHLEEN MCCANDLESS: Thank you.

20

21 --- Upon recessing at 10:16 a.m.

22 --- Upon resuming at 10:37 a.m.

23

24 THE CHAIRPERSON: Ms. McCandless...?

25 MS. KATHLEEN MCCANDLESS: Thank you.

1 CONTINUED BY MS. KATHLEEN MCCANDLESS:

2 MS. KATHLEEN MCCANDLESS: Now, Ms.  
3 Spiropoulos, before the break I had asked the question  
4 as to why the surplus distribution threshold was set  
5 at 125 percent of the RSR target -- upper target, and  
6 you've had an opportunity now to consider the  
7 question?

8 MS. JULIANNA SPIROPOULOS: So that is  
9 120 -- 120 percent, and if we move to page 99 this  
10 provides the assumptions under which we modelled. So  
11 the second sub-bullet of the first bullet states:

12 "When the RSR is in excess of 120  
13 percent of the minimum capital test,  
14 the rebate in the following year is  
15 the entirety of the excess over the  
16 maximum RSR level of 100 percent."

17 So that just represents that 120  
18 percent line.

19 MS. KATHLEEN MCCANDLESS: Thank you.

20

21 (BRIEF PAUSE)

22

23 MS. KATHLEEN MCCANDLESS: Now, could  
24 we, please move to page 33. This is with respect to  
25 the optimization phase of the review -- of the report.

1 And looking to the bottom of the screen, so for the  
2 optimization stage different portfolios were compared  
3 based on two statistics. One was risk defined as the  
4 average standard deviation of the Basic RSR over the  
5 forecast period, and reward the average annual Basic  
6 net income over the forecast period?

7 MS. JULIANNA SPIROPOULOS: M-hm.

8 MS. KATHLEEN MCCANDLESS: And these  
9 averages were taken over a ten (10) year forecast  
10 period?

11 MS. JULIANNA SPIROPOULOS: It was over  
12 the whole projection, yes.

13 MS. KATHLEEN MCCANDLESS: Why is  
14 average annual Basic net income an appropriate measure  
15 of reward, considering Basic's break-even objective?

16 MS. JULIANNA SPIROPOULOS: That  
17 reflects that, all things being equal, having a higher  
18 net income is desirable.

19 MS. KATHLEEN MCCANDLESS: And why is  
20 average Basic RSR standard deviation an appropriate  
21 measure of risk?

22 MS. JULIANNA SPIROPOULOS: So excess  
23 variability in retained earnings can lead to re --  
24 rate adjustments. So understanding the volatility of  
25 the retained earnings is important in terms of

1 understanding the likelihood of rate adjustments.

2 MS. KATHLEEN MCCANDLESS: How is  
3 volatility in the Basic RSR related to volatility in  
4 the premium rate requirement, which is MPI's stated  
5 primary concern?

6 MS. JULIANNA SPIROPOULOS: It's an  
7 input into it.

8 MS. KATHLEEN MCCANDLESS: Is  
9 volatility in the Basic RSR as modelled affected by  
10 anything other than volatility in the premium rate  
11 requirement?

12 MS. JULIANNA SPIROPOULOS: Well, it  
13 would be affected by changes in all of the different  
14 elements that are involved in setting the RSR.

15 MS. KATHLEEN MCCANDLESS: Since this  
16 is an ALM study, why not use volatility in the level  
17 of Basic investment income as the measure of risk?

18 MS. JULIANNA SPIROPOULOS: When we  
19 determine risk and reward measures, we discuss with  
20 each client what is most meaningful to them in terms  
21 of assessing their reward and assessing their risk.  
22 We discuss this with MPI. And these are the metrics  
23 that were chosen.

24 MS. KATHLEEN MCCANDLESS: We've spoken  
25 about the ten (10) year forecast period. Why is it

1 appropriate to compare these measures of risk and  
2 reward over the ten (10) year forecast period when the  
3 normal general rate application future rating period  
4 extends only two (2) years into the ten (10) year  
5 forecast period?

6 MS. JULIANNA SPIROPOULOS: So the  
7 asset mix is only set on a periodic basis. And so  
8 when setting the asset mix, we want to look at the  
9 impact of that asset mix over a longer period, which  
10 we would expect that it may be effective for.

11 We also look at the short-term rate-  
12 setting premium through the metrics. And the analysis  
13 that we did focusses very much on the short-term.

14 MS. KATHLEEN MCCANDLESS: Would the  
15 conclusions of the ALM study be different if a  
16 shorter-term focus was adopted?

17 MS. JULIANNA SPIROPOULOS: What do you  
18 mean by "shorter-term focus?"

19

20 (BRIEF PAUSE)

21

22 MS. KATHLEEN MCCANDLESS: To the end  
23 of a two (2) year rating period.

24 MS. JULIANNA SPIROPOULOS: We don't  
25 model over such short periods of time.

1

2

(BRIEF PAUSE)

3

4

MS. KATHLEEN MCCANDLESS: So what  
5 would be the shortest period of time that you would  
6 model over?

7

8

MS. JULIANNA SPIROPOULOS: Ten (10)  
years.

9

MS. KATHLEEN MCCANDLESS: Now, earlier  
10 in my questioning, I believe you said that everything  
11 in the ten (10) year period was derived  
12 stochastically?

13

MS. JULIANNA SPIROPOULOS: The  
14 assumptions built into the asset classes.

15

MS. KATHLEEN MCCANDLESS: And the Aon  
16 economic sen -- scenario generator was used to derive  
17 the forecasted investment returns by asset class and  
18 the inflation level?

19

MS. JULIANNA SPIROPOULOS: Yes.

20

MS. KATHLEEN MCCANDLESS: Is there  
21 really stochastic modelling done of everything in the  
22 ten (10) year forecast period, or is it limited to the  
23 ESG inputs?

24

MS. JULIANNA SPIROPOULOS: Well, the  
25 ESG is what derives all of the different scenarios.

1 So a thousand different stochastic scenarios are  
2 generated from this scenario generator.

3 MS. KATHLEEN MCCANDLESS: So the  
4 inputs affect other elements in the forecast?

5 MS. JULIANNA SPIROPOULOS: Yes.

6 MS. KATHLEEN MCCANDLESS: And how  
7 would they affect that?

8 MS. JULIANNA SPIROPOULOS: I'm not  
9 sure. I don't -- I don't understand the question.

10 MS. KATHLEEN MCCANDLESS: The inputs  
11 in the -- in the ESG --

12 MS. JULIANNA SPIROPOULOS: Okay.

13 MS. KATHLEEN MCCANDLESS: -- how would  
14 they affect other elements in the forecast?

15 MS. JULIANNA SPIROPOULOS: So each  
16 asset class -- assumptions are derived individually  
17 for eas -- each asset class. And then those are put  
18 into the ESG which then generates the range of  
19 outcomes. So it really isn't a --

20 THE CHAIRPERSON: Sorry. Can I just  
21 interrupt for a sec? What is ESG?

22 MS. JULIANNA SPIROPOULOS: Economic  
23 scenario generator.

24 THE CHAIRPERSON: Okay.

25

1 CONTINUED BY MS. KATHLEEN MCCANDLESS:

2 MS. KATHLEEN MCCANDLESS: So then it's  
3 not everything that's -- that is stochastic. It's the  
4 investment, returns, and inflation?

5 MS. JULIANNA SPIROPOULOS: It is, and  
6 those then, though, are projected on the assets and on  
7 the liabilities. They're applied to both the assets  
8 and the liabilities. And the volatility is stochastic  
9 as well, so the volatility and the returns.

10 MS. KATHLEEN MCCANDLESS: Thank you.  
11 Just jumping back somewhat, when we were discussing  
12 the -- the ESG forecast of interest rates, and we were  
13 speaking about any assumptions made with respect to  
14 expected movement in the market bond yields over the  
15 forecast period.

16 And if there were any assumptions made  
17 with respect to movement, can you describe the  
18 forecast, how it was derived, and its significance to  
19 the conclusions of the study?

20 MS. JULIANNA SPIROPOULOS: So I can  
21 describe how we derive our retur - our expected  
22 returns for interest rates and the annual standard  
23 deviations. So for interest rates, the expected  
24 returns are generated by our proprietary bond model.

25 This incorporates historical money

1 market yields, the actual yield curve, and expected  
2 long-term nominal and real return yield to maturities.  
3 This calculates the model that generates yield curve -  
4 - a yield curve and then movements of that yield  
5 curve. And then expected returns are derived from  
6 that yield curve that we have generated.

7                   For the average -- the ten (10) year  
8 average annual standard deviations, they're generated  
9 by the same model that generates the returns and then  
10 tests it against historical numbers for reason -- to  
11 make sure that they're reasonable.

12                   MS. KATHLEEN MCCANDLESS: Thank you.  
13 How are the mean interest rates forecasted to change  
14 over the ten (10) year forecast?

15                   MS. JULIANNA SPIROPOULOS: So for the  
16 -- I -- so I don't have the mean, but for the seven  
17 (7) year bonds, the initial at the time the study was  
18 done was 1.64 percent. The long-term target was 3.7  
19 percent, and the average at year 10 was 3 percent.

20                   The thirty (30) year bond, which is a  
21 longer-term bond, the initial rate was 2.56 percent,  
22 the long-term target was 4.24 percent, and the average  
23 in year 10 was 3.7 percent.

24                   MS. KATHLEEN MCCANDLESS: Are they  
25 moving upwards or are they flat?

1 MS. JULIANNA SPIROPOULOS: They're  
2 moving upwards.

3 MS. KATHLEEN MCCANDLESS: Thank you.  
4 Diana, could we go to page 34. And this is -- pardon  
5 me. Just jumping back for one (1) minute, can you  
6 give us the mean interest rate forecast?

7

8 (BRIEF PAUSE)

9

10 MS. JULIANNA SPIROPOULOS: So I don't  
11 have the mean. I just have those averages at year 10.

12 MS. KATHLEEN MCCANDLESS: Is that  
13 something that could be provided?

14 MS. JULIANNA SPIROPOULOS: I can look  
15 into it.

16

17 (BRIEF PAUSE)

18

19 MR. MATT GHIKAS: Ms. -- Ms.  
20 McCandless, I've just spoken to Ms. Spiropoulos. What  
21 she'll try to do is, at lunch break, we'll undertake  
22 to have her try to find out that information at the  
23 lunch break for you.

24 MS. KATHLEEN MCCANDLESS: Okay. So  
25 the undertaking then is to provide us with the mean

1 interest rate forecast?

2 MR. MATT GHIKAS: Yes.

3 MS. KATHLEEN MCCANDLESS: Okay. Thank  
4 you.

5

6 --- UNDERTAKING NO. 26: Ms. Spiropoulos to provide  
7 mean interest rate  
8 forecast

9

10 CONTINUED BY MS. KATHLEEN MCCANDLESS:

11 MS. KATHLEEN MCCANDLESS: Now jumping  
12 forward to the -- the graph that we see here on the  
13 screen, which is the risk-reward relationship of  
14 average annual basic net income and average annual  
15 volatility of retained earnings.

16 Could you just provide an explanation  
17 as to how this chart should be interpreted?

18 MS. JULIANNA SPIROPOULOS: So on the  
19 vertical axis is the ten (10) year average annual  
20 Basic net income. So that is the measure of reward.  
21 So moving upwards on that axis would be better reward.

22 On the horizontal axis is the average  
23 annual volatility of retained earnings, which was the  
24 measure of risk. So the lower the annual volatility,  
25 the better, all things being equal.

1                   So moving to the left on that axis  
2 would result in less risk. So moving up to the upper  
3 left-hand corner would be improving your risk/reward  
4 relationship.

5                   MS. KATHLEEN MCCANDLESS:   And so are -  
6 - are there any observed patterns in here that would  
7 be important to Aon's recommendations?

8                   MS. JULIANNA SPIROPOULOS:  
9 Specifically what would you like me to address?

10                  MS. KATHLEEN MCCANDLESS:   Well, in  
11 particular, we note the -- there's 70 percent on the -  
12 - towards the -- the left-hand side of the chart. You  
13 see the circle with 70 percent in there.

14                  And the 70 percent duration match  
15 portfolio is Aon's recommendation?

16                  MS. JULIANNA SPIROPOULOS:   M-hm.

17                  MS. KATHLEEN MCCANDLESS:   So perhaps  
18 you could just summarize the rack -- the rationale for  
19 the recommendation?

20                  MS. JULIANNA SPIROPOULOS:   So the  
21 rationale for the recommendation isn't entirely seen  
22 on this page. When we recommended that portfolio, we  
23 noted -- when we took a look, and you can see this  
24 here, we noted that the average annual Basic net  
25 income is in excess of zero, which is break even.

1                   So given that MPI is -- has an  
2 objective to break even, we noted that they had excess  
3 Basic net income, so there was an opportunity to match  
4 -- reduce risk by increasing the matching portion of  
5 the portfolio, and that is what we see here.

6                   Other elements of the recommendation  
7 had to do with the composition of the growth  
8 portfolio.

9                   MS. KATHLEEN MCCANDLESS:   Thank you.  
10 Diana, could we go to page 39, please? Again, with  
11 respect to the optimization phase of the study, can  
12 you discuss the significance of Aon's findings with  
13 respect to the impact of a desired state rules  
14 limiting the RSR?

15                   MS. JULIANNA SPIROPOULOS:   So in Phase  
16 I, they're in -- the -- the -- theoretically better  
17 matching resulted in more risk reduction. Part of the  
18 reason that in Phase II, when we incorporated the RSR  
19 targets into the analysis, that the strict matching  
20 did not achieve the same risk reduction was because of  
21 these RSR targets.

22                   So this part of the analysis just  
23 tested that to -- to confirm that, yes, the RSR  
24 targets were partly responsible for the fact that  
25 there wasn't the same risk reduction with a tighter

1 matching strategy.

2 MS. KATHLEEN MCCANDLESS: Thank you.  
3 Now, if we go to page 54. These are the conclusions  
4 and recommendations of the three (3) stages of the  
5 optimization phase of the study, and they run through  
6 from page -- pages 54 to 56.

7 At page 54, there's a recommendation  
8 that Aon's Phase I -- pardon me, there's a  
9 recommendation that MPI use a duration match as a  
10 hedging strategy.

11 MS. JULIANNA SPIROPOULOS: M-hm. Yes.

12 MS. KATHLEEN MCCANDLESS: And can you  
13 explain why it is that the Phase I recommendation to  
14 use a hybrid solution as a hedging strategy had -- has  
15 morphed to the duration match?

16 MS. JULIANNA SPIROPOULOS: In Phase I,  
17 we just looked at the bond portfolio and how the  
18 assets in the bond portfolio matched those of the  
19 liabilities. Phase II incorporated the growth  
20 portfolio as well as the mechanism for setting premium  
21 rates.

22 And with the -- that analysis in Phase  
23 II, we concluded that the more precise matching has a  
24 higher cost, which we knew in Phase I, but what we  
25 found in Phase II was that the amount of risk

1 reduction wasn't significant enough given the -- the  
2 lower yields.

3 MS. KATHLEEN MCCANDLESS: Thank you.  
4 If we go forward to page -- pages 55 and then 56.  
5 There's an additional step here:

6 "Some dynamic allocations can reduce  
7 the risk of low levels of retained  
8 earnings in extreme situations but  
9 are ineffective in reducing the  
10 volatility of retained earnings."

11 Can you explain why it is not  
12 beneficial for MPI to consider a dynamic allocation of  
13 the investment portfolio between Basic claim  
14 liabilities, non-Basic claim liabilities, and pension  
15 plan liabilities?

16 MS. JULIANNA SPIROPOULOS: So what we  
17 found when we tested this is the reduction in risk  
18 really was in the extreme situations but it didn't  
19 reduce the volatility, which was a key objective of  
20 MPI.

21 MS. KATHLEEN MCCANDLESS: Thank you.  
22 If Basic net income for the base case was instead  
23 forecast to approximate break-even, would this be  
24 significant to any of the conclusions of the ALM  
25 Study?

1 MS. JULIANNA SPIROPOULOS: The  
2 forecast of net income was based on the stochastic  
3 scenarios, so we did not -- there -- that's not  
4 applicable.

5 MS. KATHLEEN MCCANDLESS: For example  
6 though, is it possible that higher levels of Basic net  
7 income in the base case after recognizing modelling  
8 constraints on the composition of the investment  
9 portfolio and the size of the RSR, might affect the  
10 measurement of RSR volatility?

11 MS. JULIANNA SPIROPOULOS: So what we  
12 modelled was the process for setting net income and  
13 how that affected the RSR, and we projected it out  
14 under -- under our scenarios. I'm not sure what  
15 change to that process you're suggesting.

16 MS. KATHLEEN MCCANDLESS: Thank you.  
17 I'll move on. Are you aware that Basic target capital  
18 levels are now expressed in terms of total equity  
19 instead of the RSR, and therefore the targets include  
20 accumulated other comprehensive income?

21 MS. JULIANNA SPIROPOULOS: No.

22 MS. KATHLEEN MCCANDLESS: Knowing that  
23 that is the case, would you expect this change to be  
24 of sig -- significance to the approach taken for the  
25 findings in the ALM study?

1 MS. JULIANNA SPIROPOULOS: I don't,  
2 no.

3

4 (BRIEF PAUSE)

5

6 MS. KATHLEEN MCCANDLESS: But would  
7 the approach to the study have been different?

8

9 MS. JULIANNA SPIROPOULOS: The  
10 approach, no. We would have discussed the various  
11 risk and reward metrics with MPI, and if they feel  
12 that there are more appropriate risk and reward  
13 measures that better reflect their key risk then we  
14 would reflect that but we can't say without a further

15

16 (BRIEF PAUSE)

17

18 MS. KATHLEEN MCCANDLESS: Thank you.  
19 Diana, could you, please, pull up MPI Exhibit number  
20 10.

21

22 (BRIEF PAUSE)

23

24 MS. KATHLEEN MCCANDLESS: Thank you.  
25 Now, I understand that you were

1 provided with an opportunity to review this exhibit  
2 which was originally prepared by MPI for the interest  
3 rate forecasting risk tech -- factor technical  
4 conference, and at a high level this exhibit  
5 illustrates the estimated two year impact on Basic net  
6 income that results from the non-occurrence of the  
7 rising interest rates assumed in the Standard Interest  
8 Rate Forecast.

9           The first page of the exhibit assumes  
10 an investment portfolio matched to Basic claim  
11 liabilities, and then if we turn to the second page,  
12 the second page assumes a match to corporate claim  
13 liabilities. From the second page of the exhibit, the  
14 exhibit itemizes the sources of a \$32.2 million  
15 adverse two year impact to Basic net income if bond  
16 yields remain flat, about one-half (1/2) of which is  
17 attributable to ALM impacts.

18           As you understand it, which of these  
19 itemized impacts might fall within the scope of  
20 consideration of a comprehensive ALM Study?

21           MS. JULIANNA SPIROPOULOS: We did not  
22 review this as part of the scope of our ALM study.  
23 And I do -- I can't answer that question.

24           MS. KATHLEEN MCCANDLESS: Are you able  
25 to comment as to whether it is surprising that as much

1 of -- as 50 percent of the adverse impact if bond  
2 yields remain flat cannot be addressed through ALM?

3 MS. JULIANNA SPIROPOULOS: No. This  
4 is MPI's analysis, not ours.

5

6 (BRIEF PAUSE)

7

8 MS. KATHLEEN MCCANDLESS: Thank you.  
9 Now, in the interest of making com -- comparisons  
10 between the practices of MPI with respect to Basic  
11 coverage versus those of the Saskatchewan Ottawa --  
12 Auto Fund and Insurance Corporation of British  
13 Columbia, this Board understands that Saskatchewan  
14 Auto Fund uses a bucketed hybrid solution as its asset  
15 liability hedging strategy and that Aon may have also  
16 provided its services to the Saskatchewan Auto Fund  
17 with respect to ALM.

18 Do you have any knowledge of the  
19 Saskatchewan Auto Fund's hedging strategy?

20 MS. JULIANNA SPIROPOULOS: No, I do  
21 not.

22

23 (BRIEF PAUSE)

24

25 MS. KATHLEEN MCCANDLESS: I appreciate

1 your response there, but are you able at all to offer  
2 any knowledge or general speculation as to why a  
3 bucketed hybrid solution would be deemed optimal for  
4 Saskatchewan Auto Fund whereas a duration match  
5 solution would be deemed opti -- optimal for MPI  
6 Basic?

7 MS. JULIANNA SPIROPOULOS: No. I  
8 don't work with the su -- with that fund at all.

9

10 (BRIEF PAUSE)

11

12 MS. KATHLEEN MCCANDLESS: Thank you.  
13 Those are my questions.

14 THE CHAIRPERSON: Thank you. Mr.  
15 Williams...?

16

17 CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

18 MR. BYRON WILLIAMS: Good morning, Ms.  
19 Spiropoulos. How did I do on the pronunciation?

20 MS. JULIANNA SPIROPOULOS: Perfect.

21 MR. BYRON WILLIAMS: Just to clarify  
22 my understanding, it's correct to suggest that you're  
23 not a fellow of the Casualty Actuarial Society, or  
24 FSCAS?

25 MS. JULIANNA SPIROPOULOS: Correct,

1 I'm not an actuary.

2 MR. BYRON WILLIAMS: Okay. Now, in  
3 terms of your -- your career, I understand you moved  
4 in 1998 from your analyst position to a role as  
5 coordinator of pension income -- or pension  
6 investments at Petro-Canada.

7 Is that correct?

8 MS. JULIANNA SPIROPOULOS: Yes.

9 MR. BYRON WILLIAMS: And then you --  
10 you served in that position until August of 2000 when  
11 you moved to a manager's role in treasury for the same  
12 firm.

13 Is that correct?

14 MS. JULIANNA SPIROPOULOS: Yes.

15 MR. BYRON WILLIAMS: And going back in  
16 time, I realize it's a little ways back, but as a  
17 coordinator of pension investments for Petro-Canada in  
18 2000, you would, of course, be familiar at a high  
19 level with the -- the history of Nortel, or Northern  
20 Telecom?

21 MS. JULIANNA SPIROPOULOS: Familiar in  
22 which -- familiar, I suppose, yes.

23 MR. BYRON WILLIAMS: And again, at a  
24 high level you're aware that Nortel became the poster  
25 child for the speculative Telecom bubble of the late

1 1990s. Would that be fair?

2 MS. JULIANNA SPIROPOULOS: Yes.

3 MR. BYRON WILLIAMS: With its share  
4 prices reaching a pinnacle in the early 2000s, agreed?

5 MS. JULIANNA SPIROPOULOS: I -- I  
6 don't have detailed knowledge of Nortel.

7 MR. BYRON WILLIAMS: Okay, fair  
8 enough. You would be aware, based upon your  
9 experience between '98 and 2000, that at its peak,  
10 I'll suggest to you, Nortel accounted for more than a  
11 third of the total valuation of the companies listed  
12 on the Toronto Stock Exchange?

13 MS. JULIANNA SPIROPOULOS: Again, I  
14 don't have details on Nortel.

15 MR. BYRON WILLIAMS: Okay. So you're  
16 not able to comment based upon your experience on  
17 whether that one particular firm occupied a  
18 disproportionate share of the -- the total Toronto  
19 Stock Exchange?

20

21 (BRIEF PAUSE)

22

23 MS. JULIANNA SPIROPOULOS: That is my  
24 recollection.

25 MR. BYRON WILLIAMS: And again,

1 without meaning to delve too deep into Nortel, you're  
2 aware as well that it began a spectacular collapse  
3 inflicting damage on a wild -- wide swath of Canadian  
4 investors and pension funds? You're aware of that  
5 generally from your seventeen (17) years?

6 MS. JULIANNA SPIROPOULOS: Yes,  
7 generally.

8 MR. BYRON WILLIAMS: And if we stay  
9 with that year of 2000, would you agree with the  
10 suggestion that in those -- those years, Canadian  
11 pension funds faced significant short-term pressure  
12 flowing from the double-whammy of falling interest  
13 rates and rising inflation?

14 Are you generally familiar with that?

15 MS. JULIANNA SPIROPOULOS: Falling  
16 interest rates. I cannot speak to the rising  
17 inflation.

18 MR. BYRON WILLIAMS: Okay. You're not  
19 aware whether or not in 2000 inflation rates exceeded  
20 the Governor --

21 MS. JULIANNA SPIROPOULOS: I am not.

22 MR. BYRON WILLIAMS: You're not aware?

23 MS. JULIANNA SPIROPOULOS: I am not  
24 aware of that.

25 MR. BYRON WILLIAMS: So any insight

1 into the relationship between falling interest rates  
2 and inflation as it was in 2000 did not inform your  
3 personal analysis of the -- the asset-liability  
4 modelling for Manitoba Public Insurance?

5 MS. JULIANNA SPIROPOULOS: No.

6 MR. BYRON WILLIAMS: Just by way of  
7 definition, when we look to the Canadian equity  
8 marketplace, would it be fair to describe the basic  
9 materials section -- sector as a category of stocks  
10 that accounts for companies involved with the  
11 discovery, development, and processing of raw  
12 materials?

13 Is that your understanding?

14 MS. JULIANNA SPIROPOULOS: That's my  
15 understanding.

16 MR. BYRON WILLIAMS: Would it be fair  
17 to say that the financial, energy, and material  
18 sectors typically represent a relatively large  
19 proportion of the TSX market cap, TSX being Toronto  
20 Stock Exchange?

21 MS. JULIANNA SPIROPOULOS: Yes.

22 MR. BYRON WILLIAMS: And at certain  
23 times, you'll agree that these three sectors alone can  
24 amount to as much as or more than 50 percent of the  
25 TSX market cap?

1                   You'll agree with that?

2                   MS. JULIANNA SPIROPOULOS:    I can't  
3 speak to the percentage.

4                   MR. BYRON WILLIAMS:    Now, you're aware  
5 that Aon conducted an asset-liability matching, or  
6 ALM, study for MPI in 2008?

7                   MS. JULIANNA SPIROPOULOS:    I am aware  
8 that that was completed.

9                   MR. BYRON WILLIAMS:    And I drew you  
10 back to 2000.  Let's go back to 2008 through 2010.  
11 You'll agree that that was a very tumultuous time in  
12 the marketplace involving basically a worldwide  
13 recession?

14                   MS. JULIANNA SPIROPOULOS:    Parts of  
15 that, yes.

16                   MR. BYRON WILLIAMS:    And while the  
17 Canadian economy weathered that challenge relatively  
18 well, you'll agree that it faces significant  
19 challenges today, including relatively low oil and gas  
20 prices?

21                   MS. JULIANNA SPIROPOULOS:    I would not  
22 agree with that necessarily.

23

24                                   (BRIEF PAUSE)

25

1 MR. BYRON WILLIAMS: If we look to the  
2 2015 year, you'll agree that the Canadian economy  
3 suffered significant stresses in part related to  
4 significant declines in oil and gas prices, agreed?

5 MS. JULIANNA SPIROPOULOS: Yes.

6 MR. BYRON WILLIAMS: And the effects  
7 of that are ongoing?

8 MS. JULIANNA SPIROPOULOS:  
9 Potentially. I'm not sure what will happen.

10

11 (BRIEF PAUSE)

12

13 MR. BYRON WILLIAMS: I don't want to  
14 trench too much on the discussion that -- that My  
15 Learned Friend had with you in terms of risk and --  
16 and reward as used for the asset liability assessment,  
17 but in terms of your analysis for the optim -- opt --  
18 the two (2) step optimization process, ris -- risk was  
19 measured as the average annual volatility of retained  
20 earnings.

21 MS. JULIANNA SPIROPOULOS: Yes.

22 MR. BYRON WILLIAMS: Is that fair?  
23 And the reason you selected volatility of retained  
24 earnings as a risk factor was the indication by  
25 Manitoba Public Insurance to you that short-term

1 volatility of the premium rate requirement was a  
2 primary concern, agreed?

3 MS. JULIANNA SPIROPOULOS: Yes.

4

5 (BRIEF PAUSE)

6

7 MR. BYRON WILLIAMS: Given MPIs  
8 identification of the level and volatility of premium  
9 rates as the primary risk, the risk and reward metrics  
10 were chosen because in your opinion they directly  
11 impact -- impacted the annual premium rates under  
12 current practice?

13 MS. JULIANNA SPIROPOULOS: Not in our  
14 opinion. We discussed with MPI what would be  
15 appropriate risk and reward measures given the  
16 objective.

17 MR. BYRON WILLIAMS: So you adopted  
18 their opinion?

19 MS. JULIANNA SPIROPOULOS: We adopted  
20 in discussion with them.

21 MR. BYRON WILLIAMS: And so the  
22 efficient frontier flowing -- conclusions flowing from  
23 your report represent the efficient portfolios for  
24 those chosen risk and reward variables, taking into  
25 account any constraints imposed by MPI?

1 MS. JULIANNA SPIROPOULOS: Yes.

2

3

(BRIEF PAUSE)

4

5 MR. BYRON WILLIAMS: Just digging a  
6 bit more into that risk metric. As you understood the  
7 concern of MPI, the excess variability in retained  
8 earnings could lead to rate adjustments, agreed?

9 MS. JULIANNA SPIROPOULOS: Yes.

10 MR. BYRON WILLIAMS: And you wanted to  
11 look at the volatility both in terms of negative rate  
12 adjustments and positive as well?

13 MS. JULIANNA SPIROPOULOS: Yes.

14 MR. BYRON WILLIAMS: So the risk of  
15 rate volatility could be both a rate increase or a  
16 decrease?

17 MS. JULIANNA SPIROPOULOS: Yes.

18 MR. BYRON WILLIAMS: And it could also  
19 be an RSR dividend or an RSR surcharge, agreed?

20 MS. JULIANNA SPIROPOULOS: Volatility  
21 just shows how much it moves. Whether it hits the  
22 targets is a separate analysis.

23 MR. BYRON WILLIAMS: Okay. Just so I  
24 understand and you'll help me with this -- okay. Fair  
25 enough.

1                   Would it be fair to say that not all  
2 the funds that you consult with or have worked with  
3 consider short-term volatility of the premium rate  
4 requirement as their primary concern?

5                   MS. JULIANNA SPIROPOULOS:    Every fund  
6 we work with individually we discuss the risk and  
7 reward metrics.

8                   MR. BYRON WILLIAMS:    I'm suggesting to  
9 you that not every fund that you have consulted with  
10 has identified short-term volatility of the premium  
11 rate requirement as a primary concern?

12                  MS. JULIANNA SPIROPOULOS:    Not every  
13 fund.

14                  MR. BYRON WILLIAMS:    For example, some  
15 funds might see the primary concern as being that  
16 assets are not sufficient to match liabilities?

17                  MS. JULIANNA SPIROPOULOS:    Could be.

18                  MR. BYRON WILLIAMS:    In your seventeen  
19 (17) years of experience with pension funds or  
20 treasury, how many of the funds that you have worked  
21 with have identified the short-term volatility of the  
22 premium rate requirement as a primary concern?

23                  MS. JULIANNA SPIROPOULOS:    I have only  
24 been consulting to a variety of funds for just under  
25 five (5) years and this is, as stated earlier, my

1 first property and casualty client so by definition  
2 this would be the first.

3 MR. BYRON WILLIAMS: And with your  
4 experience -- fair enough. By definition, this was  
5 your first. Have there been any subsequent?

6 MS. JULIANNA SPIROPOULOS: No.

7 MR. BYRON WILLIAMS: So in the two (2)  
8 years since you conducted the study, no other firm  
9 identified short-term volatility of the premium rate  
10 requirement as a primary concern?

11 MS. JULIANNA SPIROPOULOS: We've had  
12 no other -- I have not worked on any other property  
13 and casualty asset liability studies in the two years  
14 since.

15 MR. BYRON WILLIAMS: Now, your firm  
16 has conducted some work with SGI. Agreed?

17 MS. JULIANNA SPIROPOULOS: I am not  
18 actually aware of our work with SGI at all.

19 MR. BYRON WILLIAMS: Okay. So you've  
20 not --

21 MS. JULIANNA SPIROPOULOS: I have not  
22 been involved at all --

23 MR. BYRON WILLIAMS: Okay, and you've  
24 not had occasion to consult, and I -- okay.

25

1 (BRIEF PAUSE)

2

3 MR. BYRON WILLIAMS: Ms. Spiropoulos,  
4 while I'm sure both you and I honour and deeply  
5 respect the accounting profession, both you and I can  
6 celebrate the fact that neither of us are accountants?

7 MS. JULIANNA SPIROPOULOS: Correct.

8 MR. BYRON WILLIAMS: But for the  
9 purposes of your work with -- and no offence to any  
10 Board member or Board advisor, or MPI vice-president,  
11 but for the purposes of your work with MPI you would  
12 have a general familiarity with the accounting  
13 treatment of certain assets?

14 MS. JULIANNA SPIROPOULOS: I -- not --  
15 not me specifically, no. I did not do the specific  
16 modelling. That's done by my colleagues.

17

18 (BRIEF PAUSE)

19

20 MR. BYRON WILLIAMS: In terms of the  
21 accounting treatment, would it have been provided by  
22 MPI to your colleagues?

23 MS. JULIANNA SPIROPOULOS: Yes.

24 MR. BYRON WILLIAMS: So the treatment  
25 of marketable bonds, MUSH, M-U-S-H, bonds, or equities

1 in terms of their treatment would have been given to  
2 Aon by MPI?

3 MS. JULIANNA SPIROPOULOS: Yes.

4 MR. BYRON WILLIAMS: Diana, I wonder  
5 if you can pull up CAC-MPI-2-34, the preamble. And,  
6 Ms. Spiropoulos, I believe this is within your -- your  
7 knowledge but you'll...

8

9 (BRIEF PAUSE)

10

11 MR. BYRON WILLIAMS: Keep scrolling.  
12 Keep scrolling, please. Scroll with MPI's response to  
13 CAC-MPI to the -- to the top of the page. Thank you.  
14 Per -- okay. I'll just give you a second to look at  
15 this, and then we won't have to go through it. I just  
16 want to jump to the chase.

17

18 (BRIEF PAUSE)

19

20 MR. BYRON WILLIAMS: Ms. Spiropoulos,  
21 just to make sure I have it right net income as  
22 modelled in the 24 (sic) ALM Study excludes other  
23 comprehensive income.

24 Is that your understanding?

25 MS. JULIANNA SPIROPOULOS: That's my

1 understanding.

2 MR. BYRON WILLIAMS: And in terms of  
3 retained earning, is it your understanding that the  
4 treatment of AOCI was excluded?

5 MS. JULIANNA SPIROPOULOS: It just  
6 included the net income. It was not accumu -- AOCI.

7 MR. BYRON WILLIAMS: Just so I'm  
8 clear, in terms of the retained earnings measure in  
9 the asset liability study, am I correct in suggesting  
10 it excluded accumulated OCI?

11 MS. JULIANNA SPIROPOULOS: According  
12 to this, yes.

13

14 (BRIEF PAUSE)

15

16 MR. BYRON WILLIAMS: So just to be  
17 clear, is it your understanding that, in terms of the  
18 assessment of retained earnings and net income in the  
19 asset liability management study, it captured both  
20 actual and realized gains for bonds?

21 MS. JULIANNA SPIROPOULOS: So I wasn't  
22 involved in the direct modelling, so I can't speak  
23 directly to that.

24 MR. BYRON WILLIAMS: Okay. In terms  
25 of the 2008 study of Aon, Ms. Spiropoulos, did you

1 review it in preparing your 2014 study?

2 MS. JULIANNA SPIROPOULOS: Personally,  
3 no, I did not.

4 MR. BYRON WILLIAMS: Your staff did?

5 MS. JULIANNA SPIROPOULOS: Yeah, pro -  
6 - possibly. I'm not sure.

7 MR. BYRON WILLIAMS: Would it be fair  
8 to suggest that in the 2008 modelling the assessment  
9 was done in -- in terms of total comprehensive income?

10 MS. JULIANNA SPIROPOULOS: I'm not  
11 familiar with the 2008 model -- modelling.

12

13 (BRIEF PAUSE)

14

15 MR. BYRON WILLIAMS: My Friend, PUB  
16 counsel, took you to the Aon report part 2, page 34.  
17 And I'm going to ask you to go with me, as well. And  
18 you did an excellent job of describing this  
19 presentation.

20 But just in terms of both basic net  
21 income and average annual volatility of retained  
22 earnings, it's -- it would be correct to suggest that  
23 that is reported in terms of millions of dollars?

24 MS. JULIANNA SPIROPOULOS: Yes. It's  
25 up on the upper left-hand corner is the indication of

1 that.

2 MR. BYRON WILLIAMS: Okay. And you've  
3 already indicated this, but just to reorientate  
4 ourselves. The 'Y' or vertical axis captures a  
5 measure of net income, agreed?

6 MS. JULIANNA SPIROPOULOS: Ten year  
7 average annual basic net income, yes.

8 MR. BYRON WILLIAMS: With the 'X' or  
9 horizontal axis capturing the volatility -- the annual  
10 volatility of retained earnings as measured by -- by  
11 Aon, agreed?

12 MS. JULIANNA SPIROPOULOS: On average,  
13 yes.

14 MR. BYRON WILLIAMS: And just to help  
15 us and help me get my head around the visual display,  
16 if I looked, for example, at the 60 -- the circle --  
17 circle and with the number 60 percent, you see it  
18 there, Ms. Spiropoulos?

19 And that 60 percent represents the  
20 fixed income element of the portfolio?

21 MS. JULIANNA SPIROPOULOS: Yes, the ca  
22 -- the liability matching portion.

23 MR. BYRON WILLIAMS: And the blue  
24 diamond, again focussing on that 60 percent, is --  
25 depicts the cashflow match approach, correct?

1 MS. JULIANNA SPIROPOULOS: Yes.

2 MR. BYRON WILLIAMS: And the orange  
3 dot re -- represents the duration match approach,  
4 agreed?

5 MS. JULIANNA SPIROPOULOS: Yes.

6 MR. BYRON WILLIAMS: And let's take  
7 for an example the 100 percent portfolio in the -- and  
8 -- and you'll see there that in terms of the  
9 horizontal or 'X' axis, the cashflow matching approach  
10 appears to the left of the duration matching approach.

11 Is that correct?

12 MS. JULIANNA SPIROPOULOS: Yes.

13 MR. BYRON WILLIAMS: And, generally,  
14 that would have been your working hypothesis as you  
15 approach this paper because the -- the theory behind  
16 duration matching is that you accept a bit more  
17 volatility in return for a bit more income, agreed?

18 MR. BYRON WILLIAMS: That is the  
19 theory behind it, yes.

20 MR. BYRON WILLIAMS: And, similarly,  
21 although it's much less pronounced, if we move up to  
22 the 70 percent portfolio, we again see the cashflow  
23 matching a bit to the left as compared to the  
24 duration-matching approach?

25 MS. JULIANNA SPIROPOULOS: Very

1 slightly.

2 MR. BYRON WILLIAMS: Okay. Now, Ms.  
3 Spiropoulos, as we -- we move out to the portfolios  
4 farther to the right at 50 percent, 40 percent, and --  
5 and 30 percent, you'll agree with me that the orange  
6 duration match does not appear to the right of the  
7 cashflow match for any of those portfolios?

8 MS. JULIANNA SPIROPOULOS: Correct.

9 MR. BYRON WILLIAMS: And you might  
10 have expected more of a tradeoff if we look at that --  
11 these portfolios between these different hedging  
12 strategies in terms of volatility, agreed?

13 MS. JULIANNA SPIROPOULOS: In which --  
14 at which levels of fixed income?

15 MR. BYRON WILLIAMS: At fifty (50),  
16 forty (40), and thirty (30).

17 MS. JULIANNA SPIROPOULOS: Not  
18 necessarily.

19 MR. BYRON WILLIAMS: Would it be fair  
20 to -- to say, directing your attention to page 35 and  
21 the fourth bullet, that Aon describes -- described  
22 this lack of tradeoff among the hedging strat --  
23 strategies for the fixed-income allocation from 30 to  
24 60 percent as being counterintuitive?

25 MS. JULIANNA SPIROPOULOS: Yes.

1 MR. BYRON WILLIAMS: Because the  
2 intuition would have been that you would have expected  
3 the duration matching to be more volatile, agreed?

4 MS. JULIANNA SPIROPOULOS: Strictly  
5 looking at the fixed-income portfolio.

6 MR. BYRON WILLIAMS: So if we turn to  
7 slide 37, and directing your -- the attention to the  
8 right-hand side of that slide, there we see the  
9 volatility assuming no RSR targets, agreed?

10 MS. JULIANNA SPIROPOULOS: Yes.

11 MR. BYRON WILLIAMS: And there we have  
12 what would be a more intuitive result?

13 MS. JULIANNA SPIROPOULOS: Yes.

14 MR. BYRON WILLIAMS: So inserting the  
15 RSR target and consequently all rate surcharges,  
16 special contributions and surplus distributions can be  
17 seen as leading the -- for those three (3) portfolios  
18 to the counterintuitive results in terms of  
19 volatility, agreed?

20 MS. JULIANNA SPIROPOULOS: No. It  
21 more changes the risk-return tradeoff between the  
22 different strategies when you include the RSR targets.

23 MR. BYRON WILLIAMS: Okay. Would it  
24 be fair to say -- I can give you a reference if you  
25 require it. Let's go back to slide 34 for just a

1 second. If we look at the low-risk -- the lower-risk  
2 portfolios, being those to the -- more towards the  
3 left and closer to the origin --

4 MS. JULIANNA SPIROPOULOS: M-hm.

5 MR. BYRON WILLIAMS: -- would it be  
6 fair to say that, even with these low-risk portfolios,  
7 the average annual probability of no adjustment  
8 calculated by Aon remains at or below 40 percent?

9 MS. JULIANNA SPIROPOULOS: I would  
10 need to look at the numbers.

11 MR. BYRON WILLIAMS: Page 50 of this  
12 same document.

13 MS. JULIANNA SPIROPOULOS: Yes.

14 MR. BYRON WILLIAMS: And even with the  
15 portfolios 1 and 2, there is still a significant prob  
16 -- probability of surcharges over the ten (10) year  
17 period?

18 MS. JULIANNA SPIROPOULOS: Yes.

19 MR. BYRON WILLIAMS: Thank you for  
20 that. I appreciate that. Just -- we're going to  
21 bounce around a little bit, so we may be able to leave  
22 this study, to my enormous relief, if not yours.

23 When I use the term "duration," do you  
24 understand that to mean a market-risk metric that  
25 measures the price sensitivity of a security or

1 portfolio to changes in interest rates?

2 MS. JULIANNA SPIROPOULOS: Yes.

3 MR. BYRON WILLIAMS: And it's fair to  
4 say that the value of most, or perhaps all assets are  
5 influenced by interest rates?

6 MS. JULIANNA SPIROPOULOS: Most.

7 MR. BYRON WILLIAMS: And all else  
8 being equal, when interest rates fall the value of  
9 most assets increases?

10 MS. JULIANNA SPIROPOULOS: The value  
11 of fixed income assets increase --

12 MR. BYRON WILLIAMS: Okay.

13 MS. JULIANNA SPIROPOULOS: --  
14 directly.

15 MR. BYRON WILLIAMS: And all else  
16 being equal -- okay, let's -- let's go back to that  
17 for a second.

18 All else being equal, when interest  
19 rates fall the value of equities would also tend to  
20 increase?

21 MS. JULIANNA SPIROPOULOS: Equities  
22 are not as directly related to interest rates. It's  
23 unfair to -- to categorize exactly -- exactly what  
24 they would do. Bonds are more mathematically tied to  
25 interest rates.

1 MR. BYRON WILLIAMS: So it wouldn't be  
2 your -- it would not be your expectation generally  
3 that when interest rate falls the value of equities  
4 increase?

5 MS. JULIANNA SPIROPOULOS: That would  
6 be a general thought, but it does not hold in many  
7 situations.

8 MR. BYRON WILLIAMS: Okay. So we'll  
9 just, again, all else being equal, when interest rates  
10 rise we would expect the value of fixed income assets  
11 to decline?

12 MS. JULIANNA SPIROPOULOS: Yes.

13 MR. BYRON WILLIAMS: And all else  
14 being equal, when interest rates rise your general  
15 expectation would be to -- to see the value of  
16 equities decline?

17 MS. JULIANNA SPIROPOULOS: It's a  
18 generalization. Markets do not always -- the equity  
19 markets do not always move as you would think they  
20 would with interest rates.

21 MR. BYRON WILLIAMS: Now, pension  
22 assets -- the pension assets of Manitoba Public  
23 Insurance -- sorry, let me back up. In Aon's work, in  
24 terms of Manitoba Public Insurance, it had an  
25 opportunity to -- at a mod -- or examine both the

1 claims liabilities and the pension liabilities,  
2 agreed?

3 MS. JULIANNA SPIROPOULOS: Yes.

4 MR. BYRON WILLIAMS: And in terms of  
5 pension liabilities, they tend -- would tend to have a  
6 longer duration than claims liabilities at Manitoba  
7 Public Insurance?

8 MS. JULIANNA SPIROPOULOS: Yes.

9 MR. BYRON WILLIAMS: And you're  
10 probably familiar with this, but would it be fair to  
11 say that in MPIs most recent annual report pension  
12 liabilities, the dur -- their duration was measured in  
13 excess of sixteen (16) years?

14 MS. JULIANNA SPIROPOULOS: I have not  
15 read that report.

16 MR. BYRON WILLIAMS: Okay. You would  
17 agree that within the MPI portfolio the liability for  
18 pension and other benefits is a material component of  
19 total liabilities?

20 MS. JULIANNA SPIROPOULOS: It depends  
21 how you define material. I recall it is approximately  
22 a third (1/3) of the portfolio. About 20 percent.

23 MR. BYRON WILLIAMS: Well, I'm going  
24 to suggest to you that 20 percent is material. You  
25 would agree with that suggestion?

1 MS. JULIANNA SPIROPOULOS: I -- sure.  
2 It -- it depends on how you define material. But it  
3 is a -- it is a component of the liabilities that we  
4 modelled.

5 MR. BYRON WILLIAMS: Well, it's more  
6 than that I'll suggest to you. It's something that --  
7 of -- that it's a sign -- significant enough size that  
8 you would want to pay attention to, agreed?

9 You're nodding your head, is that a  
10 yes?

11 MS. JULIANNA SPIROPOULOS: Yes, that's  
12 why it was modelled as part of the study.

13

14 (BRIEF PAUSE)

15

16 MR. BYRON WILLIAMS: Would you agree  
17 with the suggestion that the nature of the claims  
18 liabilities is inherently different from the nature of  
19 the pension liabilities?

20 MS. JULIANNA SPIROPOULOS: In some  
21 ways, yes.

22 MR. BYRON WILLIAMS: And what are  
23 those ways?

24 MS. JULIANNA SPIROPOULOS: It would  
25 include the duration of the liabilities and the

1 sensitivity to different factors.

2 MR. BYRON WILLIAMS: And in terms of  
3 sensitivity to different factors, one (1) of those  
4 might be inflation?

5 MS. JULIANNA SPIROPOULOS: Inflation  
6 it could be, and interest rates.

7 MR. BYRON WILLIAMS: Okay. With a  
8 longer duration, those liabilities would be more  
9 sensitive to interest rate fluctuations?

10 MS. JULIANNA SPIROPOULOS: Yes.

11 MR. BYRON WILLIAMS: And with a longer  
12 duration, those assets would be more sensitive to  
13 inflation?

14 MS. JULIANNA SPIROPOULOS: Yes.

15 MR. BYRON WILLIAMS: Now, in terms of  
16 the MPI investment portfolio you would agree that  
17 pension assets are cor -- co-mingled with insurance  
18 assets?

19 MS. JULIANNA SPIROPOULOS: Yes.

20 MR. BYRON WILLIAMS: And would it be  
21 fair to say that the portfolio is structured such that  
22 fixed income assets, i.e., bonds, match the duration  
23 of the insurance liabilities?

24 MS. JULIANNA SPIROPOULOS: That is my  
25 understanding. That is my understanding, yes.

1 MR. BYRON WILLIAMS: And the remaining  
2 assets are invested in growth assets, such as real  
3 estate or equities. Agreed?

4 MS. JULIANNA SPIROPOULOS: Or  
5 infrastructure, yes.

6 MR. BYRON WILLIAMS: Or  
7 infrastructure. Thank you for that correction.

8 Would it be fair to say that with the  
9 bond portfolio covering the insurance liabilities the  
10 pension plan liabilities are backed by the growth  
11 assets?

12 MS. JULIANNA SPIROPOULOS: Yes.

13

14 (BRIEF PAUSE)

15

16 MR. BYRON WILLIAMS: Given the  
17 inherent differences in the liabilities that we've  
18 just discussed, Aon would see value in investigating  
19 whether it would be appropriate to develop an  
20 investment policy that considers the risk and return  
21 characteristics of -- of assets specific to pension  
22 plan liabilities. Agreed?

23 MS. JULIANNA SPIROPOULOS: Yes.

24 MR. BYRON WILLIAMS: And based on your  
25 experience with other public and private sector

1 organizations, you would be aware that generally they  
2 have separate funds for pension plan assets?

3 MS. JULIANNA SPIROPOULOS: Yes.

4 MR. BYRON WILLIAMS: And given the  
5 long duration rel -- excuse me, given the relatively  
6 long duration of the pension plan liabilities, you  
7 would expect that an investment policy for the pension  
8 plans would likely include both bond and growth  
9 assets?

10 MS. JULIANNA SPIROPOULOS: Normally  
11 but not always.

12 MR. BYRON WILLIAMS: You're aware of  
13 pension plans that are fully assigned to growth  
14 assets?

15 MS. JULIANNA SPIROPOULOS: Fully  
16 assigned to bond assets --

17 MR. BYRON WILLIAMS: Fair enough.  
18 Thank you.

19 MS. JULIANNA SPIROPOULOS: -- and --  
20 yes.

21 MR. BYRON WILLIAMS: I should have  
22 asked that question better. And having a separate  
23 pension plan might present the opportunity to reduce  
24 the risks associated with that plan.

25 MS. JULIANNA SPIROPOULOS: Having a

1 separate pension plan would allow MPI to better  
2 understand the risk reward tradeoff specific to the  
3 pension liabilities.

4

5 (BRIEF PAUSE)

6

7 MR. BYRON WILLIAMS: If -- if there  
8 was a separate pension plan investigation, it would be  
9 correct to assume that would require the completion of  
10 another ALM Study?

11 MS. JULIANNA SPIROPOULOS: If there  
12 was a desire to investigate the risk return tradeoff.

13 MR. BYRON WILLIAMS: And again I don't  
14 want to venture too far down that path, but if one did  
15 so, in essence, you'd be re-examining both the  
16 liabilities and the pensions?

17 If they're co-mingled, you -- the next  
18 study would have to re-examine both?

19 MS. JULIANNA SPIROPOULOS: It would be  
20 driven by what MPI wants to understand, and their  
21 desire to get -- obtain more information on the risk  
22 or -- or a tradeoff of either fund.

23 MR. BYRON WILLIAMS: Thanks. I  
24 remember both in your PowerPoint -- I do have a  
25 reference from your evidence. I don't think you need

1 to re -- return there. But I do remember a reference  
2 to suggesting that smooth rate adjustments could be  
3 used to reduce rate volatility.

4 Do you recall that?

5 MS. JULIANNA SPIROPOULOS: I do recall  
6 that, yes.

7 MR. BYRON WILLIAMS: I have a  
8 reference from your evidence, but I think it appeared  
9 in your PowerPoint. But in your evidence it was part  
10 2, page 58.

11

12 (BRIEF PAUSE)

13

14 MR. BYRON WILLIAMS: You can see it...  
15 And I -- I guess, Ms. Spiropoulos, neither I nor my  
16 client were quite sure what you -- what -- or Aon  
17 meant by this.

18 And I'm just wondering what you're  
19 referring to?

20 MS. JULIANNA SPIROPOULOS: So in the  
21 assumptions which we referred to previously on page 99  
22 we indicate the rules under which we modelled. And so  
23 there's a certain amount of a premium increase or  
24 decrease in any given year based on these rules.  
25 Smoothing reflects the perhaps averaging out that you

1 wouldn't -- reflected as stated on page 99 that there  
2 could be an opportunity to create new rules that  
3 evened those type of adjustments out over time.

4           And we suggested that that would be  
5 another way of sort of managing the volatility of the  
6 rates, is by changing the mechanism to which premium  
7 rates are -- are calculated.

8           MR. BYRON WILLIAMS:    Okay.  Thank you.  
9 And that's recognizing the fact that even with your  
10 lower risk portfolios you were still observing  
11 significant volatility?

12           MS. JULIANNA SPIROPOULOS:    Yes.

13           MR. BYRON WILLIAMS:    So your  
14 conclusions were that the -- the tools related to  
15 asset liability management in and of itself might not  
16 be enough to deliver the rate -- rate smoothing or the  
17 absence of rate volatility that MPI was seeking?

18           MS. JULIANNA SPIROPOULOS:    Yes, except  
19 that it also relates to how much return they want in  
20 the portfolio.  So, you know, that does impact the  
21 discussion, as well.

22           MR. BYRON WILLIAMS:    Okay.  Thank you.

23           Mr. Chair, I -- I neglected to  
24 introduce an exhibit.  I believe I'm doing so.  And  
25 our friends from MPI are -- are not objecting to the

1 introduction of the exhibit.

2                   If -- hopefully you have a document  
3 titled in the top left-hand corner, 'Total Risk,'  
4 which I would ask be marked as CAC Exhibit 20.

5

6 --- EXHIBIT NO. CAC-20:       Document titled 'Total  
7                                   Risk'

8

9                   MR. MATT GHIKAS:    And I -- I should  
10 say, Mr. Chairman, we're -- we have no objection to --  
11 to the document being put in. Whether -- whether or  
12 not Ms. Spiropoulos ca -- can or cannot speak to it I  
13 assume will be ascertained momentarily. But certainly  
14 in terms of marking it we've got no issue.

15                   THE CHAIRPERSON:    Thank you.

16

17 CONTINUED BY MR. BYRON WILLIAMS:

18                   MR. BYRON WILLIAMS:    Mr. Spiropoulos,  
19 this document was shared to you in advance by legal  
20 counsel?

21                   MS. JULIANNA SPIROPOULOS:   This  
22 morning, yes.

23                   MR. BYRON WILLIAMS:    And it's -- it's  
24 not a document that -- to back up, it's -- you've been  
25 presented on the left-hand side with the calculations

1 for total risk?

2 MS. JULIANNA SPIROPOULOS: M-hm. Yes.

3 MR. BYRON WILLIAMS: And those are  
4 calculations that you would be familiar with from your  
5 everyday work?

6 MS. JULIANNA SPIROPOULOS: Yes.

7 MR. BYRON WILLIAMS: And you do not  
8 take exception to or are prepared to accept, subject  
9 to check, the veracity of the calculations appearing  
10 on the left-hand side?

11 MS. JULIANNA SPIROPOULOS: No.

12 MR. BYRON WILLIAMS: Was that you're  
13 prepared to accept it?

14 MS. JULIANNA SPIROPOULOS: Yes, I'm  
15 prepared --

16 MR. BYRON WILLIAMS: Okay.

17 MS. JULIANNA SPIROPOULOS: -- to  
18 accept it.

19 MR. BYRON WILLIAMS: The, "no," scared  
20 me there --

21 MS. JULIANNA SPIROPOULOS: Okay.

22 MR. BYRON WILLIAMS: -- for a little  
23 bit.

24 MS. JULIANNA SPIROPOULOS: I thought  
25 you said I'm not prepared to accept it.

1                   MR. BYRON WILLIAMS:    Sorry. Well, I  
2 might have. And if my question was imprecise I  
3 apologize. And if we could just for a minute, you'll  
4 -- we'll move away from the calculations to the actual  
5 right-hand side. And you'll see under 'Risk,' three  
6 different columns with the first being an asset, the  
7 second being an asset, and then a total.

8                   You see that?

9                   MS. JULIANNA SPIROPOULOS:    Yes.

10                  MR. BYRON WILLIAMS:    And then you see  
11 farther to the right a suggestion of the correlation  
12 in this document, agreed?

13                  MS. JULIANNA SPIROPOULOS:    Yes.

14                  MR. BYRON WILLIAMS:    And for the  
15 purposes of this diagram or whatever we call it, this  
16 depiction, we've labelled the second asset as an  
17 asset, but it could be just as easily a liability,  
18 agreed?

19                  MS. JULIANNA SPIROPOULOS:    As a  
20 negative, yes, which you've indicated below.

21                  MR. BYRON WILLIAMS:    And you're  
22 familiar, through your -- through your education and  
23 your many years of experience, with the concept of --  
24 of perfect correlation?

25                  MS. JULIANNA SPIROPOULOS:    Yes.

1 MR. BYRON WILLIAMS: And would it be  
2 fair to say that the term 'perfect correlation'  
3 relates to -- with -- used -- in terms of assets  
4 relates to returns going up and down together at the  
5 same magnitude?

6 MS. JULIANNA SPIROPOULOS: Yes.

7 MR. BYRON WILLIAMS: And when we see  
8 in terms of perfect correlation and we're addressing  
9 the concept of risk, we can conclude that the risks  
10 are additive, agreed?

11 MS. JULIANNA SPIROPOULOS: Yes.

12 THE CHAIRPERSON: Sorry, Mr. Williams.  
13 The risks are --

14 MR. BYRON WILLIAMS: Additive.

15 THE CHAIRPERSON: Additive? Thank  
16 you.

17 MR. BYRON WILLIAMS: Yeah. Excuse me.  
18

19 CONTINUED BY MR. BYRON WILLIAMS:

20 MR. BYRON WILLIAMS: In essence,  
21 that's what we see in the first row with the  
22 assumption of perfect correlation, the first asset and  
23 the second asset moving in tandem in the same  
24 direction and at -- and the -- and the same magnitude  
25 of movement, agreed?

1 MS. JULIANNA SPIROPOULOS: Yes.

2 MR. BYRON WILLIAMS: And that's how  
3 the additive risk of those two assets yields 200,  
4 correct?

5 MS. JULIANNA SPIROPOULOS: Yes.

6 MR. BYRON WILLIAMS: And in terms of -  
7 - you're familiar as well with the term 'perfectly  
8 negatively correlated', agreed?

9 MS. JULIANNA SPIROPOULOS: Yes.

10 MR. BYRON WILLIAMS: And that suggests  
11 that returns move in the opposite direction with the  
12 same magnitude of movement?

13 MS. JULIANNA SPIROPOULOS: Yes.

14 MR. BYRON WILLIAMS: And what we see  
15 in the -- in the second row is a perfectly correlated  
16 negative movement with one asset moving up by a \$100  
17 with the other one moving down by a \$100, agreed?

18 MS. JULIANNA SPIROPOULOS: Yes.

19 MR. BYRON WILLIAMS: And you're also  
20 familiar with the term 'uncorrelated', agreed?

21 MS. JULIANNA SPIROPOULOS: Yes.

22 MR. BYRON WILLIAMS: Or zero  
23 correlation. You're familiar with that term as well?

24 MS. JULIANNA SPIROPOULOS: Yes.

25 MR. BYRON WILLIAMS: And in the con --

1 in the context of returns, that would be that they  
2 show no pattern in that they don't move up. There's  
3 no relationship between the movement of one and the  
4 other.

5                   Would that be fair?

6                   MS. JULIANNA SPIROPOULOS:    Yes.

7                   MR. BYRON WILLIAMS:    And as you see in  
8 the third row, when we're dealing with assets that  
9 have zero correlation or -- or that are uncorrelated,  
10 their individual risks, when combined, are less than  
11 the mathematical sum of their risks, agreed, the  
12 additive sum of their risks?

13                   MS. JULIANNA SPIROPOULOS:    Yes.

14                   MR. BYRON WILLIAMS:    So instead of  
15 moving 200 points, we see here in the example  
16 presented of -- of 140 in terms of the -- of the  
17 risks, agreed?

18                   MS. JULIANNA SPIROPOULOS:    Yes.

19                   MR. BYRON WILLIAMS:    Going back to the  
20 concept of perfect negative correlation, if one had a  
21 portfolio of real return bonds with a risk of one  
22 hundred (100), and that was paired with a pension  
23 obligation of the same size and duration, and assuming  
24 perfect negative correlation, it would be fair to say  
25 that the gain in one (1) will always be mirrored by a

1 loss in the other, agreed?

2 MS. JULIANNA SPIROPOULOS: Assuming  
3 that's possible.

4 MR. BYRON WILLIAMS: And the concept  
5 of correlation is essential to our understanding of  
6 concepts such as total risk, as well as of portfolio  
7 theory, agreed?

8 MS. JULIANNA SPIROPOULOS: Yes.

9 MR. BYRON WILLIAMS: And total risk  
10 depends on volatilities and correlations to a large  
11 degree, the calculation of it?

12 MS. JULIANNA SPIROPOULOS: Yes, and --  
13 and it -- I will say though that it depends how you  
14 define risk in terms of what impact each factor has  
15 and how.

16 MR. BYRON WILLIAMS: Okay. Just to  
17 jump to a totally different subject for a moment, in  
18 Aon's modelling of Canadian and US equities, it  
19 modelled allocations to small capitalization equities  
20 reflecting MPIs plans for implementation, agreed?

21 MS. JULIANNA SPIROPOULOS: Yes.

22 MR. BYRON WILLIAMS: And this improved  
23 the risk reward profile for these asset classes?

24 MS. JULIANNA SPIROPOULOS: Yes.

25

1 (BRIEF PAUSE)

2

3 MR. BYRON WILLIAMS: Ms. SPIROPOULOS,  
4 the last ALM study for MPI was conducted about two (2)  
5 years ago, agreed?

6 MS. JULIANNA SPIROPOULOS: Yes.

7 MR. BYRON WILLIAMS: If Aon was to  
8 conduct a study for Manitoba Public Insurance today --

9 MS. JULIANNA SPIROPOULOS: M-hm.

10 MR. BYRON WILLIAMS: -- you would not  
11 expect it to replicate the results of two (2) years  
12 ago?

13 MS. JULIANNA SPIROPOULOS: It's hard  
14 to say. We wouldn't know until we did it.

15

16 (BRIEF PAUSE)

17

18 MR. BYRON WILLIAMS: At a high level,  
19 and referring to your capital market assumptions from  
20 the 2014 study, what, if any, material changes in  
21 assumptions would you expect if MPI were to engage you  
22 to do a study today?

23 MS. JULIANNA SPIROPOULOS: I don't  
24 have our current assumptions with us -- with me. The  
25 impact is unknown, because we would need to -- to put

1 that in to see what would come out of there, come out  
2 of the modelling.

3 MR. BYRON WILLIAMS: In terms of the  
4 changes that one would want to test to see whether  
5 they were material, presumably one would relate to  
6 volatilities?

7 MS. JULIANNA SPIROPOULOS:  
8 Volatilities tend to pretty stable over time.

9 MR. BYRON WILLIAMS: And in terms of  
10 correlations?

11 MS. JULIANNA SPIROPOULOS:  
12 Correlations also tend to be reasonably --

13 MR. BYRON WILLIAMS: Okay.

14 MS. JULIANNA SPIROPOULOS: -- stable  
15 over time.

16 MR. BYRON WILLIAMS: How about return  
17 expectations in absolute terms?

18 MS. JULIANNA SPIROPOULOS: In absolute  
19 returns those do change, but that may or may not lead  
20 to any difference in the recommendations.

21 MR. BYRON WILLIAMS: That's one where  
22 you might be more alive to material changes though?

23 MS. JULIANNA SPIROPOULOS: You might  
24 get different absolute numbers, but it may not result  
25 in material changes to the decisions.

1                   MR. BYRON WILLIAMS:    And in terms of -  
2 - rather than absolute terms, in terms of real  
3 returns, would you expect that there may be a prospect  
4 for change there as well?

5                   MS. JULIANNA SPIROPOULOS:    So the  
6 level of returns, whether it is on a nominal or a real  
7 basis, the level of that would be expected to change  
8 but the relationship between the assets may or may  
9 not, which gets back to the decision making may or may  
10 not change.

11                   MR. BYRON WILLIAMS:    And in terms of  
12 the return expectations between different asset  
13 classes, would that tend to be more volatile?

14                   MS. JULIANNA SPIROPOULOS:    Our return  
15 assumptions are forward looking, so they do reflect  
16 our expectations at any given point in time.  So, yes,  
17 they change more frequently.

18                   MR. BYRON WILLIAMS:    And within  
19 classes, such as equities, your relative return  
20 expectations would also tend to be more volatile.  
21 Agreed?

22                   MS. JULIANNA SPIROPOULOS:    In terms of  
23 Canadian equities versus US --

24                   MR. BYRON WILLIAMS:    Yes

25                   MS. JULIANNA SPIROPOULOS:    -- versus

1 international, we do build them with consistent  
2 methodology so we would expect that the -- all things  
3 being equal that the relationship between them would  
4 not be as volatile.

5 MR. BYRON WILLIAMS: All things are  
6 not equal though. We had a pretty material change in  
7 circumstance in 2015. Agreed?

8 MS. JULIANNA SPIROPOULOS: But these  
9 are long term assumptions over ten (10) years, so the  
10 fundamental process for which we build our equity  
11 market expectations is consistent each time we project  
12 our assumptions.

13 MR. BYRON WILLIAMS: From a revision  
14 in estimates perspective, would you consider the past  
15 two (2) year period typical, or atypical?

16 MS. JULIANNA SPIROPOULOS: I can't  
17 comment on that.

18

19 (BRIEF PAUSE)

20

21 MR. BYRON WILLIAMS: Based on your  
22 years -- at least your five (5) years of experience  
23 outside of -- outside of the Petro-Can/Suncor family,  
24 do you have any observations about the relative level  
25 of change on the asset side of the equation versus the

1 liabilities side of the equation?

2 MS. JULIANNA SPIROPOULOS: In terms of  
3 -- sorry, can you be more --

4 MR. BYRON WILLIAMS: Materiality of  
5 change over time.

6 MS. JULIANNA SPIROPOULOS: In terms of  
7 people adding new asset classes, or -- I -- I'm not  
8 sure what you're -- what you're asking.

9 MR. BYRON WILLIAMS: It's probably not  
10 that helpful of a question anyways, so I'm going to --

11 MS. JULIANNA SPIROPOULOS: Okay.

12 MR. BYRON WILLIAMS: -- if I -- if I'm  
13 struggling to ask it we're probably not going to get  
14 that far anyways.

15 Ms. Spiropoulos, just be -- on behalf  
16 of our clients we do want to thank you for attending,  
17 and my clients did ask me to express, for example,  
18 your responses of Aon to Mr. Viola's evidence we found  
19 very helpful and thoughtful, so we thank you for  
20 those. And with that, I -- we close our cross-  
21 examination of this witness, sir.

22 THE CHAIRPERSON: Thank you. So we'll  
23 adjourn for an hour for lunch. Thank you.

24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: Is -- is -- yeah,  
2 I'm just wondering is Mr. Monnin going to cross-  
3 examine on this?

4 MS. KATHLEEN MCCANDLESS: On -- on --  
5 no, he -- he's going to be here this afternoon for  
6 road safety.

7 THE CHAIRPERSON: Okay. Mr. Oakes,  
8 you have no questions?

9 MR. RAYMOND OAKES: That's right.

10 THE CHAIRPERSON: We're done. Just  
11 hold on a for a second. I -- I actually did have -- I  
12 did have one (1) question.

13 Ms. Spiropoulos, MUSH bonds.

14 MS. JULIANNA SPIROPOULOS: Yes.

15 THE CHAIRPERSON: As I understand it,  
16 they're not valued by market.

17 MS. JULIANNA SPIROPOULOS: Correct.

18 THE CHAIRPERSON: How does that -- in  
19 terms of all the other asset -- all the other  
20 investments, there seems to be a really specific  
21 desire to know what the valuations are but MUSH bonds  
22 don't seem to fall into that category and -- and I  
23 understand because they can't be sold, but is there a  
24 better way to -- to adjust the valuation, or to give  
25 it some value?

1                   It -- it appears that there is a value  
2 given but it may not actually relate to the value of  
3 the bonds.

4                   MS. JULIANNA SPIROPOULOS:    I'm not  
5 familiar with the ins and outs of how MUSH is  
6 accounted for. All I know is that we assumed that it  
7 wasn't adjusted at market for the purposes of the  
8 study. So, unfortunately, I'm not -- I can't sort of  
9 speak to alternatives at this point for --

10                  THE CHAIRPERSON:    Okay.

11                  MS. JULIANNA SPIROPOULOS:    -- for how  
12 to value them.

13                  THE CHAIRPERSON:    Okay. I just have a  
14 question though. There's an undertaking coming back.  
15 Did you want to reserve the right to cross-examine to  
16 that undertaking after lunch?

17                  MS. KATHLEEN MCCANDLESS:    Do we have  
18 an expectation as to when it will be provided?

19

20                                       (BRIEF PAUSE)

21

22                  MR. MATT GHIKAS:    So, Mr. Chairman,  
23 the question was to provide the MEAN interest rate  
24 forecast. Is there an expectation that there would be  
25 followup questions on that?

1 THE CHAIRPERSON: I have no idea.  
2 That's what I'm asking counsel.

3 MS. KATHLEEN MCCANDLESS: We may just  
4 have to check with Mr. Pelly.

5 THE CHAIRPERSON: Okay. Just a  
6 moment.

7 MR. MATT GHIKAS: And I can say while  
8 we're -- while we're waiting, Mr. Chairman, that in  
9 terms of your MUSH bond question, you'll recall that  
10 we have -- Ms. Reichert and Mr. Johnston are coming  
11 back. So I don't know the extent --

12 THE CHAIRPERSON: That --

13 MR. MATT GHIKAS: -- to which they  
14 will be --

15 THE CHAIRPERSON: That's fine.

16 MR. MATT GHIKAS: -- able to speak to  
17 it, but...

18 THE CHAIRPERSON: I could put it to  
19 them.

20 MR. MATT GHIKAS: Yeah.

21

22 (BRIEF PAUSE)

23

24 THE CHAIRPERSON: Ms. McCandless, I'm  
25 not very good at lipreading, sorry.

1 MS. KATHLEEN MCCANDLESS: I think in  
2 the circumstances we may -- I'm not sure we'll be able  
3 to get the response we need from Mr. Pelly at this  
4 time. Actually, I stand corrected. We do not expect  
5 to have any followup --

6 THE CHAIRPERSON: Okay, thank you.

7 MS. KATHLEEN MCCANDLESS: -- from Aon.

8 THE CHAIRPERSON: Then we're done.  
9 Thank you, Ms. Spiropoulos.

10 MS. JULIANNA SPIROPOULOS: Thank you.

11 MR. MATT GHIKAS: So just to clarify  
12 before we go, Mr. Chairman. So that would mean that  
13 Mr. Keith was going to return in the afternoon, so  
14 shall we start at -- with Mr. Keith right after the  
15 lunchbreak then?

16 THE CHAIRPERSON: Sure, we'll do that.

17 MR. MATT GHIKAS: Okay, thank you.

18

19 (PANEL STANDS DOWN)

20

21 --- Upon recessing at 12:02 p.m.

22 --- Upon resuming at 1:04 p.m.

23

24 THE CHAIRPERSON: Welcome back, Mr.  
25 Keith.

1 MPI PANEL 2, RESUMED:

2

3

WARD KEITH, Previously Sworn

4

5

MR. WARD KEITH: Thank you.

6

THE CHAIRPERSON: Mr. Monnin...?

7

MR. CHRISTIAN MONNIN: Thank you, Mr.

8

Chair.

9

10 CONTINUED CROSS-EXAMINATION BY MR. CHRISTIAN MONNIN:

11

MR. CHRISTIAN MONNIN: Diana, if you

12

could, please, go to page 12 of the loss prevention

13

filing of the Application?

14

15

(BRIEF PAUSE)

16

17

MR. CHRISTIAN MONNIN: In particular

18

regard to the last paragraph on that page. And again,

19

I know everyone can read but I'm reading this for the

20

-- for the benefit of the -- of the record. Here it's

21

written:

22

"IBM acknowledged in its report that

23

many of the proposed measures may

24

not have data currently available,

25

or that further methodological work

1 may need to be undertaken before  
2 implementation. The Corporation has  
3 undertaken a thorough review of the  
4 proposed measures to validate and/or  
5 confirm the suggested KPIs, key  
6 performance indicators, determine if  
7 data sources exist, are readily  
8 available and of suitable quality,  
9 assess availability of proxy data or  
10 measurements where required data  
11 does not exist, and identify a  
12 limited set of priority KPIs that  
13 should be presented in one or more  
14 scorecards."

15 And on the next page, please, the  
16 filing indicates that, "The review," which I'm  
17 assuming is the review that was identified in the last  
18 paragraph, "Produced the following conclusions." And  
19 at the second paragraph which reads:

20 "For many loss prevention program  
21 areas, quantification of the benefit  
22 stream for investment -- from  
23 investments require -- require  
24 further research and development.  
25 Furthermore, to be useful as an

1 optimization tool a dynamic model  
2 must be developed to reflect the  
3 scale effects inherent in shifting  
4 expenditures."

5 Do I understand that to read, Mr. --  
6 Mr. Ward -- Mr. Keith, rather, my apologies -- that  
7 what this states is that presently MPI cannot yet  
8 measure any of the benefits of many of its programs?

9 MR. WARD KEITH: No, that -- that  
10 wouldn't be accurate.

11 MR. CHRISTIAN MONNIN: What does that  
12 state, then? What -- what does this mean here?

13 MR. WARD KEITH: What it means is  
14 that, for some of the loss prevention programs which  
15 are included in the portfolio, there are already key  
16 performance measures that are used and that we can use  
17 to create the return on investment for the purpose of  
18 reporting in the overall score card.

19 But for some of the programs, either  
20 there are no KPIs that are in place, or there are KPIs  
21 that can't accurately or adequately be used in the  
22 build-up to the broader score card ROI that we're  
23 envisioning we would provide for the portfolio.

24 MR. CHRISTIAN MONNIN: And does MPI  
25 have a tracking or are they able to identify which of

1 those programs have insufficient KPIs or insufficient  
2 information -- or data rather?

3 MR. WARD KEITH: I would have to make  
4 that subject to check, but I know that work is  
5 actively underway. So it just may not be complete,  
6 that's all.

7 MR. CHRISTIAN MONNIN: And would you  
8 be able to provide us with a list of -- of those  
9 programs?

10 MR. WARD KEITH: I could undertake to  
11 pro -- we could undertake to provide a list of -- of  
12 the work that we've done to date on this which would I  
13 think respond to your request in terms of where we  
14 think there are data weaknesses that we would need to  
15 continue to work on in order to get the score card  
16 fully functional.

17 MR. CHRISTIAN MONNIN: I would accept  
18 that undertaking -- or I would ask for that  
19 undertaking, if that's acceptable, Mr. Ghikas.

20 MR. MATT GHIKAS: Could we just have  
21 that reformulated, please, just so we know for sure  
22 what we're -- what we're taking on.

23 Mr. Keith, could you just articulate  
24 what you were planning to provide?

25 MR. WARD KEITH: Okay. We can provide

1 an update on the work that we've done in terms of our  
2 analysis of the key performance measures that exist  
3 for the programs under the loss prevention portfolio;  
4 and where there are insufficient measures or  
5 inadequate measures, then what our progress is in  
6 terms of closing those data gaps.

7 MR. CHRISTIAN MONNIN: Thank you.

8

9 --- UNDERTAKING NO. 27: MPI to provide update on  
10 work done on analysis of  
11 key performance measures  
12 that exist for programs  
13 under the loss prevention  
14 portfolio, and what  
15 progress has been made in  
16 terms of closing data gaps  
17 where there are  
18 insufficient or inadequate  
19 measures. MPI to provide  
20 an update on the  
21 development of the model,  
22 which is tying to the  
23 predictive analytics work  
24 and the reporting tools  
25

1 CONTINUED BY MR. CHRISTIAN MONNIN:

2 MR. CHRISTIAN MONNIN: And -- and  
3 still with the same paragraph, Mr. Keith:

4 "A dynamic model must be developed  
5 to reflect a scale of effects  
6 inherent in shifting expenditures."

7 What's the status of that dynamic  
8 model?

9 MR. WARD KEITH: That work is also  
10 involved in this process, so that would also be ready  
11 for sharing with the 2018 GRA, and we would intend to  
12 complete in 2017.

13 MR. CHRISTIAN MONNIN: And would that  
14 -- that dynamic model, the status of -- of it, be  
15 included or rolled into the undertaking which was just  
16 provided?

17 MR. WARD KEITH: Would you like it to  
18 be included in the undertaking?

19 MR. CHRISTIAN MONNIN: If it isn't,  
20 sure. But if it was, then I just wanted to confirm.

21 MR. WARD KEITH: Okay. My initial  
22 intent was not to because we would stay focussed on  
23 the KPIs and the data quality issues.

24 But if you're looking for an update on  
25 the development of that model beyond what we talked

1 about yesterday, which is tying to the predictive  
2 analytics work and the reporting tools that we're  
3 looking at, then we can include that in the  
4 undertaking as well. It just may not be quite as  
5 detailed.

6 MR. CHRISTIAN MONNIN: And, counsel,  
7 is that acceptable?

8 MR. MATT GHIKAS: It is, but I'm  
9 wondering whether or not it could actually just be  
10 addressed through questioning now. I'm -- I'm not  
11 sure of the answer to that, Mr. Keith, whether you're  
12 able to just speak to that or not.

13 MR. WARD KEITH: Well, only to the  
14 extent that I spoke to it yesterday in terms of the  
15 work that we're doing on the predictive analytics  
16 piece in conjunction with IBM and the data modelling  
17 that we're looking at.

18 MR. MATT GHIKAS: Okay. And if -- if  
19 there's -- if it's anticipated that there might be  
20 more than that, then that's fine. We'll take an  
21 undertaking on that.

22 MR. CHRISTIAN MONNIN: Thank you.

23

24 CONTINUED BY MR. CHRISTIAN MONNIN:

25 MR. CHRISTIAN MONNIN: Still on the

1 same page under 'Availability of Data,' in particular  
2 with regard to the last sentence:

3 "New and considerable work is  
4 required to ready systems and data  
5 to meet the recommendations of MPI."

6 Could you elaborate on what that  
7 sentence means specifically?

8 MR. WARD KEITH: Well, this relates to  
9 our discussion yesterday around the fact that, if  
10 there are key performance measures in place that are  
11 usable, then we will use them. If there aren't, then  
12 we have to develop them.

13 And once we develop the suitable key  
14 performance measures, then we have to -- we have to  
15 make sure that we have data sources that can feed  
16 them. And that's what this speaks to.

17 I think that's why, in what was  
18 submitted, as for being able to deliver for 2017, we  
19 may very well find that there are -- and this was  
20 acknowledged by IBM -- that there are key performance  
21 measures that may not be trackable depending on the  
22 certain loss prevention programs that we're talking  
23 about. And -- and so if that's the case then we would  
24 need to call those out.

25 MR. CHRISTIAN MONNIN: If you can go

1 to page 74, Diana, please.

2

3

(BRIEF PAUSE)

4

5

MR. CHRISTIAN MONNIN: Here it's  
6 written that -- with regards to programming ideas that  
7 are currently being explored with road safety and loss  
8 prevention stakeholders for potential implementation  
9 in 2017/'18 include a specific and deliberate focus on  
10 changing the road safety culture in Manitoba by  
11 introducing a Vision Zero, also known as towards zero  
12 approach.

13

What does the Corporation mean by that,  
14 Mr. -- Mr. Keith?

15

MR. WARD KEITH: So this relates to  
16 the discussion yesterday and I know Ms. Kroeker-Hall  
17 had some comments on this as well, the difference  
18 between safe systems and the Vision Zero. Vision Zero  
19 is really the -- the target. In fact, it's a measure  
20 of road safety success.

21

And the whole concept here, it's being  
22 adopted in the United States. It is and has been  
23 adopted in some European countries, is really just the  
24 fact that, you know, when it comes to fatalities on  
25 our roadways, the target -- the -- the objective

1 should be zero.

2                   The objective should be that nobody  
3 loses their lives when they're involved -- when  
4 they're travelling on our roadways, whether as a  
5 driver, or a vehicle owner, or passenger, or other  
6 road user.

7                   So really the intent -- what this means  
8 is in the next year what we really want to look at is  
9 focusing more on behavioural change and behavioural  
10 theory as -- as a way to get at changing the culture  
11 around road safety in this province to the extent that  
12 we can ourselves, and the extent to which we can in  
13 cooperation with other stakeholders and through the  
14 provincial committee.

15                   And what I mean by that is that when  
16 you talk about fatalities and we talk about the --  
17 quite frankly, the progress that we've made over the  
18 last twenty (20) years and we've seen regular downward  
19 trending, et cetera, at the end of the day in 2014,  
20 there were still, I believe, the number is seventy-  
21 eight (78) fatalities on our roadways in this  
22 province.

23                   And at the end of the day is seventy-  
24 eight (78) fatalities okay, notwithstanding we used to  
25 have a hundred and thirty (130), or a hundred and

1 sixty (160), or a hundred and eighty (180) or  
2 whatever. So the thought here is that, really to try  
3 and -- and change what people think about road safety  
4 and what people think about driving safely on our  
5 roadways to get to the point where nobody should be  
6 comfortable with even one (1) life lost as a result of  
7 a motor vehicle collision.

8                   That's at the heart of Vision Zero. So  
9 that's why I say it's a target approach, not a method  
10 -- methodological approach. And -- and in order to  
11 get there what we've learned from countries like  
12 Australia, and New Zealand, and what have you, is that  
13 you really need to change the conversation that people  
14 have around road safety.

15                   And you really need to change the --  
16 the tolerance, the threshold that people seem  
17 comfortable with when it comes to fatalities on our  
18 roadways.

19                   MR. CHRISTIAN MONNIN:    When it comes  
20 to Vision Zero, would you agree with me that there are  
21 four (4) principles -- four (4) core principles to  
22 Vision Zero?

23                   MR. WARD KEITH:       Subject to check, I  
24 would agree with you.

25                   MR. CHRISTIAN MONNIN:    And those would

1 be ethics, and that's the first one. Human life and  
2 health are paramount and take priority over mobility  
3 and other objectives of the road traffic system?

4 MR. WARD KEITH: Subject to check,  
5 yes. I don't have that in front of me.

6 MR. CHRISTIAN MONNIN: And the second  
7 one, responsibility. Providers and regulators of the  
8 road traf -- road traffic safety -- sorry, road  
9 traffic system share a responsibility with users?

10 MR. WARD KEITH: Subject to check,  
11 yes.

12 MR. CHRISTIAN MONNIN: For everyone's  
13 safety road traffic systems should take into account  
14 human failability and minimize both the opportunities  
15 for error and the harm done when they occur.

16 And fourth, mechanisms for change.  
17 Providers and regulators must to their utmost to  
18 guarantee the safety of all citizens. They must  
19 cooperate with road users and must be ready for change  
20 to achieve safety.

21 Do those sound familiar to you?

22 MR. WARD KEITH: Subject to check,  
23 yes.

24 MR. CHRISTIAN MONNIN: And does the  
25 Corporation envision having any, for example, targets

1 per year by victim type with Vision Zero or towards  
2 zero?

3 MR. WARD KEITH: Well, again, as  
4 explained yesterday, you know, we alone have not  
5 established targets, specific targets, reduction  
6 targets by user group or overall by fatalities or  
7 serious injuries because of the limited role we play  
8 within the bigger road safety construct.

9 But those discussions would be held at  
10 the provincial road safety committee level and are  
11 incorporated into the terms of reference that have  
12 been shared with this panel.

13 MR. CHRISTIAN MONNIN: And I believe I  
14 heard your evidence yesterday that with regards to  
15 that collaboration with stakeholders, the Corporation  
16 views that as outside of the PUB process.

17 Is that correct?

18 MR. WARD KEITH: I didn't -- I don't  
19 think I characterized it that way. And if I did, I --  
20 I'm not sure that I meant to be so explicit.

21 What I meant to say is that, if there -  
22 - if -- if our stakeholders who have an interest in  
23 road safety have perspectives they want to share, have  
24 input they want to provide, if we, as we should, want  
25 to talk about our priorities and make sure that they

1 align to the priorities of our stakeholders, we should  
2 have a mechanism to do that outside of this regulatory  
3 process and not do it once a year through this  
4 regulatory process and through the Intervenor process.

5 MR. CHRISTIAN MONNIN: And just to  
6 make sure I -- I understand clearly. That in addition  
7 to what's happening outside of the process, within the  
8 regulatory process the issue of road safety still  
9 ought to be considered.

10 Is that -- is that fair? Would the --  
11 the Corporation agree with that?

12 MR. WARD KEITH: I'm sorry, could you  
13 -- could you repeat that question?

14 MR. CHRISTIAN MONNIN: Certainly. The  
15 Corp -- it isn't the Corporation's position that the  
16 road safety issue, the loss prevention portfolio,  
17 ought not to be considered in front of the regulator  
18 or by the regulator.

19 Is that -- is that fair to say?

20 MR. WARD KEITH: Well, the -- the  
21 regulator has had and expressed in interest in the  
22 Corporation's loss prevention efforts. And -- and so  
23 -- so we would continue to -- to deliver on those  
24 expectations.

25 MR. CHRISTIAN MONNIN: Thank you.

1 Unfortunately, Mr. Williams isn't here, but I'm  
2 lifting some words from his vernacular. This is a  
3 short snapper of a question. Page 51 of the loss  
4 prevention portfolio filing, please.

5 In here I understand there's a  
6 precursor to major curriculum redevelopment. There  
7 are options to transmit information via mobile and  
8 online services delivery that can be used to expand  
9 the Corporation reach of information both efficiently  
10 and effectively.

11 And I'm struggling with this one  
12 because one of the issues that I've seen the last  
13 three years that I've been here with GRAs is that the  
14 use of cell phones or smartphones while driving are  
15 problematic. And here you're using a platform that  
16 encourages the use of smartphones, and it just seems  
17 to be a little counterintuitive to me.

18 Would you agree with that?

19 MR. WARD KEITH: No, that's not what  
20 we intend here. What we're talking about is, more  
21 broadly, the use of technologies that are most usable  
22 by young children -- by young -- young Manitobans  
23 today. So it doesn't necessarily have to be  
24 smartphones while people are driving.

25 The thought here is that if we can look

1 at mobile applications and computer-base learning and  
2 if there are elements of the high school driver  
3 education program that exist today that are really  
4 knowledge-based, so they're not skill-based, they're  
5 not experience-based, they're not judgment and  
6 decision-based, they're not about hazard perception,  
7 they're about knowledge, learning knowledge.

8           So the time in the curriculum, for  
9 instance, that are -- the instructors spend teaching  
10 students about rules of the road and about what's in  
11 the provincial driver handbook to prepare, exa -- for  
12 example, for passing the written test, that is  
13 knowledge-based information that could conceivably  
14 deli -- be delivered through other mediums and not in  
15 a lecture-based format that exists today with the  
16 instructor standing at the front and talking at the  
17 kids for two hours after a full day of class.

18           It's also an effective way to -- and we  
19 are piloting this this year. We've called them  
20 booster events, booster learning events. And so what  
21 we're able to do is, depending on what is taught in  
22 the class or what is taught in the car, then if there  
23 are certain road safety messages or learning reminders  
24 that we want to convey to the students outside of the  
25 classroom, then we have an ability to push out those

1 learning events and -- and push them out in more -- in  
2 smaller more digestive chunks so that the students can  
3 absorb them better and absorb them through use of a  
4 medium that they're -- that they're more used to.

5 MR. CHRISTIAN MONNIN: Thank you.

6 Diana, if you can go to page 75, please.

7

8 (BRIEF PAUSE)

9

10 MR. CHRISTIAN MONNIN: Scroll down.

11 Thank you. In here we're dealing with collision  
12 mapping, and the Corporation states at the second  
13 paragraph:

14 "The maps dem -- demonstrate that an  
15 elevated risk for injuries and  
16 deaths of vulnerable users is not  
17 identifiable within hot spots.  
18 Rather, these inci -- incidents  
19 occur with a high degree of  
20 randomness throughout urban  
21 environments. Nevertheless, the  
22 Corporation recognizes the  
23 particular vulnerability of people  
24 on foot, on bicycles, and those  
25 riding motorcycles, and have

1 structured education and awareness  
2 campaigns and messaging to be  
3 targeted at population demographics  
4 rather than specific locations."

5 Does the Corporation -- have -- has the  
6 Corporation identified any particular demographic  
7 which seems to be more careless or less aware of  
8 vulnerable road users?

9 MR. WARD KEITH: The -- the focus of  
10 this particular reference is -- is in relation to a  
11 new public awareness campaign that we will be  
12 initiating this fall, and it will run through the  
13 winter. And the intent here is to focus the awareness  
14 more at pedestrians themselves as opposed to  
15 motorists.

16 So typically we'd talk to motorists  
17 about being watchful for pedestrians crossing the  
18 road, or what have you. The intent here is to focus  
19 on -- on pedestrians, particular during the winter  
20 months when we know that -- that pedestrians are  
21 bundled up because of the cold weather, are usually  
22 walking in a hurry because of the cold weather, and  
23 may be distracted because of use of -- of the -- their  
24 iPod or what have you, their smart phone or whatever  
25 you -- have you -- while they're walking.

1                   And so this is the demographic that  
2 we're talking about that we'll specifically target  
3 this coming fall.

4                   MR. CHRISTIAN MONNIN:    So -- okay.  So  
5 the demographic are the vulnerable road users  
6 themselves, and not those in the vehicles.

7                   MR. WARD KEITH:    Well, I'd say that  
8 with caution because it's sort of like the cycling  
9 issue where we believe messaging to both cyclists and,  
10 in this case, pedestrians and -- and motorists is  
11 important.  So this is not a shift to starting to talk  
12 only at pedestrians about how to keep themselves safe  
13 on the road.  The awareness around motorists being  
14 alert to cyclists -- sorry, to pedestrians does not  
15 change, and will not be softened.

16                   It's just more specific messaging to  
17 pedestrians about what they can do to protect  
18 themselves during the winter when they're out walking.

19                   MR. CHRISTIAN MONNIN:    And I've seen  
20 in this filing and in prior filings the -- the concern  
21 with regards to distracted driving.

22                   Does the -- the Corporation have any  
23 data, or reports, or studies with regards to  
24 distracted pedestrians, or distracted vulnerable road  
25 -- road users?  Have they been -- has the Corporation

1 been looking into that in particular?

2 MR. WARD KEITH: Yes. I don't have  
3 reports or data, but we have been looking at this  
4 because this is a growing concern, not just in  
5 Manitoba but elsewhere in terms of the fact that  
6 pedestrians are often distracted when they're walking  
7 and that can lead to collisions if they walk out on  
8 the roadway because they're -- their minds are  
9 somewhere else.

10 So you have likely seen pedestrians  
11 walking and texting while they're walking, or on the  
12 phone while they're walking. They have earbuds in  
13 their ears while they're walking. And this is all --  
14 these are all things that distract them from the task  
15 of walking.

16 And I think we have to be careful here  
17 not to be sort of too paternalistic about starting to  
18 control what pedestrians do and -- and how they -- how  
19 they chose to spend their time when they're walking  
20 because that does go beyond our mandate.

21 But -- but it is a road safety risk and  
22 so we have to start conveying to pedestrians the need  
23 to start focussing on the task of walking, even --  
24 even if they're not behind the wheel, and that's the  
25 intent of this campaign in the fall.

1                   MR. CHRISTIAN MONNIN:    I -- I hear you  
2 on -- on the -- the caveat about being paternalistic,  
3 and I'm not trying to put words in your mouth but  
4 wouldn't that fall into the deliberate and focused  
5 view to change the road safety culture in Manitoba  
6 with -- with the introduction of Toward Zero or Vision  
7 Zero? We're talking about behavioural change, whether  
8 it be pedestrian or -- or people behind the wheel.

9                   MR. WARD KEITH:        I -- I think that's -  
10 - I think that's a fair -- a fair correlation.

11                  MR. CHRISTIAN MONNIN:    I'd like to ask  
12 you some questions with respect to some Information  
13 Requests.

14

15   (BRIEF PAUSE)

16

17                  MR. CHRISTIAN MONNIN:    Diana, if you  
18 can go to Bike Winnipeg MPI-1-1, please. And in the  
19 preamble, which lifts language from the loss  
20 prevention filing, it's written:

21   "Total traffic fatalities -- traffic  
22   fatalities have steadily declined in  
23   the past decade."

24                  And, Diana, if you'd go to page 3 of  
25 the IR, please. And under Table 1, 'Fatally Injured

1 Victims by Road User Type,' you'll see drivers, you'll  
2 see passengers and vulnerable road users.

3                   And the drivers -- the driver line, if  
4 you compare from '05 across to the right to 2014, has  
5 steadily declined or has gone down, with passengers as  
6 well. But would you agree with me that's not  
7 necessarily the case with vulnerable road users?

8                   MR. WARD KEITH: When you look at  
9 actual numbers, I would agree with that. That's less  
10 -- less consistent in terms of downward trending.

11                   MR. CHRISTIAN MONNIN: And the same  
12 under Table 2, 'Fatally Injured Victims by Road User  
13 Type and Age Group.' Age 55 to 64, drivers has  
14 remained flat or gone up a little bit. Passengers has  
15 gone down, and vulnerable road users remained flat.  
16 And the same would apply for 65 or older.

17                   And so we don't see this steadily  
18 declining as -- as just -- as is said in -- in the  
19 preamble to the IR with regards to vul -- vulnerable  
20 road users if we look at the numbers.

21                   Do you agree with that?

22                   MR. WARD KEITH: Well, we don't see it  
23 in the first sentence to the preamble, but we see it  
24 in the second sentence, which is why it was qualified.

25

1 (BRIEF PAUSE)

2

3 MR. CHRISTIAN MONNIN: If you can go  
4 to MPI-1-2, please, on the second page. A little  
5 further down, the last paragraph:

6 "The Corporation intends to launch a  
7 new and innovative campaign aimed at  
8 overall traffic safety culture."

9 Do I understand it correctly to be --  
10 that to be the -- the Vision Zero or the Toward Zero  
11 that would -- that would -- the Vision Zero/Toward  
12 Zero approach that we saw in the filing?

13 MR. WARD KEITH: Aligned with that  
14 concept, yes. And I wish I'd have seen this because  
15 that would have been how I would have answered your  
16 first question. But it does relate to what we were  
17 talking about.

18 MR. CHRISTIAN MONNIN: So we have a  
19 specific -- on one hand we have:

20 "...seeking the implementation of a  
21 specific and deliberate focus on  
22 changing the road safety culture in  
23 Manitoba by introducing a Vision  
24 Zero, also known as Toward Zero,  
25 approach."

1 In the IR, we have:

2 "...intends to launch a new and  
3 innovative campaign aimed at overall  
4 traffic safety culture."

5 Which is aligned with Vision Zero but  
6 isn't quite necessarily Vision Zero?

7 MR. WARD KEITH: Yes, that's my  
8 testimony, but I really don't see a discrepancy in  
9 that wording, quite frankly.

10 MR. CHRISTIAN MONNIN: Well, I guess  
11 the discrepancy I would suggest is either we're  
12 seeking a specific and deliberate focus on changing  
13 the road safety culture in Manitoba such as Vision  
14 Zero/Toward Zero, or the Corporation intends something  
15 that's aligned with it which is to launch and new and  
16 innovative campaign aimed at overall traffic safety  
17 culture.

18 And I'm just trying to get some --

19 MR. WARD KEITH: Yeah.

20 MR. CHRISTIAN MONNIN: -- some clarity  
21 on what the -- the Corporation's position is.

22 MR. WARD KEITH: Yeah. Fair enough.  
23 Our position is that we think we need to move and  
24 change the overall traffic safety culture. And -- and  
25 we intend to do that based on how I've explained. And

1 -- and why we'll do it is for the reasons that I've  
2 suggested.

3

4 (BRIEF PAUSE)

5

6 MR. CHRISTIAN MONNIN: Is it safe to  
7 say that the -- the Corporation has an idea of where  
8 it would like to go but just hasn't quite figured out  
9 it's going to get there yet?

10 MR. WARD KEITH: How we -- where we'd  
11 like to go in terms of -- of what, Mr. Monnin?

12 MR. CHRISTIAN MONNIN: Well, what we  
13 were just discussing about, sir.

14 MR. WARD KEITH: You mean the traffic  
15 safety culture?

16 MR. CHRISTIAN MONNIN: That's correct.

17 MR. WARD KEITH: Well, I -- I mean --  
18 I think -- you know, we -- we do have an idea of where  
19 we want to go, meaning we do have an idea where we  
20 think the conversation around road safety needs to go  
21 in this province. And what's presented here is one  
22 (1) tangible campaign that we believe will start to  
23 get us there.

24 MR. CHRISTIAN MONNIN: But to be  
25 clear, that campaign isn't the introduction of Vision

1 Zero towards zero, it's something that is in the  
2 spirit of it, that's aligned with it?

3 MR. WARD KEITH: Well, the campaign  
4 that I'm referring to is the pedestrian campaign that  
5 I spoke of. And then as we move forward next year,  
6 you know, the more we can, in our public messaging, in  
7 our road safety initiatives, focus on -- on changing.

8 I mean, this is about cultural change,  
9 right. This is about behavioural change and how  
10 people view road safety and view the acceptability of  
11 -- of fatalities and serious injuries on our roadways.  
12 And -- and this is generational. This could very well  
13 take one (1) or two (2) generations to get to where we  
14 want to go based on -- you know, based on -- on the  
15 way you've -- you've profiled it.

16 But -- but we know that we need to go  
17 there. And based on what we've seen in other  
18 jurisdictions it seems to be having some effect and --  
19 in -- in making everybody more responsible for doing  
20 their part to be part of the solution as opposed to  
21 potentially part of the problem.

22 MR. CHRISTIAN MONNIN: Diana, if you  
23 can go to IR 1-8B, please.

24

25

(BRIEF PAUSE)

1                   MR. CHRISTIAN MONNIN:    So this IR from  
2 Bike Winnipeg seeks confirmation if -- if MPI has  
3 identified other jurisdictions with con -- which  
4 consistently have been successful in reducing road  
5 injuries and fatalities and if they -- if MPI has  
6 identified, the extent to which these programs --  
7 which programs of information, education,  
8 supplemental, enforcement played a role in the success  
9 of other jurisdictions.

10                   And in the response -- this is what I -  
11 - I'm -- I'm still struggling to get some  
12 clarification.  If you go up a little bit, Diana,  
13 please.  Thank you.  And I apologize for being so daft  
14 with my questions, but I had spent some time with  
15 Karen (sic) Kroeker -- Ms. Kroeker-Hall yesterday  
16 about whether MPI had a safe systems approach or not.

17                   And her advice was -- her position or  
18 opinion was that it does.  And when I read this  
19 paragraph I'm still not uncertain whether a safe  
20 systems approach is adopted by MPI or not, because the  
21 Corporation here refers to these other countries with  
22 low and consistent reductions in rate of their traffic  
23 fatality.

24                   Attribute -- what -- they attribute  
25 their success to adopting a safe system approach to

1 road safety and safe roads, safe vehicles, safe  
2 speeds, and safe drivers where all stakeholders and  
3 initiatives including enforcement play an important  
4 role.

5 High performing jurisdictions  
6 furthermore credit their success to the ongoing  
7 setting of aggressive goals to reducing the rate of  
8 fatalities. And I'm bundling that in -- that response  
9 in to the safe systems example where they have  
10 aggressive goals for reducing rate of fatalities.

11 And then the last sentence is the one  
12 (1) that confuses me, and I apologize, I get easily  
13 confused. It says:

14 "Manitoba has adopted a model that  
15 considers health infrastructure and  
16 other safe contributors where  
17 initiatives maybe be oper --  
18 operationalized through the  
19 provincial road safety committee."

20 I read that as we're talking about safe  
21 systems in other jurisdictions and then we talk about  
22 what Manitoba has and it's not safe systems.

23 Do you agree with that?

24 MR. WARD KEITH: No, I wouldn't agree  
25 with it. I -- I believe that when it comes to

1 Manitoba Public Insurance we have adopted the safe  
2 systems approach and we understand the importance and  
3 -- and priority of a safe systems approach.

4           But we -- when we talk about Manitoba  
5 Public Insurance specifically and our legislated  
6 mandate around road safety, we have to qualify some of  
7 that discussion. So, for example, we recognize that a  
8 part of the safe systems approach is safe drivers.

9           So that's where our mandate comes in in  
10 terms of public awareness, in terms of driver  
11 education, in terms of the work we do under the  
12 Drivers and Vehicles Act with enforcing driver  
13 licensing and driver testing standards, et cetera, but  
14 that's only a piece of it, right?

15           Another piece of -- of the safe systems  
16 approach is safe roads. And safe roads can be two (2)  
17 things. It can be safe roads because of controlling  
18 driver behaviour through police enforcement. And it  
19 can be safe roads by way of sound infrastructure.

20           So there's a perfect example, in my  
21 view, where we can leverage our mandate to work  
22 cooperatively with law enforcement in this province to  
23 make sure that our education and awareness campaigns  
24 are aligned to visible enforcement on the roadways.

25           But we don't have a role in terms of

1 the highway infrastructure, in terms of highway design  
2 and construction or the passing of -- of the posting  
3 of speed limits, for that matter, which ties to safe  
4 speeds.

5           So when we talk about -- we -- we agree  
6 with and support the safe systems concept. But the  
7 extent to which we, as an organization, can deliver on  
8 that is limited by our mandate.

9           Which then takes us to the last part of  
10 this sentence, this paragraph, which says that, within  
11 the broader provincial road safety construct, that's  
12 where we will be able to see more -- more tangible  
13 movement, more tangible alignment on the safe systems  
14 approach, because all of the players responsible for  
15 those aspects of that -- of that methodology are at  
16 the table.

17           MR. CHRISTIAN MONNIN: So if I  
18 understand correctly, looking still at this paragraph  
19 B of IR I-8, your evidence is that the Corporation has  
20 adopted a safe system approach?

21           MR. WARD KEITH: Yes.

22           MR. CHRISTIAN MONNIN: But you're also  
23 saying in the same vein that the Corporation does not  
24 have jurisdiction over safe roads?

25           MR. WARD KEITH: We don't have

1 jurisdiction over ele -- over all of the elements that  
2 make up a safe systems approach.

3 MR. CHRISTIAN MONNIN: And you don't  
4 have the -- "you" being the Corporation, doesn't have  
5 jurisdiction over safe vehicles?

6 MR. WARD KEITH: We don't have sole  
7 jurisdiction over that, yes.

8 MR. CHRISTIAN MONNIN: Okay.

9 MR. WARD KEITH: We do have  
10 relationships with the vehicle manufacturers. We have  
11 our participation on groups like the Canadian Council  
12 of Motor Transport Administrators, which works  
13 directly with Transport Canada, who does have direct  
14 oversight over vehicle manufacturers manufactured for  
15 sale in Canada, but we don't have sole jurisdiction  
16 over this -- over these things, no.

17 MR. CHRISTIAN MONNIN: And -- and you  
18 don't have jurisdiction over safe speeds?

19 MR. WARD KEITH: Well, again, I mean,  
20 I don't want to be argumentative, but there's a lot in  
21 those two words, 'safe speeds'. So we don't have  
22 jurisdiction over the establishment of speed limits.  
23 That's controlled by the Highway Traffic Board in this  
24 province, not by Manitoba Public Insurance.

25 We do have involvement in terms of

1 making drivers aware of the need to drive within  
2 posted speed limits or to drive to conditions which,  
3 in our weather and road conditions, may very well be  
4 well under the posted speed limit.

5                   So each of these -- each of these  
6 references contains very many elements, some of which  
7 we will have involvement in, and some of which we have  
8 no direct jurisdiction over.

9                   It doesn't change the fact, in our  
10 view, that when we approach road safety, we do  
11 approach it with a safe systems approach. And we do  
12 recognize how all of these elements of road safety  
13 really do play together to -- to create maximum  
14 effectiveness.

15                   MR. CHRISTIAN MONNIN:    And where this  
16 answer provided MPI says:

17                               "High performing jurisdictions  
18                               furthermore credit their success to  
19                               the ongoing setting of aggressive  
20                               goals of reducing the rate of  
21                               fatalities."

22                   The Corporation does not have those  
23 aggressive goals. Do you agree with me?

24                   MR. WARD KEITH:    Well, I would point  
25 you back to our discussion yesterday, because I would

1 agree with you that the Corporation does not itself  
2 set specific percentage-based targets for reductions  
3 in fatalities. But I think that needs to be qualified  
4 with an explanation of why, which is because we are  
5 but one (1) player in this construct, and that when it  
6 comes time to doing apples-to-apples comparisons, this  
7 is at the jurisdictional level.

8                   And so it will be up to the Provincial  
9 Road Safety Committee to determine if they do indeed  
10 want to pursue aggressive, tangible fatality reduction  
11 targets as part of the Provincial Road Safety plan.

12

13                   (BRIEF PAUSE)

14

15                   MR. CHRISTIAN MONNIN: Diana, if you  
16 could, please, go to Bike Winnipeg MPI-1-12.

17

18                   (BRIEF PAUSE)

19

20                   MR. CHRISTIAN MONNIN: And on --  
21 scroll down under 'response'. Now, I appreciate that  
22 this is -- is referring to another IR but the question  
23 I have for you, sir, pertains to the sentence that  
24 starts as:

25                   "Furthermore, the Corporation does

1 not necessarily view a return on  
2 investment for road safety programs  
3 exclusively in financial terms."

4 And we touched upon this yesterday when  
5 we were talking about social costs, social value,  
6 human toll. Is the Corporation in a position to  
7 identify or to explain which road safety programs  
8 specifically were not -- had more than just exclusive  
9 -- was -- was looked at more than just exclusively in  
10 financial terms?

11 Do you have a library of these programs  
12 where you can say, program 'A', 'B', 'C', were not  
13 looked at exclusively in financial terms and it  
14 concerted for example the human toll?

15 MR. WARD KEITH: Well, I would -- my  
16 testimony would be that all of our road safety  
17 programs -- none of our road safety programs look  
18 exclusively in financial terms because an important  
19 element in establishing the return on investment to  
20 the extent that we can is whether or not we can move  
21 the needle when it comes to human toll.

22

23 (BRIEF PAUSE)

24

25 MR. CHRISTIAN MONNIN: And the human

1 toll, if I understand your evidence correctly, is a  
2 component of the consideration of every potential  
3 program?

4 MR. WARD KEITH: Yes, as well as is --  
5 is leveraged in our priority setting process when it  
6 comes time to establishing the priorities that we seek  
7 to identify programs for.

8 In my view, this really speaks to the  
9 question of -- this particular reference speaks to the  
10 question of the extent to which we may or may not be  
11 able to establish a clear return on investment for our  
12 -- some of -- for our road safety programming, quite  
13 frankly.

14 So the extent to which we can look for  
15 positive outputs, as Mr. Williams explained yesterday,  
16 to show that we are making a difference in terms of  
17 raising awareness about road safety risks and changing  
18 peoples' attitudes and behaviours as reported by those  
19 people, that's what -- that's what we look to achieve  
20 through our road safety programming.

21 It is very different, in my view, to be  
22 able to correlate specific initiatives, and specific  
23 investment in initiatives directly to reductions in  
24 collisions, claims, and claim's cost. For that, we  
25 have to go to the next level and look at the downward

1 trending that we just spoke about.

2 MR. CHRISTIAN MONNIN: Thank you.

3 Allow me to apologize in advance to the Board and to  
4 Mr. Keith. I'm going to make you folks bounce around  
5 a little bit.

6 Diana, if you go to Bike Winnipeg MPI-  
7 1-5, and if you can split screen -- I believe you have  
8 the ability to do that -- with Bike Winnipeg MPI-2-1.

9

10 (BRIEF PAUSE)

11

12 MR. CHRISTIAN MONNIN: Sorry, with  
13 regards to 1-5 have it attachment -- yeah, be --  
14 Attachment 'A' is good. Thank you.

15 And with 2-1 -- you may recall with 1-5  
16 we asked for some information based on the TCSR, and  
17 then we asked for the same information based on the  
18 enterprise data warehouse.

19 And if I can summarize, the Corporation  
20 has taken the position that, We'll give you that  
21 information, but really the Enterprise Data Warehouse  
22 is -- is not -- it's not the -- the database that you  
23 need. It's the TCSR, which is the Traffic Collision  
24 Statistics Report.

25 And there's a very -- there's a host of

1 reasons why MPI's taken this position, but in  
2 particular regard, the Enterprise Data Warehouse  
3 collates information about injuries or fatalities that  
4 did not occur in -- in Manitoba and therefore not  
5 relevant.

6                   And, Diana, if you can go to Attachment  
7 A of MPI-2-1(b).

8

9                   (BRIEF PAUSE)

10

11                   MR. CHRISTIAN MONNIN: Let the record  
12 show that I did apologize beforehand. 2-1(b), MPI-2-  
13 1(b). You were there before. I'm just looking for a  
14 comparison of the tables, so if we can keep the table  
15 on the left.

16

17                   (BRIEF PAUSE)

18

19                   MR. CHRISTIAN MONNIN: Exhibit --  
20 sorry, what?

21

22                   (BRIEF PAUSE)

23

24                   MR. CHRISTIAN MONNIN: Exhibit 15,  
25 perhaps.

1 (BRIEF PAUSE)

2

3 MR. CHRISTIAN MONNIN: Yeah, it's  
4 Figure 1, Diana, 'Fatal -- Fatalities Count.'

5

6 (BRIEF PAUSE)

7

8 MR. CHRISTIAN MONNIN: Yeah. If you -  
9 - you're at five (5). If you go up to -- to Table 1,  
10 please.

11 And all this effort for the one (1)  
12 point I wanted to show is that the TCSR on the  
13 subtotal of VRUs starting at 2001, which you'll see at  
14 the Enterprise Data Warehouse -- and we can take this  
15 subject to check in -- in the interests of time -- but  
16 I'm going to suggest that the VRU totals that are  
17 shown in the Enterprise Data Warehouse table are  
18 higher throughout than the ones that are shown in the  
19 TCSR.

20 Would you agree with that?

21 MR. WARD KEITH: Subject to check and  
22 based on the explanation that's provided in two point  
23 one (2.1), yes.

24 MR. CHRISTIAN MONNIN: And you would  
25 also agree with me that, on average, what we're

1 looking at -- so the TCSR information is -- is  
2 provided to the regulator for this application. But  
3 that information stops around 2014, some two (2) years  
4 earlier than -- the date that we're at 2016, whereas  
5 the -- the Enterprise Data Warehouse information is  
6 more current.

7 Would you agree with that?

8 MR. WARD KEITH: Yes, although 2015  
9 TCR data is now available.

10 MR. CHRISTIAN MONNIN: But that wasn't  
11 the case when the application was filed. It stopped  
12 at 2014, correct?

13 MR. WARD KEITH: That's correct, yeah.  
14 And the reason there is because the tra -- the traffic  
15 collision statistics data is intentionally developed  
16 for comparative purposes between jurisdictions and  
17 published at the national level, so it's usually a  
18 year behind.

19 MR. CHRISTIAN MONNIN: And the  
20 Enterprise Data Warehouse information is the one  
21 that's required -- or the one that's used for the  
22 financial statements of the Corporation because it  
23 gives the global picture of the fin -- the -- the  
24 Corporation's exposure to -- to injuries and  
25 fatalities, correct?

1                   MR. WARD KEITH:    From a claims cost  
2 perspective, yes, that's right.

3                   MR. CHRISTIAN MONNIN:   And if it  
4 wasn't for the IR and our purs -- and -- and our  
5 pursuit of the IR, would -- would this enterprise data  
6 warehouse information be provided to the regulator in  
7 this hearing?

8

9                                   (BRIEF PAUSE)

10

11                   MR. WARD KEITH:    So the actual numbers  
12 of fatalities coming out of the enterprise data  
13 warehouse, I'm advised, would -- would not normally be  
14 provided to the regulator.  Although, the claims costs  
15 associated with those would form part of the  
16 application itself.

17                   The -- when -- when it comes to talking  
18 about road safety and road safety efforts and moving  
19 the needle with respect to road safety, we have  
20 historically provided traffic collision data  
21 information, because that is the information that's  
22 publically available and -- and so that is what was  
23 done this year as well.

24                   MR. CHRISTIAN MONNIN:   Diana, if you  
25 can go to page 82, please, of the loss prevention

1 filing. And also what -- we'll -- we'll start here  
2 first and then we'll take you to the report of Ms.  
3 Kroeker-Hall.

4                   Here we have the recommendations. And  
5 we run -- starting at page 82, we run recommendation  
6 1, 2, going to 83, recommendation 3, and then  
7 ultimately we go to recommendation 5. And then we  
8 have an omnibus other recommendations, which simply  
9 reads:

10                   "Other recommendations to clarify  
11                   language in the road safety  
12                   operational plan and related  
13                   frameworks have been considered and  
14                   incorporated where deemed  
15                   appropriate."

16                   And if you go to page 50 and 51 of Ms.  
17 Kroeker-Hall's report, please, Diana.

18

19                   (BRIEF PAUSE)

20

21                   MR. CHRISTIAN MONNIN: Although not  
22 numbered as in the -- the MPI filing, the first page  
23 that I'm referring to is page 50. You have  
24 recommendations 1 through 5, which coincide with the  
25 recommendations that are in the filing. And then if

1 you go to page 51, you have 6 through 10 of the  
2 recommendations.

3                   And I'm curious as to why MPI thought  
4 it didn't -- it wasn't necessary to itemize those  
5 recommendations and be more specific about their  
6 status and -- rather than just saying that they've  
7 been considered and incorporated where deemed  
8 appropriate.

9                   I would just suggest to you that it's -  
10 - it's -- ultimately it's to the -- the regulator to  
11 deem whether it was done appropriately or not, and it  
12 should be fleshed out more thoroughly.

13                   Would you agree with that?

14                   MR. WARD KEITH: Well, if the regul --  
15 regulator had felt the need for more information into  
16 how these recommendations were acted upon, then I  
17 would have expected we would have received that in an  
18 Information Request, but we didn't.

19                   And the reason we put it together is  
20 because primarily, there was -- these recommendations  
21 relate to feedback from Ms. Kroeker-Hall, and based on  
22 her testimony yesterday, to help enhance and make even  
23 stronger the road safety operational plans that have  
24 been put together.

25                   So in many of these cases, the intent

1 behind the recommendation was included in the  
2 operational plans. And if they were not well enough  
3 articulated in the wording of those plans themselves,  
4 then we've committed to -- to add that wording to make  
5 it clearer.

6

7

(BRIEF PAUSE)

8

9

MR. CHRISTIAN MONNIN: If I could just  
10 have two (2) minutes to speak with my client, please?

11

12

(BRIEF PAUSE)

13

14

MR. CHRISTIAN MONNIN: Mr. Chair,  
15 members of the panel, those are my questions. And  
16 thank you very much, Mr. Keith, for putting up with me  
17 this afternoon.

18

19

THE CHAIRPERSON: Thank you, Mr.  
Monnin. Mr. Oakes...?

20

21

22

23

24

25

MR. RAYMOND OAKES: Than you, Mr.  
Chairman. I'm ready to proceed. I anticipate being  
roughly an hour and a half. The cross-examination of  
Mr. Keith will relate to two issues primarily, the  
investment and road safety as it relates to  
motorcycles, and then the Corporation's plan with

1 respect to preventing wildlife collisions.

2 I'm happy to start now, if you wish, or  
3 if the panel wishes to take a short break before we  
4 start.

5 THE CHAIRPERSON: Would there be a  
6 suitable breakpoint in about a half an hour, Mr.  
7 Oakes?

8 MR. RAYMOND OAKES: Certainly, Mr.  
9 Chairman.

10 THE CHAIRPERSON: Thank you.

11 MR. RAYMOND OAKES: As a preliminary  
12 matter, I have three exhibits. They've been provided  
13 to My Learned Friend. They are each IRs from last  
14 year's hearing. And the Board secretary has been kind  
15 enough to mark the first one CMMG-8, which is CMMG IR-  
16 1-7 from last year.

17

18 --- EXHIBIT NO. CMMG-8: CMMG IR-1-7 from last year  
19

20 MR. RAYMOND OAKES: CMMG-9 will be the  
21 IR-2-8 from last year from CMMG.

22

23 --- EXHIBIT NO. CMMG-9: CMMG IR-2-8 from last year  
24

25 MR. RAYMOND OAKES: And the last CMMG

1 number 10 being the CMMG-2-9.

2

3 --- EXHIBIT NO. CMMG-10: CMMG IR-2-9 from last year

4

5 CROSS-EXAMINATION BY MR. RAYMOND OAKES:

6 MR. RAYMOND OAKES: So, Mr. Ward, your

7 title is Vice-president business development and

8 communications and chief product officer. And I'm

9 impressed by the length and breadth of that title.

10 But I'm more impressed by the length and breadth of

11 your responsibilities with the Corporation which --

12 and I'll probably not remember all of them, but they

13 included both product development in four line -- or

14 all of the lines of the Corporation's insurance

15 business.

16 They include communications with

17 government and within the Corporation. They include

18 handling DDVL concerns which, of course, you ran for a

19 number of years.

20 Can you tell us what percentage of the

21 time that you would spend relative to road safety?

22

23 (BRIEF PAUSE)

24

25 MR. WARD KEITH: That's a difficult

1 question. But, I mean, at the current time, with  
2 respect to both loss prevention and road safety, I  
3 would say it accounts for perhaps 20 or 30 percent of  
4 my -- of my -- my focus.

5 MR. RAYMOND OAKES: And thank you for  
6 that, sir. And there's -- certainly I hope there's  
7 going to be a number of difficult questions in the  
8 balance of the afternoon.

9 And when you're not here educating and  
10 edifying and assisting this Board in -- in this GRA  
11 you have other staff as well that would concentrate  
12 solely on road safety.

13 Would that be correct, sir?

14 MR. WARD KEITH: Yes, that's right.

15 MR. RAYMOND OAKES: And can you detail  
16 who you would have in terms of their positions, how  
17 many people?

18 MR. WARD KEITH: So we have a road  
19 safety programming department that is led by a  
20 director of our loss prevention work. And then there  
21 is a manager of road safety programming. And then  
22 there are a number of business analysts that make up  
23 the road safety department. These are the folks who  
24 are responsible for doing the majority of our priority  
25 setting, of our research, of our program development,

1 and -- and then -- and, as well, our program  
2 evaluation work.

3                   And then we also have a community  
4 relations department. And there are staff within the  
5 community relations department that are actually  
6 responsible for delivering our road safety programming  
7 as identified, as created, and as defined and launched  
8 by the road safety programming folks.

9                   MR. RAYMOND OAKES:    Would you also  
10 have persons whose role with the road safety  
11 department is that of researcher?

12                   MR. WARD KEITH:    Yes, not just within  
13 the road safety department. We do have a customer  
14 research department as well as a data analytics  
15 department. And information from those sources is  
16 also leveraged in the creation of the -- of the road  
17 safety plans.

18                   MR. RAYMOND OAKES:    Okay. But how  
19 about specifically researching for road sas -- road  
20 safety data and initiatives?

21                   MR. WARD KEITH:    That's the  
22 responsibility of the business analyst within the road  
23 safety programming department.

24                   MR. RAYMOND OAKES:    Thank you for  
25 that. If we can take a peak at CMMG Exhibit number

1 10, and last year we'd asked the Corporation to  
2 compare the budgeted amounts for wildlife collision  
3 initiatives with seatbelt and distracted driving  
4 safety initiatives by comparing the budgeted amounts  
5 for each of these road safety concerns with the  
6 estimated losses.

7                   The Corporation responded that that was  
8 not possible at that time. The Corporation had  
9 tentative plans in 2016/'17 for a costing study that  
10 may be used for, or in the future for estimating the  
11 losses attributed to distracted driving.

12                   Where are we at with respect to being  
13 able to answer that question, and the budgeted amounts  
14 for those initiatives?

15

16                   (BRIEF PAUSE)

17

18                   MR. WARD KEITH: I wanted to appear  
19 intelligent and give you an IR number but I can't find  
20 it. We had addressed this in one (1) of the  
21 Information Requests. The work on the distracted  
22 driving costing analysis is nearing completion, and we  
23 expect to have that completed before the end of this  
24 year.

25                   MR. RAYMOND OAKES: Would you be able

1 to advise me what the Corporation is spending on  
2 seatbelt initiatives at this time?

3 MR. WARD KEITH: I would have to take  
4 that subject to check as an undertaking

5 MR. RAYMOND OAKES: If you could  
6 advise by way of undertaking. Would you anticipate  
7 you could do that this week, sir?

8 MR. WARD KEITH: Yes. I believe the  
9 information is actually in the Application, and we  
10 just have to pull it out.

11 MR. RAYMOND OAKES: Okay.

12

13 --- UNDERTAKING NO. 28: MPI to advise what they  
14 are spending on seatbelt  
15 initiatives at this time.

16

17 CONTINUED BY MR. RAYMOND OAKES:

18 MR. RAYMOND OAKES: And I -- I wish to  
19 be fair with you. I think that your testimony in these  
20 last two (2) days has been very informative, very  
21 excellent and well reasoned, and fair.

22 But can you understand that our clients  
23 have been extremely frustrated with the fact that over  
24 the past three (3) years we've asked about information  
25 and initiatives, and we've been met with the response

1 of the Corporation that it is busy assembling the road  
2 safety committee. It's busy creating a loss  
3 prevention framework. And that it seems that things  
4 have been at a standstill for three (3) years.

5                   Would you comment on that?

6                   MR. WARD KEITH: Well, I wouldn't  
7 agree with that and I would be very surprised -- I am  
8 very surprised to hear that is the position of your  
9 clients. The members of the Canadian -- the Coalition  
10 of Manitoba Motorcycle Groups are actively involved in  
11 our road safety work, are active participants on the  
12 external committee for loss prevention that I spoke  
13 of, and we have regular meetings to talk about issues  
14 of concern effecting motorcyclists and the motorcycle  
15 community.

16                   I have myself personally attended  
17 rallies and meetings of the CMMG to speak directly to  
18 their membership with the support of the current  
19 president and the current director of member services.  
20 So I -- I would not support the characterization that  
21 you've just provided.

22                   MR. RAYMOND OAKES: Well, let's talk  
23 about the characterization because I wasn't speaking  
24 about the collaborative communication efforts that you  
25 spoke of.

1                   I was talking about the fact that the  
2 Corpor -- Corporation hasn't by itself developed new  
3 initiatives for motorcycle safety, nor has it, as  
4 indicated by the response to Exhibit 10, been up to  
5 date -- been up until this time to provide information  
6 relative to its initiatives and budgets.

7                   MR. WARD KEITH:   Well, the one piece  
8 outstanding from your exhibit was the costing study on  
9 distracted driving, which has been a considerable  
10 piece of work because of the nature of distracted  
11 driving and the extent to which one could incorporate  
12 the -- the -- depending on how narrow or how broadly  
13 you want to define distracted driving.

14                   And what I mean by that is, Do you want  
15 to stick to the legislation which makes it an offence  
16 to be talking on the phone or texting while driving,  
17 or do you want to look more broadly at the overall  
18 matter of distracted driving which would mean  
19 distraction from any number of sources?

20                   That has been the complexity of  
21 developing the costing study for distracted driving.  
22 It has taken time -- time because we want to do it  
23 right, and we want to make it an accurate, useful  
24 piece of information for planning purposes.

25                   Anything else that is addressed in this

1 particular exhibit, I do not believe that you are --  
2 that -- that this Board or that your clients are  
3 waiting on. And I can speak to a number of motorcycle  
4 safety initiatives that we have been working with the  
5 CMMG on over the last two (2) years.

6 MR. RAYMOND OAKES: All right. If --  
7 Diana, if I could ask you to throw up on the screen  
8 the Loss Prevention-D, the Loss Prevention attachment.

9

10 (BRIEF PAUSE)

11

12 MR. RAYMOND OAKES: And, Mr. Keith,  
13 this is one (1) demonstration of the Corporation in  
14 terms of its financial breakdown by program area. And  
15 the road safety planning talks about a number of  
16 things in number 4, but nowhere on the page do I see  
17 any reference to motorcycle initiatives.

18 Would you agree with me?

19 MR. WARD KEITH: Just one (1) second,  
20 please.

21

22 (BRIEF PAUSE)

23

24 MR. WARD KEITH: Diana, could you  
25 scroll up to the next page? Thank you. Thank you.

1 (BRIEF PAUSE)

2

3 MR. WARD KEITH: Yes. In this  
4 particular chart, there is no specific reference to  
5 motorcycle safety initiatives.

6 MR. RAYMOND OAKES: And if we can look  
7 at the actual funding, if we can look at CME -- CMMG  
8 Exhibit number 9. And just while those numbers are up  
9 on the screen in terms of budgets and actual spending  
10 on motorcycle-specific initiatives, I think the record  
11 shows that the road safety budget for the application  
12 year is \$13.2 million.

13 Is that correct, sir?

14 MR. WARD KEITH: Yes.

15 MR. RAYMOND OAKES: And it's  
16 forecasted that, for the following year, it would go  
17 up by about nine hundred thousand dollars (\$900,000)  
18 to 14.1 million.

19 Is that correct, sir?

20 MR. WARD KEITH: Yes.

21 MR. RAYMOND OAKES: And when we look  
22 at this table, we see that, in the last year reported  
23 -- and of course, this could be updated -- but we're  
24 showing that the actual spent was a -- what I would  
25 say would be a relatively paltry sum of a hundred and

1 fifty-one thousand one hundred and seventy-nine  
2 dollars (\$151,179).

3 Is that correct, sir?

4 MR. WARD KEITH: I would agree with  
5 the actual amount that you've stated.

6 MR. CHRISTIAN MONNIN: Thank you.

7 MR. WARD KEITH: Perhaps not the  
8 characterization.

9 MR. CHRISTIAN MONNIN: All right. And  
10 from looking at the table, you'll see that from  
11 2013/'14 on, the Corporation spent less than budgeted  
12 on motorcycle-specific initiatives.

13

14 (BRIEF PAUSE)

15

16 MR. WARD KEITH: Yes. The numbers are  
17 stated in last year's Information Request.

18 MR. RAYMOND OAKES: All right. So do  
19 you have anything that I can offer to my constituents  
20 by way of some comfort that, as the road safety budget  
21 increases by the sums that we talked about, that some  
22 significant monies are going to be spent to address  
23 motorcycle-specific initiatives?

24 MR. WARD KEITH: So our position on  
25 this has always been clear, Mr. Oakes, and that is

1 that, with motorcycle safety in particular, it is  
2 possible to pull out specific expenditures related  
3 directly to motorcycle safety.

4                   So, for example, the awareness  
5 campaigns that we do in the spring of each year  
6 specifically to raise awareness amongst motorists that  
7 motorcycles are back on the road, and that they need  
8 to be cared for.

9                   The specific funding that we provide to  
10 Safety Services Manitoba to provide a subsidy or  
11 rebate to those folks, new motorcycle owners who take  
12 the mandatory motorcycle training as a condition of  
13 getting their motorcycle licence, so we continue to  
14 provide that subsidy.

15                   And as was explained in one (1) of the  
16 -- in the application this year, in the loss  
17 prevention submission, we have recently made changes  
18 to the allocation formula, the rebate formula, to in -  
19 - in direct response actually to feedback from your  
20 clients to make sure that more people who complete  
21 that twenty-one (21) hour training course qualify for  
22 the subsidy provided by MPI.

23                   So those numbers aren't reflected in  
24 thi -- this Information Request from last year. Those  
25 are the specific costs that we have attributed to

1 motorcycle safety. Our position has always been  
2 though that, if you want to really understand the true  
3 cost of road safety as it pertains to motorcyclists,  
4 you can't look exclusively at that.

5           You have to look at the money that is  
6 invested in road safety awareness and advertising  
7 campaigns. You have to look at the money that's  
8 invested in road safety programming. And you have to  
9 look at the money that's invested in enhanced  
10 enforcement.

11           Why? Because motorcyclists, like any  
12 other drivers, are at risk to being involved in  
13 collisions as a result of contributing factors,  
14 whether that be impaired driving, speed, non-use of --  
15 of safety equipment or helmets in the case of  
16 motorcyclists versus seatbelts, as well as distracted  
17 riding.

18           Additionally, motorcyclists, because  
19 they are vulnerable, are at greater risk to be injured  
20 or fatally injured if they're involved in a collision  
21 and, therefore, the driving behaviour of motorists  
22 also is directly relevant to the safety of  
23 motorcyclists.

24           So the messaging to motorists around  
25 the dangers of impaired driving, distracted driving,

1 speed are very important from a motorcycle safety  
2 perspective. So our view has always been and remains  
3 this year that you can't look at the spending  
4 specifically on motorcycle safety in isolation of the  
5 totality of our programming which is intended to keep  
6 motorcyclists safe on the roads just like all other  
7 road users.

8 MR. RAYMOND OAKES: I suspect, like My  
9 Learned Friends had indicated, I'll be reviewing about  
10 five (5) page of testimony and dissecting the answer.  
11 But I can assure you that we will speak both about the  
12 two (2) initiatives that you detailed in that lengthy  
13 answer.

14 The first was the billboard or  
15 awareness program, and the second was the driver  
16 training and the rebate structure for dealing with  
17 that. I'll have questions for you on that.

18 And you'll agree with me that with  
19 respect to general initiatives, certainly the money  
20 that the Corporation spends on seatbelts has no  
21 applicability to motorcycles.

22 Would you agree with that narrow  
23 statement, sir?

24 MR. WARD KEITH: Yes.

25 MR. RAYMOND OAKES: And that sum,

1 although you're not able to right now give us the  
2 specific amount, it makes these numbers in terms of  
3 one hundred and fifty-one thousand dollars (\$151,000)  
4 pale in comparison, doesn't it, sir?

5 MR. WARD KEITH: I -- I can't answer  
6 that until I get the numbers.

7 MR. RAYMOND OAKES: You don't have a  
8 rough idea with your responsibilities as to what the  
9 Corporation spends on seatbelt?

10 MR. WARD KEITH: I'd prefer to  
11 complete the undertaking so you have the actual  
12 numbers for your consideration.

13 MR. RAYMOND OAKES: That's fair. Just  
14 looking at the CMMG IR-1-2 and some of the experience  
15 of -- of claims with respect to motorcycles. There's  
16 approximately -- and the number varies a little bit,  
17 but the grand total, looking at the bottom, you'll see  
18 that on average there's about a hundred and eighty  
19 (180) accidents.

20 Would you confirm that for me, sir?

21 MR. WARD KEITH: Yes. Based on this -  
22 - this attachment? Yes.

23 MR. RAYMOND OAKES: And in some years  
24 there's no serious losses. The Corporation I think  
25 defines those as over half million dollars for a

1 specific loss. And some years there's one (1) or two  
2 (2).

3 Can you confirm that from looking at  
4 the tables here?

5 MR. WARD KEITH: Yes.

6 MR. RAYMOND OAKES: Okay. And I asked  
7 the Corporation whether it couldn't put an emphasis on  
8 motorcycle safety with the goal of reducing even a  
9 dozen accidents a year, which would have a huge effect  
10 on the total claims of the class.

11 Could you respond to that?

12 MR. WARD KEITH: Well, my response  
13 would be that as with all of our road safety programs  
14 we remain open to considering new initiatives that may  
15 help to reduce collisions, claims, and claims costs.  
16 And -- and this is the purpose of creating this  
17 external committee on stakeholder loss prevention of  
18 which your members are a part.

19 MR. RAYMOND OAKES: I'm not sure that  
20 was responsive to the question. I'm going to move  
21 onto another question.

22 Would you agree, as a principle, that  
23 it makes sense for the Corporation to invest more for  
24 vulnerable road users than it does on a percentage  
25 basis for non-vulnerable road user units?

1

(BRIEF PAUSE)

2

3

MR. WARD KEITH: I'm struggling only because I'm not sure that I can make that statement on behalf of the Corporation. I think that when we look at the factors that we use in order to establish our priorities that human toll absolutely is one (1) of the indicators that we use, which is -- which vulnerable road users are most vulnerable to, but there are other aspects that we have to consider as well.

12

MR. RAYMOND OAKES: Is it a consideration, though, that if we have a accident involving a large suburban and a motorcyclist, or a large truck or bus and a motorcyclist, that the responsibility for that accident, if it's determined to be that of the larger vehicle, means that there's a concomitant responsibility of those insured units to contribute more to pro -- to prevent these accidents that result in damage to the vulnerable motorcyclists in that example?

22

23

(BRIEF PAUSE)

24

25

MR. WARD KEITH: In your response, I

1 was just speaking to Mr. Johnston and I think that our  
2 response here would be in relation to the decisions  
3 that have been made by this Board in the past with  
4 respect to the loss transfer provisions that speak to,  
5 I think what you were getting at.

6                   When it comes to actual funding for  
7 road safety initiatives, we do not, at this point, nor  
8 do we intend to, quite frankly, start to attribute  
9 loss prevention programming costs to specific road  
10 user groups.

11                   MR. RAYMOND OAKES:    Can you explain  
12 that last part, because I think you do already?

13

14   (BRIEF PAUSE)

15

16                   MR. WARD KEITH:    No, I don't think we  
17 do, Mr. Oakes. I was referring to costs stemming from  
18 these collisions versus the fun -- how we attribute  
19 funding to the various user groups and the various  
20 road safety issues.

21                   MR. RAYMOND OAKES:    So we're not  
22 cross-examining yet on the issue of wildlife  
23 collisions but has it been accepted in these hearings  
24 that that's about a \$30 million problem for the  
25 Corporation, and you're telling me the fact that you

1 have \$30 million of carnage on the highways attributed  
2 to wildlife collisions doesn't influence how much you  
3 spend on initiatives for reducing wildlife commissions  
4 -- collisions?

5 MR. WARD KEITH: No, I'm not saying  
6 that. What I'm saying is that we do not attribute --  
7 we do not attribute our road safety spending  
8 specifically to the road user groups. So in other  
9 words, we look at the totality of the collision costs  
10 as they relate to wildlife.

11 That is one of the elements that is  
12 used in our priority setting process and our program  
13 development process, but we do not look at the  
14 wildlife costs that were created by commercial  
15 vehicles versus the wildlife costs that were created  
16 by motorcyclists versus the wildlife costs that were  
17 created by passenger vehicles. That's the distinction  
18 I was trying to make.

19 MR. RAYMOND OAKES: I see, sir, but  
20 would you agree with me that those other users have a  
21 responsibility in terms that relates to road safety  
22 and the expenditures?

23 MR. WARD KEITH: "Those other users"  
24 meaning users beyond motorcyclists involved in  
25 wildlife collisions?

1                   MR. RAYMOND OAKES:   Those users that  
2 are causing the actual damage by virtue of their size  
3 and presence on the roadways.

4                   MR. WARD KEITH:   Well, if you can draw  
5 that correlation to the size and their presence on the  
6 roadway.  What we do instead is we look at the causal  
7 factors related to collisions, and those crossroad  
8 user groups.

9                   MR. RAYMOND OAKES:   All right.  Just  
10 in terms of causation, there was a fact that's been  
11 well established in the decades of this hearing, and  
12 of course you've been around a long time, as have I,  
13 and that is that two-thirds of multi-vehicle accidents  
14 involving motorcyclists are the fault of other  
15 vehicles.  Are you familiar with that fact, sir?

16                  MR. WARD KEITH:   Yes.

17                  MR. RAYMOND OAKES:   And that was  
18 really the basis that this Board implemented the loss  
19 transfer system designed by the Corporation, which was  
20 a comparative fault system.

21                           Do you understand that, sir?

22                  MR. WARD KEITH:   I do.  For loss  
23 transfer purposes, yes, but that same statistics is  
24 exactly where I was going with my testimony just a few  
25 minutes ago in terms of the -- the relevance of our

1 road safety efforts, our road safety programs, and our  
2 road safety messaging related to all road user groups,  
3 not just motorcyclists.

4                   So every time we make an attempt to  
5 alter or influence driver behaviour as it results to -  
6 - as it relates to distracted driving for example that  
7 does, if it is effective, have a positive impact on  
8 the motorcycling community.

9                   MR. RAYMOND OAKES:   Diana, I wonder if  
10 you could throw up loss prevention at page 61.

11

12   (BRIEF PAUSE)

13

14                   MR. RAYMOND OAKES:   That -- that's  
15 fine there, Diana. Thank you. Why would motorcyclist  
16 safety not make it into the top three behavioural  
17 change priorities of the Corporation?

18

19   (BRIEF PAUSE)

20

21                   MR. WARD KEITH:   I can't speak  
22 specifically to the results of the priority setting  
23 process or the ranking that was used based on the  
24 factors that I spoke about yesterday that go into our  
25 priority setting process, but I do believe that as

1 part of our filing one of the appendices in the third  
2 volume, AI.13, I believe, does provide you with the  
3 priority setting report that will provide you with  
4 those details. I can provide you with the exact  
5 reference if you'd like. I just would have to find  
6 it.

7 MR. RAYMOND OAKES: Now, we talked --  
8 you had a lengthy answer, and one (1) of the matters  
9 you spoke about previously was driver training.

10 Do you recall that exchange, sir?

11 MR. WARD KEITH: Yes.

12 MR. RAYMOND OAKES: And you spoke  
13 about the Gearing Up Program, which is a twenty-one  
14 (21) hour course for novices.

15 Is that correct, sir?

16 MR. WARD KEITH: That's right.

17 MR. RAYMOND OAKES: And, Diana, I  
18 wonder if you could throw up CMMG-2-9.

19

20 (BRIEF PAUSE)

21

22 MR. RAYMOND OAKES: And as opposed to  
23 novices, the Corporation has been studying mature  
24 drivers. And the CMMG asked about options for mature  
25 riders, those needing a refresher course in operating

1 a motorcycle, and asked about incentives for that.

2 And the answer of the Corporation is  
3 that it's not indi -- not interested in providing a  
4 rebate structure for that program.

5 Is that accurate, sir?

6 MR. WARD KEITH: We have no plans on  
7 doing that, that's right, Mr. Oakes.

8 MR. RAYMOND OAKES: And the -- yet the  
9 Corporation sees certainly mature drivers as an  
10 important issue to concentrate its resources on and to  
11 offer solutions for. You spoke about that at length  
12 yesterday, mature car drivers.

13 MR. WARD KEITH: Yes.

14 MR. RAYMOND OAKES: Okay. And the  
15 Corporation sees the value in people taking up driver  
16 improvement courses?

17 MR. WARD KEITH: Well, people have no  
18 choice but to take driver improvement courses that are  
19 administered by the Corporation.

20 MR. RAYMOND OAKES: Well, how about  
21 those that are administrated by the Canada Safety  
22 Council? Does the Corporation believe those are of  
23 value in reducing claims costs?

24 MR. WARD KEITH: I couldn't answer in  
25 generalities. I'm not sure what course you're

1 referring to.

2 MR. RAYMOND OAKES: Well, let's go  
3 back to the beginning. Let's talk about the Gearing  
4 Up Program. Does the Corporation see value in that  
5 program?

6 MR. WARD KEITH: We do.

7 MR. RAYMOND OAKES: Next question: Do  
8 you see value in the Experienced Rider Program?

9 MR. WARD KEITH: We do.

10 MR. RAYMOND OAKES: Okay. And would  
11 you agree with me that there'd be more uptake of that  
12 program if there was a rebate structure for that  
13 program?

14 MR. WARD KEITH: Well, I couldn't  
15 speculate on that. I can tell you, though, Mr. Oakes,  
16 that this whole experience in terms of working with  
17 the CMMG to create -- to convince Safety Services  
18 Manitoba to create this program has been somewhat  
19 frustrating for the Corporation.

20 We were approached by your clients to  
21 work with Safety Manit -- Safety Services Manitoba to  
22 have them create this program which, as you have  
23 indicated -- or you may have not, but if you don't  
24 know, is -- is also a Canada Safety Council course.

25 It was intended specifically to address

1 the needs of -- primarily of older motorcyclists, not  
2 mature motorcyclists -- or, in other words, aging  
3 motorcyclists, but people who have not driven for --  
4 ridden for a long period of time and wish to get back  
5 into the motorcycle riding community.

6                   So we worked with Safety Services  
7 Manitoba. They created this program. They introduced  
8 this program. It was supported by the CMMG,  
9 publicized widely, and they have I believe had, in the  
10 three (3) years it's been offered, one (1)  
11 registration for the program.

12                   MR. RAYMOND OAKES: Are you in a  
13 position to comment whether a lack of affordability  
14 perhaps relates to that lack of uptake?

15                   MR. WARD KEITH: I couldn't comment on  
16 that, quite frankly, but I do know that the cost to  
17 take this program was -- was, in our view, reasonable.  
18 And so I -- I could not comment on whether or not the  
19 cost that was put in place by Safety Services was  
20 prohibitive.

21                   And I don't know what drove lack of  
22 participation, and if participation would only come  
23 from the Corporation being prepared to provide rebates  
24 to convince people to go into this program that the  
25 motorcycling community themselves asked for, then I

1 don't know that would get us where we want to be  
2 either.

3 MR. RAYMOND OAKES: The Corporation  
4 indicates it's reviewing and redesigning the rebate  
5 program. Would it consider a rebate program for the  
6 Experienced Rider Program?

7 MR. WARD KEITH: No. As indicated in  
8 our response, we have no plan to review -- consider a  
9 rebate program at this time. We have looked closely  
10 at the rebate program for the gearing up. And, as you  
11 know, this is important, not just to your clients, but  
12 to MPI, as well. The mandatory requirement to qualify  
13 for a motorcycle learner permit is -- in Manitoba is a  
14 training requirement of eight hours.

15 In our view, that's not sufficient and  
16 is just enough information to make -- to make  
17 motorcycling dangerous, quite frankly. And so we have  
18 for many years supported the twenty-one (21) hour  
19 motorcycle course which is not mandatory. It is an  
20 optional upgrade to the eight hour program offered by  
21 Safety Services.

22 And we did receive some concerns from  
23 your clients that, because people who took the twenty-  
24 one (21) hour program were unable to actually pass the  
25 end-of-course test associated with that program, that

1 they didn't qualify for the rebate. And that was a  
2 concern, from your client's perspective.

3 We looked at it. And we made the  
4 decision that, providing that the course is completed  
5 and all twenty-one (21) hours are -- are endured, that  
6 -- that we would provide the rebate regardless of the  
7 outcome of the test. So that change was introduced  
8 this -- this past riding season.

9 MR. RAYMOND OAKES: Thank you for  
10 that, sir. Mr. Chairman, you asked me to keep a watch  
11 on the time. And it appears that this would be a  
12 convenient time to break.

13 THE CHAIRPERSON: Okay, we'll break  
14 for fifteen (15) minutes. Thank you.

15

16 --- Upon recessing at 2:33 p.m.

17 --- Upon resuming at 2:55 p.m.

18

19 THE CHAIRPERSON: Mr. Oakes...?

20 MR. MATT GHIKAS: Just before Mr.  
21 Oakes jumps in I can just deal with undertakings for  
22 the moment. Just a status update then to let  
23 everybody know that we have a number of undertakings  
24 that are very close to being finalized. And we  
25 anticipated that we would file a number of them

1 tonight electronically after the hearing.

2                   And we've also managed to take care of  
3 one of Mr. Oakes's over the break. And Mr. Keith can  
4 speak to that. It deals the spending on the -- on the  
5 seatbelts.

6                   THE CHAIRPERSON: Thank you.

7                   MR. WARD KEITH: So in relation to the  
8 undertaking on spending anticipated for seatbelt  
9 safety or occupant restraint which is broadly focussed  
10 on seatbelts as well as child car seat use, in  
11 Appendix 10 of Volume 2 under the expects -- under the  
12 'expenses' section, we do indicate that for the rating  
13 year we are projecting to spend \$137,000 specifically  
14 on occupant safety education strategies, which  
15 includes programming as well as advertising and  
16 promotion.

17                   So that 137. is comparable or in fact  
18 less than we would envision to spend on motorcycle  
19 safety specific training for the rating year.

20                   Also, in relation to that point, last  
21 year there was a response provided, CMMG-1-5, in  
22 relation to your question earlier, Mr. Oakes, about  
23 the proportion of spending on motorcycle safety  
24 specific education versus the road safety funding in  
25 general.

1                   And we responded last year. These  
2 numbers will change slightly. But we responded last  
3 year that, on a per-vehicle basis, total spending on  
4 all road safety programming is forecast -- forecasted  
5 at \$10.43 per vehicle compared to \$13.29 per  
6 motorcycle on motorspi -- motorcycle specific  
7 initiatives.

8                   So those numbers will change based on  
9 the rates this year and the spending this year, but we  
10 would not expect the proportion to change.

11

12 CONTINUED BY MR. RAYMOND OAKES:

13                   MR. RAYMOND OAKES: So just on that  
14 point, Mr. Keith, you would now agree with me that the  
15 Corporation believes that there should be more  
16 spending on vulnerable road users than on non-  
17 vulnerable road users on a per unit basis?

18                   MR. WARD KEITH: What I provided was  
19 the -- was the actual spending for the 2016/'17 year.

20                   MR. RAYMOND OAKES: If I could ask you  
21 to be more responsive to the question.

22                   Is this an indication that the  
23 Corporation believes that you should be spending more  
24 on vulnerable road users than non-vulnerable road  
25 users on a per unit basis.

1                   MR. WARD KEITH:    You know, honestly I  
2 can't answer that question in specific terms.  What I  
3 was responding to is specifically the question around  
4 motorcycle safety spending in proportion to all other  
5 road safety spending.

6                   It -- just to follow on, I mean, we  
7 talked yesterday about funding for road safety  
8 initiatives and how we really do need to work from the  
9 ground up, that we rely on the frameworks, that the  
10 priority setting processes -- process tells us what  
11 the priorities ought to be, and then the program  
12 development processes tell us what programming we can  
13 implement to address those priorities.  And the  
14 funding, quite frankly, will follow.

15                   And that would be my response to your  
16 particular question.

17                   MR. RAYMOND OAKES:    As indicated, Mr.  
18 Chairman, I'm going to move to the area of wildlife  
19 collisions.  And if I could ask Diana to put up  
20 Exhibit 8 from CMMG.

21                   And, Mr. Keith, you'll note that the  
22 table shows that for the seven (7) years, 2005 to  
23 2012, five (5) people died in Manitoba as a result of  
24 wildlife collisions?

25                   MR. WARD KEITH:    Yes.

1                   MR. RAYMOND OAKES:   And with respect  
2 to the families of those persons, you would expect  
3 that they would anticipate that there would be  
4 considerable human toll associated with that and  
5 corresponding social costs as well?

6                   MR. WARD KEITH:    As with all  
7 fatalities.

8                   MR. RAYMOND OAKES:    If I could just  
9 refer you to your -- to CMMG 1-5.

10

11                                   (BRIEF PAUSE)

12

13                   MR. RAYMOND OAKES:    And the -- the  
14 second paragraph of that response the Corporation  
15 says:

16                                    "In addition, with respect to  
17 wildlife collisions specifically,  
18 the use of social costs is most  
19 relevant when addressing the impacts  
20 of serious injuries and fatalities.  
21 The incidents of which are very low  
22 in wildlife collisions resulting in  
23 marginal material difference to the  
24 analysis."

25                   You'll agree with me that those five

1 (5) families wouldn't characterize it as a marginal  
2 material difference, that they would say there was a  
3 significant social cost?

4 MR. WARD KEITH: Well, if I'd lost a  
5 family member as a result of a wildlife collision, I  
6 would feel that way. That was not the intent of the  
7 response to this question though.

8 MR. RAYMOND OAKES: Okay. With  
9 respect to the following IR, CCMG 1-6...

10

11 (BRIEF PAUSE)

12

13 MR. RAYMOND OAKES: Oh, I'm sorry,  
14 this is -- this one was last year. And I appreciate  
15 you don't have it in front of you, but I asked a  
16 question about the budgeted amounts for 2016 for  
17 wildlife collision reduction initiatives and the  
18 response, which Diana was good enough to put before  
19 us, is that the budget for wildlife collision  
20 reduction initiatives was sixty-three thousand two  
21 hundred and fifty dollar -- two hundred and fifteen  
22 dollars (\$63,215).

23 Do you see that, sir?

24 MR. WARD KEITH: Yes.

25 MR. RAYMOND OAKES: And I don't want

1 to get back to the question of whether sixty-three  
2 thousand and two hundred and fifteen dollars (\$63,215)  
3 is a paltry sum or not, you didn't agree that the  
4 hundred and fifty thousand (150,000) that you're  
5 spending on motorcycle safety initiative was paltry,  
6 but doesn't it seem very strange to you that the  
7 Corporation is only spending sixty-three thousand  
8 dollars (\$63,000) out of a budget of 13.2 million for  
9 a problem that's costing the Corporation \$30 million a  
10 year?

11 MR. WARD KEITH: It doesn't seem  
12 strange to me when we factor in the operational stra -  
13 - strategies and the fact that as part of our  
14 framework we look not just at the priorities, but at  
15 the programming that could reasonably be implemented  
16 to address those priorities.

17 So our focus primarily when it comes to  
18 wildlife collision as was addressed in the Information  
19 Request, is on raising awareness about the dangers of  
20 travelling through high collision wildlife zones,  
21 particularly during the key wildlife collision months  
22 of October and November of each year.

23 MR. RAYMOND OAKES: So in terms of  
24 initiative, the Corporation is pretty much just buying  
25 some billboards.

1 MR. WARD KEITH: I'm sorry?

2 MR. RAYMOND OAKES: I said in terms of  
3 initiative, the Corporation is pretty much just buying  
4 some billboards.

5 MR. WARD KEITH: No, actually we don't  
6 -- we don't use billboards for wildlife collision  
7 reduction because the research and best practice would  
8 say that when you put up billboards of that nature in  
9 a -- in a permanent or even semi-permanent way that  
10 drivers tend to normalize the information, and it  
11 becomes completely irrelevant and unusable, and noise  
12 for the drivers.

13 So our strategy, as has been discussed,  
14 is to use variable message boards which we put up on a  
15 temporary basis which we relocate around the province  
16 to focus on high risk collision corridors based on the  
17 claim's data that we have.

18 MR. RAYMOND OAKES: I'm sorry, sir, I  
19 misspoke. Instead of saying the Corporation only buys  
20 billboards, it rents some flashing mobile signs.

21 MR. WARD KEITH: Yes. And applies  
22 them strategically where we know that the collision  
23 hot spots are within the Province, yes.

24 MR. RAYMOND OAKES: All right. Diana,  
25 if I could ask you to put up page 135 of the wildlife

1 collision study that's CMMG Exhibit number 7.

2

3

(BRIEF PAUSE)

4

5 MR. RAYMOND OAKES: And I think you'll  
6 have to scroll down for me. Direct benefits. So at  
7 this -- are you -- you've read this report, I assume,  
8 sir? It's been an exhibit in the last two GRAs.

9 MR. WARD KEITH: Yes. We have read  
10 this report, and it has been used in our wildlife  
11 collision research. For your information, Mr. Oakes,  
12 there is another version of this report which is a  
13 2009 publication from the same author -- authors  
14 titled 'Cost Benefit Analyses of Mitigation Measures  
15 Aimed at Reducing Collisions and Large Ungulates in  
16 the United States and Canada, a Decision Support  
17 Tool'. And that follows on from this, so they really  
18 should be read together.

19 MR. RAYMOND OAKES: All right. But  
20 just while we have this page here, it says in the  
21 second sentence:

22 "Wildlife fencing may reduce the  
23 number of wildlife vehicle  
24 collisions 80 to 99 percent."

25 Do you see that, sir?

1 MR. WARD KEITH: I do.

2 MR. RAYMOND OAKES: And CMMG-1-8...

3

4 (BRIEF PAUSE)

5

6 MR. RAYMOND OAKES: And in response to  
7 the question:

8 "The Corporation agrees that it is  
9 possible to achieve the 86 to 95  
10 percent reduction rate referenced in  
11 the literature at the geographic  
12 sites where the fencing is  
13 installed."

14 Do you see -- see that, sir?

15 MR. WARD KEITH: I see that sentence,  
16 yes.

17 MR. RAYMOND OAKES: And despite these  
18 -- these facts indicating that you can get -- whether  
19 you use 95 percent of the high end or 99 at the high -  
20 - at the high end, the Corporation still has no  
21 interest at all in -- in providing any wildlife  
22 fencing initiatives?

23 MR. WARD KEITH: Yes, but for the  
24 reasons that are further articulated in the rest of  
25 that response.

1 MR. RAYMOND OAKES: Okay.

2 MR. WARD KEITH: I'd be happy to  
3 discuss those in more detail.

4 MR. RAYMOND OAKES: I'm certain that  
5 we will. Diana, if you could go back to the wildlife  
6 collision study at page 137.

7

8 (BRIEF PAUSE)

9

10 MR. RAYMOND OAKES: And you'll see,  
11 sir, under 'cost' it indicates that -- and it gives  
12 the name of the researcher, S-I-E-L-E-C-K-I:

13 "...compared the benefits to cost of  
14 fencing over different times spans,  
15 twenty (20) to thirty (30) years,  
16 and -- given different levels of  
17 potential damage prevented. He  
18 determined that the benefits of the  
19 wildlife fencing outweighed  
20 potential costs in 12 of 16 cases."

21 Do you see that, sir?

22 MR. WARD KEITH: I do.

23 MR. RAYMOND OAKES: Is the Corporation  
24 saying that in Manitoba they are certain that they  
25 would fall into that bottom quarter where the benefits

1 would outweigh potential costs?

2 MR. WARD KEITH: No, Mr. Oakes, that's  
3 not our position and -- but I do think that when we  
4 talk about fencing we need to talk more holistically  
5 in terms of the entire context.

6 So with respect to this -- this  
7 analysis, there is no question that, where wildlife  
8 fencing is used, that it reduces wildlife collisions.  
9 And that makes sense in terms of wildlife fencing  
10 being used to prevent wildlife from coming onto the  
11 highway.

12 A challenge that we have within  
13 Manitoba's context is -- is multifold. And the first  
14 is that, in Manitoba, while there are a significant  
15 number of wildlife collisions, and while some of those  
16 collisions, as you've indicated, have tragic outcomes,  
17 at the end of the day the collisions that we see in  
18 Manitoba are fairly random.

19 And so they are located all across the  
20 province. And while it is possible -- in fact, we've  
21 just issued a news release in the last couple of weeks  
22 as part of our awareness strategy -- there are hot  
23 spots in the province where we see larger  
24 concentrations of wildlife activity, and therefore the  
25 potential for -- for collisions on roadways.

1                   But on an overall basis, the cost of  
2 wildlife collisions is very spread out across the  
3 province. And so when you look at an -- an  
4 alternative like fencing, as has been done in some  
5 other jurisdictions, most recently in Saskatchewan for  
6 a period of -- a period -- a portion of the highway  
7 where they chose to fence it off, the -- the  
8 effectiveness is only as effective, quite frankly, as  
9 the length of the fencing.

10                   And it's only as effective as you can  
11 make the fencing without cutouts and opening in the  
12 fencing. So in Manitoba's environment, for example,  
13 you could create fencing if there was support from the  
14 stakeholders to do so from infrastructure. But every  
15 time you create a cutout for a roadway or some other  
16 form of path, then that gives an avenue for the  
17 wildlife to get back on the roadway.

18                   What we also see is that, if the --  
19 depending on the length of the -- of the fencing, you  
20 tend to congregate now the concentration of wildlife  
21 at each of the ends of that fencing. And so  
22 potentially the cost savings that you incur on the  
23 corridor that is fenced you will lose or be mitigated  
24 by the increase in collisions that occur at each end  
25 of the fencing.

1           Also, there are environmental factors  
2 which I believe are addressed in this report,  
3 environmental factors that relate to disturbing the  
4 natural movement of wildlife. And that kind of ties  
5 to our discussion yesterday around the broader social  
6 implications that -- that form part of this -- of this  
7 issue.

8           And lastly, there's the -- the cost  
9 involved in creating these fences and the cost of  
10 maintaining them, particularly in our environment here  
11 in Manitoba.

12           So, you know, at the end of the day,  
13 while it is feasible that a portion of fencing will be  
14 effective in reducing wildlife collisions 85 to 96  
15 percent based on this report, or 86 to 95 percent, for  
16 that period of fencing, as they found in Saskatchewan,  
17 because of the extent to which wildlife collisions are  
18 dispersed throughout this province, it would have a  
19 minimal impact on the overall claims experience and  
20 claims expenditures related to wildlife.

21           MR. RAYMOND OAKES:   Mr. Keith, in --  
22 in researching this issue and attempting to come up  
23 with an initiative that might work, did the  
24 Corporation contact the people who were involved in  
25 this report and the sister report that you mentioned?

1                   MR. WARD KEITH:    I could not say  
2 whether or not direct contact was made, although I am  
3 advised that this report and its sister report were  
4 used in the analysis that was conducted by our  
5 researchers.

6                   MR. RAYMOND OAKES:    And the  
7 Corporation is still maintaining that, as indicated in  
8 the response to CMMG-1-6, that a cost recovery of six  
9 (6) to twelve (12) years represents an inferior  
10 investment?

11                  MR. WARD KEITH:    Well, again, I think  
12 it is eight (8) to twelve (12) years, just to clarify.

13                  MR. RAYMOND OAKES:    Thank you for  
14 that.

15                  MR. WARD KEITH:    And I do think that,  
16 you know, we do have to consider the -- the impact of  
17 technology as part of this whole discussion around  
18 wildlife as well. And I appreciate, Mr. Oakes, that  
19 you have been raising this issue for many years on  
20 behalf of your clients.

21                                And when you first started raising this  
22 issue, there was not nearly the technology advances  
23 that we're seeing in vehicles these days.

24                                But we are confident, based on our  
25 research and to vehicle technologies and the whole

1 move towards vehicle automation, that the work being  
2 done by manufacturers of these vehicles will within  
3 eight (8) to twelve (12) years make the incidence of  
4 wildlife collisions much lower than it is today.

5           And they -- it will do that by creating  
6 technology within the vehicles that uses infrared  
7 technology to actually spot and identify wildlife on  
8 the sides of roads that is not easily observable by  
9 the human eye and by the driver, and will  
10 automatically either alert the driver or take evasive  
11 action to prevent a wildlife collision.

12           We've seen some of these automations --  
13 these automated technologies coming forward already in  
14 terms of automated braking system and adaptive cruise  
15 controls, lane departure warning systems, et cetera.

16           There's not been a lot of talk about  
17 these infrared technologies, but they are coming and  
18 they will be very successful in avoiding collisions  
19 with wildlife, and with pedestrians, as well.

20           And so we believe that within the  
21 period of a cost recovery for an expenditure such as  
22 this, that we will see vehicle automation technologies  
23 that will address this problem in a more holistic way.

24           MR. RAYMOND OAKES:   Mr. Keith, you're  
25 pretty knowledgeable about vehicles and the fleet in

1 Manitoba. You'll agree with me that we have one (1)  
2 of the oldest fleets in Canada?

3 MR. WARD KEITH: I don't know that for  
4 a fact. But I do know that we have an aging fleet,  
5 and that the average age of the fleet, I think, is in  
6 the range of seven (7) years, I think.

7 MR. RAYMOND OAKES: All right. And  
8 not many Manitobans today have a vehicle with any of  
9 the systems that you've talked about in that first  
10 paragraph of that response?

11 MR. WARD KEITH: I don't know that I  
12 would agree with that, Mr. Oakes. I think that these  
13 -- these technologies are becoming more and more  
14 mainstream, and that certainly in the majority of 2016  
15 model vehicles and some 2013 model vehicles, you will  
16 see this sort of automated vehicle technology.

17 When I talk about the infrared  
18 technology related specifically to things that don't  
19 look like other vehicles, pedestrians and wildlife,  
20 that that is emerging technology. But based on the  
21 way that some of these emerging vehicle technologies  
22 are becoming mainstream, I don't know that -- I don't  
23 know that we will have to wait eight (8) to twelve  
24 (12) years to see some meaningful reductions.

25 MR. RAYMOND OAKES: Well, you didn't

1 have any information about an aging Manitoba fleet.  
2 Can you provide the facts that you rely on in saying  
3 that Manitobans now have a significant percentage of  
4 vehicles that have forward collision avoidance  
5 systems, night vision, automatic emergency braking  
6 systems?

7                   And if you like, you can take night  
8 vision out of that. But do you have some information  
9 you can put on the record for this hearing as to what  
10 percentage of Manitobans have those in their cars?

11                   MR. WARD KEITH: No, I don't have  
12 that, Mr. Oakes, nor did I say that there was a  
13 significant proportion of the current population that  
14 has this. My -- my evidence was that I believe that  
15 this technology is coming and coming quickly, and is  
16 already on the market and is already in operation in  
17 Manitoba.

18                   And that will continue to grow as these  
19 technologies become more mainstream, as auto  
20 manufacturers build them in as standard versus  
21 optional equipment in their vehicles. And as they do  
22 that, then the price will come down, and -- and we  
23 will see greater penetration within the fleet.

24                   MR. RAYMOND OAKES: And, in the  
25 meantime, the Corporation will buy some flashing

1 billboards?

2 MR. WARD KEITH: In the meantime, we  
3 will continue to look for strategies that are cost-  
4 effective and can make a difference in trying to  
5 effect fewer of these wildlife collisions.

6 But we must, as part of our operational  
7 plans and our road safety investments, focus on  
8 strategies that we think will have a reasonable cost  
9 benefit. And, unfortunately, based on the nature of  
10 wildlife collisions and the randomness of those  
11 collisions in the Province, we don't think that  
12 pouring money into creating wildlife fencing for some  
13 specific corridors within the Province will have a  
14 meaningful difference in terms of addressing this \$30-  
15 some million problem.

16 MR. RAYMOND OAKES: Diana, I wonder if  
17 you could put up page 63 of the loss prevention  
18 materials.

19

20 (BRIEF PAUSE)

21

22 MR. RAYMOND OAKES: The Corporation in  
23 the loss prevention materials is indicating support  
24 for a wildlife collision priority.

25 Would you agree with that statement,

1 sir?

2 MR. WARD KEITH: Yes.

3 MR. RAYMOND OAKES: Okay. If you  
4 could point me to the Corporation's expenditure that  
5 demonstrates that statement that they have -- that  
6 this is a priority?

7 MR. WARD KEITH: Well, I don't have  
8 access at this point to the dollars that are invested  
9 in wildlife mitigation. We could take that as an  
10 undertaking. But we have within the same submission  
11 identified the specific initiatives that we do intend  
12 to pursue with respect to wildlife collision  
13 mitigation.

14 One, as I -- we have talked about is  
15 expanding the use of variable message boards, which --  
16 which are, I think, unfairly being characterized as  
17 simple and meaningless initiatives when in fact the  
18 evidence would tell us that these are in fact very  
19 effective at raising awareness about the wildlife  
20 collision issue for drivers at a time when they most  
21 need that information as they're entering wildlife  
22 collision corridors and at the time of year that they  
23 are most susceptible to come into collision with --  
24 with wildlife.

25 And as well, we have talked about

1 working with our stakeholders in the Department of  
2 Conservation to do more wildlife -- more detailed  
3 wildlife mapping. And what I mean by that is mapping  
4 of the specific locations where wildlife collisions  
5 occur, because our data at this point is somewhat  
6 limited in terms of our ability to create hot spots at  
7 the regional level.

8                   So we can identify, for instance, the  
9 roadways around Birds Hill Provincial Park are a hot  
10 spot for wildlife collisions, for deer collisions.  
11 Probably not a surprise, because of the size of Birds  
12 Hill Park and the concentration of wildlife within  
13 that park.

14                   What we are less certain about at this  
15 point is where exactly on those roadways these  
16 collisions are happening. And so if we -- if we can  
17 get that information we be -- we may be able to sort  
18 of better -- better narrow, better focus our efforts  
19 to raising awareness within those -- with -- at those  
20 locations.

21                   MR. RAYMOND OAKES: Mr. Keith, the  
22 last sentence on the board indicates, these message  
23 boards, in known hot spots across the province. I ask  
24 you, sir, the fact that there's known hot spots across  
25 the province indicates that the experience is not

1 random.

2                   Would you agree with that?

3                   MR. WARD KEITH: No, I wouldn't.

4 Because when we talk about the hot spots across the  
5 province we -- it speaks to the point that I just  
6 tried to make where we are able to identify the  
7 regions of the province where wildlife collisions are  
8 occurring.

9                   We are sometimes often able to identify  
10 the specific highway corridors where wildlife  
11 collisions occur. That's what we mean by the hot  
12 spots. But when I talk about corridors where wildlife  
13 collisions occur, I'm talking about large stretches of  
14 highway where we know there to be wildlife and we know  
15 there to be wildlife interaction with vehicles.

16                   That is what we want to get better at  
17 in terms of more specifically pinpointing where within  
18 those corridors the collisions are happening.

19                   MR. RAYMOND OAKES: Well, we'll look  
20 forward to those initiatives when you have that  
21 information. And at this time I'm going to close my  
22 cross-examination. Thank you.

23                   THE CHAIRPERSON: Thank you, Mr.  
24 Oakes. I'm just going to ask the panel if they have  
25 any questions. Okay.

1 (BRIEF PAUSE)

2

3 MS. KATHLEEN MCCANDLESS: I'm assuming  
4 Ms. Miller has no questions?

5 THE CHAIRPERSON: Sorry, Ms. Miller.  
6 You -- no, okay. Thank you.

7 MS. KATHLEEN MCCANDLESS: Then I  
8 believe that's it for --

9 BOARD MEMBER BOTTING: I have a  
10 question.

11 MS. KATHLEEN MCCANDLESS: Oh, you do  
12 have questions, sorry. I didn't see that.

13 BOARD MEMBER BOTTING: Sorry. Yes, I  
14 have a question for you. You mentioned that the safe  
15 systems approach to road safety is being utilized by  
16 MPI in conjunction with other Provincial partners,  
17 which might include the police or Manitoba  
18 Infrastructure, just to name a couple.

19 And you also mentioned that within its  
20 safe systems approach to road safety, MPI has adopted  
21 Vision Zero as a road safety target of having no  
22 fatalities. Is that correct?

23 MR. WARD KEITH: That's what we are  
24 intending to do in the coming year, yes.

25 BOARD MEMBER BOTTING: Okay. So I

1 guess when we were looking at that, if it's -- you're  
2 in a safe systems approach; have the other partners on  
3 the Provincial road safety committee or the other  
4 external committees adopted this Vision Zero to give  
5 it a pro -- Provincial focus?

6 MR. WARD KEITH: So we have had  
7 preliminary discussions about that at the Provincial  
8 level, and I can tell you that that will be  
9 incorporated in the -- in the road safety action plan  
10 that's currently under development.

11 BOARD MEMBER BOTTING: Okay, because  
12 that was going to be my second question, that if -- in  
13 fact that -- when you're doing the new initiative with  
14 the pedestrians, is that the one you're referring to,  
15 that initiative, or...

16 MR. WARD KEITH: No -- no, sorry. I  
17 meant the Information Request we provided on the  
18 status of the work of the Provincial road safety  
19 committee, that the next deliverable of that committee  
20 is twofold.

21 One is to establish the technical  
22 oversight group that I spoke about yesterday, and once  
23 that technical oversight group is established then for  
24 them to actually create a three year road save --  
25 safety action plan for the Province, and that action

1 plan will encompass the concept of a -- of a Vision  
2 Zero.

3 In other words a target where really  
4 the only time we will truly be satisfied is when  
5 there's no fatalities on the roadways.

6 BOARD MEMBER BOTTING: Okay. And will  
7 that Vision Zero be articulated to all Manitobans so  
8 that it's kind of like a thread running through  
9 everything so that people actually know what the  
10 target is when they're doing road safety, or thinking  
11 about themselves out there on the roads?

12 MR. WARD KEITH: So -- so that would  
13 absolutely be the intent. And what MPI wanted to do,  
14 and intends to do in the coming year as a precursor to  
15 that, is to focus more on this education and awareness  
16 around changing the traffic culture -- traffic safety  
17 culture, and getting that conversation going between  
18 Manitobans about what really -- what really is -- what  
19 really is an okay number for people being killed on  
20 our roadways.

21 And, you know, that's the challenge  
22 with setting targets, right, is that are we really  
23 satisfied that we would see a 20 percent reduction in  
24 fatalities in a year or two years or five years, or --  
25 or is our objective, however aspirational it is, that

1 at the end of the day we would hope to have no  
2 fatalities on our roadways.

3 BOARD MEMBER BOTTING: Okay. So your  
4 goal is to have all Manitobans thinking that way.

5 MR. WARD KEITH: Yes.

6 BOARD MEMBER BOTTING: Okay. Thank  
7 you.

8 BOARD MEMBER NEVILLE: Just a brief  
9 question. What's your timeline for establishing this  
10 plan?

11 MR. WARD KEITH: The road safety  
12 action plan under the Provincial committee?

13 BOARD MEMBER NEVILLE: Yes.

14 MR. WARD KEITH: So -- is that --

15 BOARD MEMBER NEVILLE: Yes.

16 MR. WARD KEITH: So this is the one  
17 that we had envisioned would be completed before the  
18 end of this year, before the end of this calendar  
19 year. We are still aiming to have that complete but  
20 as I mentioned yesterday we did have a bit of a delay  
21 with the change in the Provincial administration only  
22 because up until now the membership of the Provincial  
23 committee has been at the leadership level, so it's  
24 been representatives of MPI and other government  
25 departments.

1                   And so before actually starting to  
2 reach out to other stakeholders such as those  
3 represented by the Intervenors today, we wanted to be  
4 sure that there was still support from the new  
5 government to proceed with the Provincial road safety  
6 committee and development of the plan.

7                   And we received that confirmation a few  
8 weeks ago, and so the work has now resumed. But --  
9 but we would still hope at this point to -- to have  
10 something before the end of the year.

11                   BOARD MEMBER NEVILLE:    When you talk  
12 about road safety culture, is there another  
13 jurisdiction that you could speak to or that you could  
14 refer that has done this, and has it been effective in  
15 making change and reducing costs?

16                   MR. WARD KEITH:       So the jurisdictions  
17 that we've been looking at are Australia and New  
18 Zealand, and Australia and New Zealand have  
19 implemented -- or introduced this concept of creating  
20 a new traffic safety culture. And they've done so  
21 with some pretty interesting and unique public  
22 awareness campaigns that really helped to quantify --  
23 just give you an example, if there are seventy (70)  
24 fatalities in Australia in a year -- I just throw that  
25 number out -- they would go out on the street and they

1 would ask people, You know, what do you think a  
2 reasonable target is?

3                   Like, for successful road safety  
4 programming, what should we get -- like, what -- what  
5 would be a reasonable reduction target? And people  
6 would say, I don't know, 20 percent, 50 percent.

7                   And so then what they did is, Okay, 50  
8 percent of seventy (70) is thirty-five (35). So then  
9 thirty-five (35) of their family and friends would  
10 come around the corner and they would say, This is  
11 what thirty-five (35) Australians look like, and they  
12 happen to be your friends and family. Do you still  
13 think a 50 percent reduction target is good enough?

14                   And so my -- my only point is it -- it  
15 helps to sort of reset people's thinking around road  
16 safety and hopefully be less complacent and -- and  
17 more interested in getting to the true number of zero  
18 fatalities.

19                   BOARD MEMBER NEVILLE: I think I  
20 understand that, but what I want to know is: Have you  
21 seen any concrete results in terms of the reduction of  
22 fatalities and the reduction of costs?

23                   MR. WARD KEITH: Yeah. So not -- not  
24 specifically at this point based on the research that  
25 we've conducted, yeah.

1 BOARD MEMBER NEVILLE: Thank you.

2 THE CHAIRPERSON: I've got a -- a  
3 number of questions, Mr. Keith, as the new kid on the  
4 block trying to understand the -- the industry.

5 This morning, there was a report on the  
6 television that the Insurance Institute came out with  
7 a major study in relation to headlights on trucks in  
8 the United States. And they ran a test, and out of  
9 eleven (11) vehicles, I think all of them failed  
10 except one (1). And they talked about how poor  
11 headlights were for trucks -- sorry, pickup trucks  
12 during the evening hours.

13 A study like that comes along, what  
14 does MPI do with it? I mean, I -- I'm sure it becomes  
15 part of their knowledge, but practically, does it go  
16 anywhere into a program or -- or anything like that  
17 for MPI?

18 MR. WARD KEITH: So -- so in an  
19 example like that, it would go into our inventory of  
20 research and reports. And then we would use that when  
21 we do our research every year to examine potential  
22 programs to address road safety priorities in  
23 Manitoba.

24 But in a situation like that, we would  
25 look at really, what is the cause of that issue. And

1 what we know, for example, is that, in Canada, you  
2 know, headlights, daytime running lights, they are  
3 mandatory in Canada. They're not so man -- they're  
4 not mandatory in the US.

5                   So from our perspective, we don't have  
6 the same issue with non -- and I know that's not your  
7 specific example, but we don't have the same issue  
8 with non-use of headlights during the day as we do in  
9 the US.

10                   When it comes to usage at night, now  
11 that comes to our obligation as administrators of the  
12 Drivers and Vehicles Act. So that really pertains to  
13 the mechanical fitness of that vehicle.

14                   And so from our perspective, we play a  
15 role in terms of administering the vehicle's  
16 inspection programs that exist in this province and  
17 that we administer under the Hydro -- Drivers and  
18 Vehicles Act.

19                   Between those inspections, it is a  
20 matter of enforcement in terms of people who are  
21 driving at nights with burnt-out headlights, or  
22 mispointed headlights, or what-have-you.

23                   THE CHAIRPERSON: Yeah. I think this  
24 is actually -- they were going to the -- the entire  
25 design of the headlights were -- were incorrect --

1 MR. WARD KEITH: Okay.

2 THE CHAIRPERSON: -- so --

3 MR. WARD KEITH: Okay.

4 THE CHAIRPERSON: -- this sounds like  
5 it's a broad industry --

6 MR. WARD KEITH: Okay.

7 THE CHAIRPERSON: -- problem.

8 MR. WARD KEITH: Okay. So -- so that  
9 is a -- a very good example of an element of what we -  
10 - what we're calling the safe systems approach, right,  
11 where -- the safe systems approach really recognizes  
12 that, at the end of the day, no matter what you do,  
13 quite frankly, to try and change driver behaviour, to  
14 try and give people information and educate them on  
15 safe driving. Drivers are human beings, and they will  
16 always make judgment lapses. They will always make  
17 errors in judgment.

18 So until such time as you can take the  
19 driver out of the equation, there will always be  
20 collisions. And so the purpose of a safe systems  
21 approach is to say, What are the other ways that you  
22 can mitigate the severity of a collision or reduce the  
23 cost of a collision by way of things outside of driver  
24 behaviour, right?

25 So you get into vehicle design, you get

1 into vehicle construction, you get into the standards  
2 that apply in Canada which are controlled by Transport  
3 Canada on the standards for passenger vehicles and  
4 light trucks in order to be able to drive on our  
5 highways, right?

6           You get into road design. You get into  
7 the response of emergency services personnel after a  
8 crash. All of that is intended to mitigate the -- the  
9 negative effects of a collision, recognizing that as  
10 long as there's a human being behind the wheel, you --  
11 you probably can't avoid collisions from occurring.

12           THE CHAIRPERSON: Okay. The second  
13 question I'd like to ask relates to marijuana. The  
14 Federal Government's going to legalize marijuana; the  
15 time frame is uncertain. There's some -- there's some  
16 discussion recently that it may be in a year.

17           I always wondered, if they legalized  
18 marijuana, how you'd deal with the potential impaired  
19 driving and identify it. What programs is MPI working  
20 on or prepared to introduce to address this issue?

21           MR. WARD KEITH: Yeah, that's an  
22 excellent question. And we are as concerned about the  
23 potential for impaired driving rates to jump back up  
24 after we've seen declines over the last twenty (20)  
25 years with the legalization of marijuana.

1           We look to the experience in Washington  
2 state and in Colorado state where marijuana was  
3 legalized. And we did see impaired driving rates  
4 climb as well as collisions, fatalities, and serious  
5 injuries related to impaired driving. It's sort of  
6 the -- the new emerging type of impaired driving where  
7 the focus has traditionally been on alcohol  
8 impairment.

9           So, from MPI's perspective, as part of  
10 our planning for next year we will be doing much more  
11 to raise awareness about the risks and dangers of  
12 impaired driving, not just marijuana and not just  
13 other illegal or illicit drugs. But impaired driving  
14 from drugs can also be triggered by use of  
15 prescription medication if mis-taken (sic) as well as  
16 overuse of over counter medication.

17           And there's really little -- based on  
18 our polling, there's really little understanding of  
19 that. Like, people just do not understand that they  
20 can be -- be impaired by drugs to the same extent that  
21 they can be impaired by alcohol.

22           So our intent next year is to really  
23 step up our public awareness on that issue. We have,  
24 as I spoke about this morning, funded a roadside  
25 survey, observational survey, to try and determine a

1 baseline measure of drug impaired -- the prevalence of  
2 drug impaired driving on Manitoba roadways that we can  
3 use to determine if, number 1, the introduction of  
4 marijuana has an affect and if our strategies to try  
5 and counter that issue are having an affect.

6 THE CHAIRPERSON: Yeah, I guess the --  
7 with your baseline survey, and I remember when it took  
8 place and the criticism, for the results, are you  
9 going on the basis that people actually told you the  
10 truth?

11 MR. WARD KEITH: Well, the protocol  
12 that we used was the same protocol that was provided  
13 by Transport Canada and used quite effectively in  
14 British Columbia and Ontario.

15 And, surprisingly enough, when you  
16 offer somebody a ten dollar (\$10) gift card, which we  
17 did, and assure them that the results of the survey  
18 will have no impact on them personally, they will  
19 participate.

20 So I -- you know, the -- the results  
21 out of BC and Ontario were quite surprising in terms  
22 of the level of drivers where they had -- there was a  
23 prevalence of drug use. And it was recorded and it  
24 was able to extrapolated to create a provincial  
25 baseline.

1 I mean, we'll see what the data tells  
2 us, quite frankly.

3 THE CHAIRPERSON: Yeah. Yeah, we  
4 will. In terms of -- of this program though with the  
5 introduction of marijuana, are there discussions  
6 between provinces and is there sort of a national  
7 program for, you know, best practices or something  
8 like that?

9 MR. WARD KEITH: Yes. So that -- that  
10 was the third thing I was going to talk about --

11 THE CHAIRPERSON: Okay.

12 MR. WARD KEITH: -- that we're doing  
13 on this, or involved in on this. So there is work  
14 being done at the international level through the  
15 American Association of Motor Vehicle Administrators  
16 and at the national level through the Canadian Council  
17 of Motor Transport Administrators of which we are  
18 members.

19 And these organizations are working  
20 directly in Canada with Transport Canada and with the  
21 Federal Government in terms of -- of what the  
22 introduction of legalization of marijuana will look  
23 like in Canada.

24 And there is, as I'm sure you're aware,  
25 a task force that has been created, that's

1 crisscrossing the country looking for feedback from  
2 interest groups and from jurisdictions. So Manitoba,  
3 as well, has established an interdepartmental working  
4 group to look at the issue of legalization of  
5 marijuana and to provide comment to this task force  
6 through the Federal Government's process.

7                   And also we're aware that CCMTA, the  
8 Canadian Council of Motor Transport Administrators,  
9 has been approached to provide input to the task  
10 force, as has the Canadian Association of Chiefs of  
11 Police. And so we are -- we -- we participate as a  
12 member of that interdepartmental working group and we  
13 are trying very hard to make sure that the issue of  
14 impaired driving becomes a priority in the overall  
15 discussion around the legalization of marijuana.

16                   THE CHAIRPERSON:     Okay.

17                   MR. WARD KEITH:     My concern is it's  
18 not there yet.

19                   THE CHAIRPERSON:     Yeah.

20                   MR. WARD KEITH:     But --

21                   THE CHAIRPERSON:     Mr. Keith, the --  
22 the final -- the final question I want to ask you,  
23 distracted driving. There was a -- you increased -- I  
24 don't know if it's you or the Provincial Government  
25 increased the penalties for distracted driving.

1                   Was it MPI alone or was it the  
2 Provincial Government?

3                   MR. WARD KEITH:     That's in regulation,  
4 so the Government --

5                   THE CHAIRPERSON:    Okay.

6                   MR. WARD KEITH:     -- chose to do that.  
7 We made a recommendation --

8                   THE CHAIRPERSON:    Yeah, that's what I  
9 was going to ask you. Was the -- what was the -- the  
10 decision making process in that? Did it go before the  
11 road safety committee? Is it just MPI talking to the  
12 government? How -- how did it go forward?

13                   And, for example, if -- if there was a  
14 decision to increase penalties again, what would the  
15 steps be taken to do that?

16                   MR. WARD KEITH:     So in that particular  
17 scenario that -- remember I talked with respect to the  
18 provincial road safety committee, there was a summit  
19 that the committee held in December on both impaired  
20 and distracted driving.

21                   One of the recommendations that came  
22 out of that summit work was that there needed to be  
23 tougher fines for distracted driving. Now, in  
24 Manitoba there's the fine itself, which is set by the  
25 province, and then there's also the impact on

1 somebody's driver safety rating.

2                   And the driver's safety rating is  
3 actually an insurance risk component. And that is  
4 contained in regulation -- a regulation to the MPIC  
5 Act. So out of those recommendations came a  
6 recommendation to government to look at toughening the  
7 fine, or the financial penalties for distracted  
8 driving, and from there came the decision to pursue  
9 the regulation change, to bump up the DSR impact from  
10 falling two levels to falling five levels.

11                   And the rationale, I can tell you,  
12 because we were a part of -- of that work, is that  
13 currently in the DSR for somebody who is convicted of  
14 a roadside impaired driving offence, they will fall  
15 five levels on the driver safety rating. So the very  
16 fact that last year distracted driving as a  
17 contributing factor for the first time eclipsed  
18 impaired driving in collisions, fatalities, and  
19 serious injuries; there was some rationale for making  
20 the DSR impact level 5 from a risk perspective rather  
21 than level 2.

22                   So that's what drove that particular  
23 decision.

24                   THE CHAIRPERSON:    Okay. And if  
25 distracted driving does not decrease, would you look

1 at additional penalties?

2 MR. WARD KEITH: We may look at  
3 recommending additional penalties, but again --

4 THE CHAIRPERSON: Right.

5 MR. WARD KEITH: -- it would be  
6 government that would decide what the fines are and  
7 what the additional penalties are.

8 THE CHAIRPERSON: Those are my  
9 questions. Any other questions? Okay.

10 BOARD MEMBER NEVILLE: I don't want to  
11 prolong the afternoon, but you made the reference  
12 several times, Mr. Keith, about taking the driver out  
13 of the equation and that's going to be happening very  
14 soon.

15 What preparation is MPI doing in terms  
16 of road safety as it relates to driverless cars?

17 MR. WARD KEITH: So -- so we are doing  
18 a lot of research on that and we have created an  
19 internal working group that is looking specifically at  
20 this particular issue. Now, what we know quite  
21 frankly is that, you know, we are still a ways away  
22 from having truly driverless vehicles in Manitoba.

23 There is some research and some testing  
24 of driverless vehicles going on, as you know, in  
25 Europe through Volvo, and in the US with the Google

1 car and that sort of thing. But the reality is that  
2 there are -- there are five levels of vehicle  
3 automation and the top level is a truly driverless  
4 vehicle where there is no obligation whatsoever for a  
5 driver to be in the vehicle and for a driver to be  
6 prepared to take control of the vehicle, and at this  
7 point, none of that is even yet being tested.

8           What's being tested now is -- is the  
9 next level down, where the vehicle can be automated  
10 for a period of time, but there is still a legal  
11 requirement for an authorized driver to be in the  
12 vehicle and available to assume control of that  
13 vehicle. And so it -- it is coming, absolutely, but I  
14 would think that we're probably talking in the range  
15 of maybe 2040 before we see truly driverless vehicles  
16 in Canada, and certainly in Manitoba.

17           Now, that said, and I spoke about it in  
18 the -- the questioning this afternoon, it's a  
19 continuum. So our discussion with -- my discussion  
20 with Mr. Oakes about the emergence of vehicle  
21 automation tools and technologies, like we are already  
22 seeing things like lane -- not just lane departure  
23 warning systems that says to the driver, Hey, you  
24 know, you're -- you're starting to go out of your  
25 lane, we have lane departure correction systems that

1 will put somebody back in.

2 I have a vehicle that has adaptive  
3 cruise control, so I can be on cruise control and it  
4 will measure the distance between my vehicle and the  
5 vehicle in front, and it will slow down my vehicle to  
6 the speed of the vehicle in front of me. These are  
7 the kinds of technologies that they are starting to  
8 work up, and move that automation forward. But a  
9 truly driverless vehicle is still many years away.

10 That said, lots of implications from a  
11 road safety perspective, from a driver fitness  
12 perspective, from a -- from a behavioural perspective,  
13 and from an insurance and liability perspective, all  
14 of those issues -- from a licensing perspective, all  
15 of those are being looked at in terms of creating  
16 strategies so we're ready when those vehicles come to  
17 Manitoba.

18 THE CHAIRPERSON: Thank you, Mr.  
19 Keith. We'll adjourn until 9:00 a.m. tomorrow  
20 morning. Thank you.

21 MR. WARD KEITH: Thank you.

22

23 (PANEL STANDS DOWN)

24

25 --- Upon adjourning at 3:45 p.m.

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2 Certified by,

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8 Sean Coleman, Mr.

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