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1 CHAIRMAN:
 2 Q. Good morning everybody. And I'll call the
 3 continuation of this hearing to order. I
 4 don't think there are any preliminary or
 5 procedural matters to be considered, is there,
 6 madame?
 7 MS. GLYNN:
 8 Q. No, Mr. Chair, only that the undertakings that
 9 were provided by Mr. Doherty, we understand
 10 that they will be filed by close of business
 11 today.
 12 CHAIRMAN:
 13 Q. Okay, well in that case I believe I do turn it
 14 over to you.
 15 MS. GLYNN:
 16 Q. Absolutely.
 17 CHAIRMAN:
 18 Q. You're on.
 19 MS. GLYNN:
 20 Q. And we'd like to present Ms. Paula Elliott
 21 from Oliver Wyman. Ms. Elliott, I understand
 22 that you would like to be affirmed?
 23 MS. ELLIOTT:
 24 A. Yes.
 25 MS. GLYNN:

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1 Q. And I know how to do that this time.
 2 MS. ELLIOTT:
 3 A. Good.
 4 MS. PAULA ELLIOTT (AFFIRMED) EXAMINATION-IN-CHIEF BY MS.
 5 JACQUELINE GLYNN
 6 MS. GLYNN:
 7 Q. Thank you. Thank you for coming back and
 8 joining us again today. The parties have
 9 agreed, Ms. Elliott, on your experience and
 10 your expertise as an actuary, so we won't go
 11 through your background here this morning. I
 12 would ask that you state your current position
 13 though, please.
 14 MS. ELLIOTT:
 15 A. I'm with--I'm a principal with the consulting
 16 firm Oliver Wyman.
 17 MS. GLYNN:
 18 Q. Thank you. Ms. Elliott, you prepared a report
 19 dated May 16th, 2014 dealing with facilities
 20 right filing for taxis and limousines, is that
 21 correct?
 22 MS. ELLIOTT:
 23 A. Yes.
 24 MS. GLYNN:
 25 Q. And you adopt that report as your testimony?

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1 MS. ELLIOTT:
 2 A. Yes, with one change. It was brought to our
 3 attention through the work done by the
 4 consumer advocate that there was an error in
 5 the transfer to data by FA from its prior
 6 filing to this current filing, and as a result
 7 of that finding by the consumer advocate it
 8 changes our overall rate level estimate of the
 9 rate level change need from about 21 percent
 10 down by about an additional one point decline.
 11 MS. GLYNN:
 12 Q. Okay, thank you. And Ms. Elliott, we may have
 13 covered some of all this through our
 14 examination of Mr. Doherty, but I do want to
 15 walk through your findings in your report. So
 16 I'd ask if you could describe the general
 17 approach that you take when reviewing
 18 facilities rate application.
 19 MS. ELLIOTT:
 20 A. Well, with all filings that we review for the
 21 Board we compare the description of the
 22 assumptions and methodology that are presented
 23 in the filing and we compare that to the prior
 24 filing, looking for consistency, and we also
 25 compare that to the Board's guidelines, so

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1 that we can see the assumptions and methods
 2 that are used and if there are any changes in
 3 that. So that's the first step that we do.
 4 Then we'll review the calculations, all the
 5 steps that go through the preparation of
 6 determining what the rate indication change
 7 is. Then, after we've completed that, we'll
 8 ask--we'll typically ask questions of the
 9 filer, so that we understand that we're sure
 10 that we understand their assumptions and
 11 methods. We might ask for a testing of
 12 alternative assumptions. We might ask for
 13 additional data, and sometimes there are
 14 follow-up questions. And finally, after that
 15 process is completed, we'll prepare our report
 16 of findings.
 17 MS. GLYNN:
 18 Q. Is there anything different in this review
 19 compared to other reviews?
 20 MS. ELLIOTT:
 21 A. Well, yes. In this particular review for the
 22 taxi filing we had just completed last year a
 23 review of a taxi filing, and in that review
 24 last year we found that a rate increase of 50
 25 percent was supported based on the information

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1 provided. FA had proposed a 50 percent rate
 2 increase and the Board approved the 50 percent
 3 rate increase. So in this particular filing
 4 what we wanted to understand, what would cause
 5 such a change after this prior filing, what
 6 would cause such a change to come back in with
 7 another proposal just north of 50 percent? So
 8 that's unique in this filing. And then the
 9 second thing with this filing compared to many
 10 other filings is that we're dealing with taxi
 11 data which is very limited and very small,
 12 very volatile. So we want--there's a lot of
 13 uncertainty in this filing compared to other
 14 filings. So there are two things that are
 15 pretty unique about this filing compared to
 16 other reviews that we do.
 17 MS. GLYNN:
 18 Q. Ms. Elliott, can you summarize the findings on
 19 the proposed rate level changes?
 20 MS. ELLIOTT:
 21 A. Okay. Probably easiest if I just go to my
 22 report.
 23 MS. GLYNN:
 24 Q. Sure.
 25 MS. ELLIOTT:

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1 A. Okay, I think it's page 20. I hope it's
 2 there. So this table we've presented for what
 3 we're referring to as the three key coverages
 4 or the three independently rated coverages,
 5 third party liability, accident benefits, and
 6 uninsured auto, and for those three coverages
 7 based on assumptions presented by FA they had
 8 a rate indication of just shy of 82 percent.
 9 They're proposing just over 50 percent, 56.7.
 10 And based on assumptions that--and the Board
 11 guidelines that we thought were reasonable, we
 12 were estimating a rate increase of 21.5
 13 percent with TPL just under 20 percent and
 14 accident benefits and uninsured auto over a
 15 hundred percent. And as I noted earlier, due
 16 to a finding by the consumer advocate of a
 17 transfer error made by FA, that 21.5 percent
 18 is a little bit lower, about a point lower.
 19 MS. GLYNN:
 20 Q. So Ms. Elliott, today I want to touch on the
 21 same three issues which we discussed with Mr.
 22 Doherty, and those are the differences between
 23 your report and Facility's, and also
 24 Facility's report from last year and this
 25 year. So we're going to start with the loss

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1 trend rates.
 2 MS. ELLIOTT:
 3 A. Okay.
 4 MS. GLYNN:
 5 Q. Can you explain generally what loss trends are
 6 and how they are used in this filing?
 7 MS. ELLIOTT:
 8 A. Okay. Loss trend rates are simply trying to
 9 take historical data, experience data that we
 10 have, the taxi data in this particular filing,
 11 and trying to project these historical costs
 12 that we have to what the cost level would be
 13 for the proposed rate program that's going to
 14 be effect--in effect in 2015. So that's the
 15 purpose of loss trend rate, is to project them
 16 forward. And in doing so an actuary will
 17 examine historical data to try to identify the
 18 patterns of change in that historical data.
 19 So we want to look at how many claims
 20 occurred, and that's referred to as the
 21 frequency rate. Is there a change in the
 22 frequency rate over time? We're trying to
 23 identify that pattern. Then we're looking at
 24 the average claim size which is referred to as
 25 a severity, and is that changing over time and

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1 how is that changing? And the combination of
 2 the frequency change and the severity change
 3 is the loss cost change, and the loss cost is
 4 the average cost per car insured, the average
 5 claim cost per car insured. So we're trying
 6 to identify those patters. And in the process
 7 of identifying those patterns we use something
 8 referred to as a regression analysis to
 9 calculate that rate of change. And in doing
 10 so we want to consider what time period should
 11 we use? How many years of data? Are any data
 12 points--you know, what should we exclude when
 13 we do this regression analysis? We also want
 14 to consider are there any external forces that
 15 are occurring that could affect these loss
 16 trend rates? And last, but not least, we also
 17 want to consider the uncertainty of that data.
 18 MS. GLYNN:
 19 Q. Did Facility use its taxi data to determine
 20 those loss trend rates?
 21 MS. ELLIOTT:
 22 A. Did--yes. Sorry. To determine the rate
 23 indications and to determine the loss trend
 24 rates that are used Facility used commercial
 25 data, and this is commercial data for vans and

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1 trucks. Is it not taxi experience. There's
 2 no taxi experience included in the commercial
 3 data. It's completely separate. So Facility
 4 used commercial data to determine loss trend
 5 rates and then applied that to taxi
 6 experience.
 7 MS. GLYNN:
 8 Q. And did Oliver Wyman use the same data?
 9 MS. ELLIOTT:
 10 A. Yes, we used the same data, yes.
 11 MS. GLYNN:
 12 Q. Okay. So Ms. Elliott, is there a better
 13 alternative than the commercial data?
 14 MS. ELLIOTT:
 15 A. No, we are not saying that there's a better
 16 alternative than using the commercial data as
 17 FA had chosen to do, but that adds to the
 18 uncertainty. We're talking loss trend rates
 19 based on commercial experience which does not
 20 include taxis and then using those loss trend
 21 rates to apply to taxi experience.
 22 MS. GLYNN:
 23 Q. Ms. Elliott, is there judgment applied in
 24 selecting loss trend rates?
 25 MS. ELLIOTT:

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1 A. Yes, there's considerable judgment, and one of
 2 the things that we do is we, in a review such
 3 as this review or any other rate filing
 4 review, is we look at the judgments that are
 5 made in selecting the loss trend rates by the
 6 filer in their prior filing, and then we look
 7 at the judgments that are made in this filing.
 8 So we want to see are there any differences,
 9 and that's an important issue. And then in
 10 this particular filing the judgments that are
 11 made by FA there are many differences from
 12 their prior filing. And there are differences
 13 to the judgments that we have made in
 14 selecting the commercial loss trend rates.
 15 MS. GLYNN:
 16 Q. And do you agree with the judgments made by
 17 Facility in selecting its loss trend rates?
 18 MS. ELLIOTT:
 19 A. No, we don't agree with all of the judgments
 20 made by FA and that's why we have different
 21 loss trend rates.
 22 MS. GLYNN:
 23 Q. Can you explain the process of how the loss
 24 trend rates become the Board's guidelines?
 25 MS. ELLIOTT:

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1 A. Yes. Each--every six months there's--it's
 2 called the General Insurance Statistical
 3 Agency. We refer to that as GISA. Every six
 4 months new data is released, provided by GISA.
 5 We analyze that data. We review the
 6 experience. We prepare our report that
 7 presents our loss trend rates that we've
 8 selected, and that report--we do this
 9 separately for private passenger and
 10 commercial auto. That report is then provided
 11 to the insurers for their review and comment,
 12 and based on any comments that might be
 13 received they are taken into consideration.
 14 And then the report is approved by the Board
 15 and it's published on the Board's website for
 16 insurers to use, to choose to use if they so
 17 decide to.
 18 MS. GLYNN:
 19 Q. Can you explain the parameters which resulted
 20 in the different loss trend rates being chosen
 21 by yourself and by Mr. Doherty?
 22 MS. ELLIOTT:
 23 A. Okay. There are I guess four key differences.
 24 One is the time period that is selected. FA
 25 has chosen to use a 20-year experience that

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1 they review. That is a change from their
 2 prior filing, and Oliver Wyman, we are--we
 3 take into consideration the trend rates over a
 4 ten-year and a five-year period. A second
 5 difference is the reform factors. So with
 6 looking at the reforms that occurred in 2004
 7 and determining the impact of any of those
 8 reforms. So in this filing FA has presented a
 9 very sizable impact for the reform which is a
 10 complete change from their prior filing where
 11 they found that the reforms had no impact on
 12 the loss costs, and in this filing we have the
 13 same position that there was a not a material
 14 impact, a measurable impact of the reforms on
 15 the claims experience. So those two items.
 16 Another difference that we have are the loss
 17 adjustment expenses. In this filing in
 18 calculating its loss trend rates FA excludes
 19 the loss adjustment expenses which is fine,
 20 but in their prior filing they included the
 21 loss adjustment expenses when they were
 22 calculating their loss trend rates. In our
 23 guideline loss trend rates that we prepare we
 24 include the loss adjustment expenses, so
 25 that's a difference. And then the fourth kind

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1 of key difference is the selection of loss
 2 development factors. So lost development
 3 factors are these factors that we apply to the
 4 losses that have been reported to date to try
 5 to estimate what the claims will ultimately
 6 be, what they will ultimately cost when all
 7 the files are closed and settled. So FA
 8 selects its set of loss development factors
 9 that it applies to the indemnity only, the
 10 losses only, and we select a set up of loss
 11 development factors that we apply to the
 12 losses and loss adjustment expenses. So
 13 they're the four differences.

14 MS. GLYNN:
 15 Q. Okay. And we'll go into each of those in a
 16 little bit more detail later on. So let's
 17 start with the data that you're using. We've
 18 had a lot of discussion around the data, and
 19 it is the commercial data that Oliver Wyman
 20 used, is that correct?

21 MS. ELLIOTT:
 22 A. That's correct.

23 MS. GLYNN:
 24 Q. Okay.

25 MS. ELLIOTT:

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1 A. Yeah.

2 MS. GLYNN:
 3 Q. And you feel that that data was stable enough
 4 to prepare the loss trend rates?

5 MS. ELLIOTT:
 6 A. The data is very challenging to use and
 7 there's a lot of instability in that data. So
 8 I think it would be helpful if I presented a
 9 report, I believe it's been distributed -

10 MS. GLYNN:
 11 Q. Okay.

12 MS. ELLIOTT:
 13 A. - that shows a measure if you will of this
 14 volatility in the data.

15 MS. GLYNN:
 16 Q. Okay, so we'll just -

17 MS. ELLIOTT:
 18 A. And -

19 MS. GLYNN:
 20 Q. We'll bring that up there first if that's
 21 okay.

22 MS. ELLIOTT:
 23 A. Thank you.

24 MS. GLYNN:
 25 Q. It's actually Exhibit PE 2. We had

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1 distributed an exhibit on Friday which we'll
 2 come to later on.

3 MS. ELLIOTT:
 4 A. Okay. All right, so this for--for convenience
 5 we merged two charts that are presented in our
 6 Loss Trend Report. So the most recent report
 7 that's being used within in this rate filing
 8 are the findings based on data as of December
 9 2012. And that's on the right-hand side, and
 10 on the left-hand side is an excerpt from our
 11 report as of December 2011. So we put these
 12 side by side just for your visual convenience,
 13 and in our report we indicate or outline what
 14 is the change from year to year of the loss
 15 cost. So looking at each of these rows--well,
 16 let's just take as of December 2012 for
 17 example. We're seeing the change in cost from
 18 26--2006 to 2007 is plus 29 percent; and the
 19 next year from 2007 to 2008 the cost dropped
 20 by 11 percent; and then the next year, down 9
 21 percent; and it went down 6 percent; then it
 22 went up 34 percent; and then it went down 17
 23 percent. So what we're seeing with this
 24 commercial data is it's pretty volatile, the
 25 costs go up, they go down, they go up, they go

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1 down. So that one issue with this, the
 2 difficulty with the stability of the data,
 3 it's very volatile from year to year. The
 4 second issue with stability is of December we
 5 have data that's provided as I said by GISA,
 6 but claims that were reported one year--sorry,
 7 the experience that's developed new
 8 information the claims are being handled and
 9 processed, so the estimate of those claims if
 10 you take for example, an accident year 2011,
 11 the estimate of those claims that we know as
 12 of December 2011, one year later at the end of
 13 December 2012 that estimate has changed. So
 14 point that out let me look at my--if we look
 15 at 2008 to 2009, as of December 2011 the
 16 change was minus six percent, but one year
 17 later, now at the end of 2012, the change from
 18 2008 to 2009 is minus nine percent. Similarly
 19 when we look from 2009 to 2010 we thought the
 20 change was plus three percent, but now one
 21 year later we thing it's minus six percent.
 22 And the big one is from 2010 to 2011, and we
 23 thought it was a 58 percent increase based on
 24 the information that was provided by GISA, and
 25 now one year later we think it's a 34 percent

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1 increase. So we have the volatility from year
 2 to year, each accident year as it changes, and
 3 then we have the volatility of what we think
 4 the estimate is as it changes over time. So
 5 when we think about this data, do we describe
 6 it as stable? No, it's very unstable. It's
 7 very challenging to work with.

8 MS. GLYNN:
 9 Q. Thank you. Ms. Elliott, can you confirm that
 10 in preparing these Loss Trend Reports every
 11 six months that you look at data for the end
 12 of December and for the end of June? So for
 13 this year's report you would have looked at
 14 December 2012 and June 2012?

15 MS. ELLIOTT:
 16 A. Yes, so one of the things that we try to do,
 17 because we find the data has a lot of
 18 volatility to it, we--and to try to account
 19 for that, we look at the estimate of the loss
 20 trend rates using the data as of the end of
 21 June 2012, and then we look at it as of
 22 December 2012 when we prepare our most recent
 23 report that we're referring to. And the most
 24 recent data point is the most unstable. It's
 25 new and it's subject to change. So excluding

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1 that last data point, that last half of 2012,
 2 helps to just bring a little more stability,
 3 not a lot of stability, but some more
 4 stability to the estimates that we're
 5 providing.

6 MS. GLYNN:
 7 Q. Okay, can you describe Oliver Wyman's trend
 8 model?

9 MS. ELLIOTT:
 10 A. Yes, our trend model, I think it's
 11 sophisticated and flexible. We have the
 12 ability to include any time period that we
 13 want, the number of years. We can exclude any
 14 data points that we choose to excludes. You
 15 know, maybe they were too high or too low a
 16 data point. We can include any consideration
 17 on the reforms, consumer price index,
 18 unemployment rates. We've even included
 19 models with weather, what the precipitation
 20 is. So it's a very flexible model that we
 21 use, yeah.

22 MS. GLYNN:
 23 Q. Do you run your models for frequency and
 24 severity as well as loss cost?

25 MS. ELLIOTT:

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1 A. Yes. Our models that we run include--every
 2 trend model that we run includes a look at
 3 what the frequency trend rate is, what the
 4 severity trend rate is, and what the loss cost
 5 trend rate is, but what I said earlier, when
 6 you take the frequency trend rate, the
 7 severity trend rate, the two combined equal
 8 loss cost trend rate. So we do all three
 9 every time.

10 MS. GLYNN:
 11 Q. And is the paper report that's established
 12 every six months, is that a reflection of all
 13 the analysis that you perform?

14 MS. ELLIOTT:
 15 A. No, the paper report is a summary of what
 16 we're presenting. It is by no means a
 17 reflection of all the runs that we do. We do
 18 numerous runs and I think it might be a good
 19 point--I'd like to show from our December 2011
 20 report a summary of some of the runs, not even
 21 all of the runs that we present. And then
 22 I'll explain, you know, a little bit more. If
 23 we could bring up the 2011 report?

24 MS. GLYNN:
 25 Q. And that would be PE Exhibit 3.

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1 MS. ELLIOTT:
 2 A. Okay. So this happens to be collision and we
 3 do the same for every report. So this is our
 4 Loss Trend Report at the end of 2012--sorry,
 5 2011. And it's one of the exhibits at the
 6 back. And in this we have some trend rates
 7 that we've run, and we exclude--we have ten
 8 years, six years, five, you know, different
 9 ones. We look at loss cost, severity,
 10 frequency in R squares and various exclusions.
 11 So we run numerous models, versions of our
 12 trend runs, and even more than this. So to
 13 assume that we just run four models and that's
 14 it is a misunderstanding of what we do. And
 15 in the process of our work -

16 STAMP, Q.C.:
 17 Q. Excuse me, Mr. Chairman, can we have the page
 18 number, please, that we're following here?

19 MS. GLYNN:
 20 Q. Oh, I'm sorry. It's page 14.

21 MS. ELLIOTT:
 22 A. So the issue here is not -

23 MS. GLYNN:
 24 Q. Just one second, Ms. Elliott. Do you have it?

25 MS. NEWBURY:

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1 Q. I'm just trying to keep track of the documents
 2 here, okay?
 3 STAMP, Q.C.:
 4 Q. That's it. Yes, okay. Thank you.
 5 MS. GLYNN:
 6 Q. You have it? Okay. Sorry, go ahead.
 7 MS. ELLIOTT:
 8 A. So what I'm trying to express is that we
 9 certainly prepare more than four trend runs
 10 that you see in the written summary report,
 11 many more, and even more than what's presented
 12 on a summary sheet that was included as an
 13 appendices in our 2011 report. And we
 14 received some feedback that--which expressed
 15 we'd really just rather see your data at the
 16 end of the report, what they do--that you used
 17 to run your models. And then when we get your
 18 report, we'll know what data you used and then
 19 we'll decide whether we agree or not. If we
 20 don't agree, you know, we'll let you know. So
 21 in 2012 we started to change our reports to
 22 just include the data, a long sheet of data at
 23 the end of our report because we had a comment
 24 that they would find that more useful to them
 25 to know exactly what we were putting in,

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1 because any other actuary can take the data
 2 and run their own trend model and then decide
 3 if they agree or not with our findings. And
 4 they found that more useful, so we made that
 5 change in our 2012 report that we didn't
 6 include this because we had the comment that
 7 they weren't finding that that useful. So
 8 that was a change.
 9 MS. GLYNN:
 10 Q. Can you explain the judgments that you make
 11 for your approach to your model?
 12 MS. ELLIOTT:
 13 A. Yes, now as I mentioned there is a lot of
 14 instability to the data. So one of the things
 15 that we're trying to do is strike a balance
 16 between responsiveness and stability. So in
 17 our model we take into consideration of what
 18 time periods we're going to use, what data
 19 that we're going to exclude, and when we take
 20 all this into account what we done and what we
 21 try to do to present what we believe is a
 22 responsive and stable approach is we take an
 23 averaging approach. So we're looking at ten-
 24 year runs and five-year runs and taking an
 25 averages of that, and we're drawing in our

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1 selection from a prior report so that we feel
 2 that we're getting a stable estimate for each
 3 six-month report that we prepare.
 4 MS. GLYNN:
 5 Q. And that approach was the same in the 2011 and
 6 the 2012 report?
 7 MS. ELLIOTT:
 8 A. Yes.
 9 MS. GLYNN:
 10 Q. Okay. How do your model results compare to
 11 those of -
 12 MS. ELLIOTT:
 13 A. Okay, I think we've prepared an exhibit that I
 14 think will be helpful.
 15 MS. GLYNN:
 16 Q. And that would be Exhibit 4, the Summary of
 17 the R Squared Information?
 18 MS. ELLIOTT:
 19 A. Yes, yes. Okay, so first of all I promise I
 20 will not go through each number here. That
 21 would be painful. And I think it's--if you
 22 get one thing from this is that--and we're
 23 trying to compare trend models. As easy tool
 24 to use, it's not always right, but a common
 25 tool to use is the adjusted R square. The

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1 higher the R square is, the--typically the
 2 better the fit of the model, but it's not
 3 always--it doesn't always give you the right
 4 answer, but that's kind of a rough rule of
 5 thumb. So you have the R square. The
 6 adjusted R square makes models more comparable
 7 and that's there for you. And we've presented
 8 the findings. We've done a ten-year run as
 9 we've said, ending June; a ten-year run ending
 10 December; and then the same thing with the
 11 five-year models. We look at loss costs,
 12 severity and frequency, and we've presented
 13 this here for you. And on the far columns
 14 that I've kind of highlighted if you will for
 15 you are the calculated loss trend rate. We
 16 have minus 3.6 percent on one of the ten-year
 17 models, minus 1.7 on another ten-year model; a
 18 five-year model we get 1.9 and minus 0.4. So
 19 we take an average of those in our selection.
 20 We draw in what we selected in the prior
 21 review and that's how we're forming our
 22 selection that we present in our Loss Trend
 23 Report. So when we look at frequency for
 24 example, we're looking at the R square, the
 25 adjusted R square. They're in the fifties,

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1 high forties, fifties range. And the average
 2 of our frequency trend is about minus 5.5
 3 percent, and those fits are reasonable, If
 4 all the R squares were in the ninety percent
 5 range, we'd all be happy, and you know we'd
 6 feel comfortable that is it stable. We're
 7 getting good fits, but that's not the case
 8 here. What you can see is that excluding one
 9 or two different points you can get very
 10 different answers. Right? So that's what
 11 we're trying to take into consideration. If
 12 we just looked at said, "What's the best fit?"
 13 and there's the answer, minus 3.6 has got the
 14 R square, I don't think that's the right
 15 answer if we're trying to look at what the
 16 loss trend rates are and be responsive and
 17 stable from review to review. So that's why
 18 we take averages, because we know just
 19 excluding one data point you can get a pretty
 20 different answer. So when we compare the
 21 model, we've looked at this and we think it's
 22 important to take away from here is that just
 23 excluding a couple of different data points,
 24 you can get a very different answer. So it's
 25 very difficult to be confident that that one

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1 answer, minus 3.6, is right or minus 1.7 is
 2 right, because you know if I just excluded one
 3 data point or two data points, I get a really
 4 different number. So there's a lot of
 5 instability in the data, and when we compare
 6 the findings, you know, this is my take-away,
 7 that it's not stable, you get different
 8 answers pretty easily.

9 MS. GLYNN:
 10 Q. Ms. Elliott, you spoke about excluding data
 11 points. Could you--so could you explain
 12 Oliver Wyman's treatment of outliers?

13 MS. ELLIOTT:
 14 A. Sure. With outliers, graphically with this
 15 data it is so volatile that a layman can see
 16 what are the high points and low points, you
 17 know up and down, up and down. And we also--
 18 no, we look at the actual experience for all
 19 the data, we look at the fitted values to try
 20 to see what those differences are. So
 21 statistically we're looking at, what are the
 22 extreme points? But our approach is trying to
 23 be both responsive and stable from review to
 24 review is we take in our ten-year model, we
 25 take the two high points and the two low

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1 points, and in the five-year model we take the
 2 one high point and the one low point to
 3 exclude those. So that's the approach that
 4 we've taken to try to be stable from review to
 5 review.

6 MS. GLYNN:
 7 Q. And Mr. Doherty has stated in his examination
 8 that he does not agree with that exclusion of
 9 the high points and the low points on a
 10 percentage basis. Can you speak to that?

11 MS. ELLIOTT:
 12 A. Yes, I think what we were trying to achieve in
 13 excluding the high and the low points on a
 14 percentage basis, as we said, the loss trend
 15 rate is a percentage change from year to year.
 16 So our thinking was that if we excluded the
 17 high percentage change or the low percentage
 18 change, perhaps that would be a good way to
 19 capture these extremes, you know, to take that
 20 out of the measurement that we're trying to
 21 assess, what is the percentage change from
 22 year to year. So we did that, and you know,
 23 we've presented what our calculations are, but
 24 you know, it's a valid point. I think Mr.
 25 Doherty was speaking to our ten-year model

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1 ending June 2012 and maybe we could, you know,
 2 talk about that a little bit further. We
 3 prepared a report and the exhibit -

4 MS. GLYNN:
 5 Q. So the exhibit that was distributed on Friday
 6 which was PE 1 that's the Background
 7 Information.

8 MS. ELLIOTT:
 9 A. Okay.

10 MS. GLYNN:
 11 Q. And then Ms. Elliott prepared the summary of
 12 this which is PE 5.

13 MS. ELLIOTT:
 14 A. Okay. So this exhibit is looking at the loss
 15 trend rates, doing sort of two approaches, two
 16 exclusions of data points. So in our report
 17 of our Loss Trend Report -

18 MS. GLYNN:
 19 Q. Just one second, please.

20 STAMP, Q.C.:
 21 Q. The exhibit that we're getting into now, is
 22 this labelled PE 1?

23 MS. GLYNN:
 24 Q. PE 1 is the background information.

25 MS. NEWBURY:

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1 Q. Okay.
 2 MS. GLYNN:
 3 Q. And then we've summarized it into a -
 4 STAMP, Q.C.:
 5 Q. This is the background?
 6 MS. GLYNN:
 7 Q. Yes, yes.
 8 STAMP, Q.C.:
 9 Q. PE 1?
 10 MS. GLYNN:
 11 Q. And we've summaries into this chart.
 12 MS. NEWBURY:
 13 Q. And that's PE 1 as well?
 14 MS. GLYNN:
 15 Q. That's PE 5.
 16 MS. NEWBURY:
 17 Q. PE 5.
 18 MS. GLYNN:
 19 Q. Thank you. Go ahead, Ms. Elliott.
 20 MS. ELLIOTT:
 21 A. Okay. So here and it's another good example
 22 of excluding a couple of different data
 23 points, you get another different answer. So
 24 we have one column which was--we just looked
 25 at these numbers a moment ago, like the ten-

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1 year trend ending June 2012, the minus 3.6
 2 percent. So when we exclude data points based
 3 on the percentage change from the prior
 4 period, we had certain estimates, and so we
 5 redid the work to look at to prepare this
 6 report. What is the loss trend estimate when
 7 we exclude the highest dollar value, and the
 8 lowest dollar value? And we have these
 9 findings. So for example, for the ten year
 10 ending June 2012, we have minus 3.6 percent on
 11 excluding data points that were the highest
 12 percentage change. And then when we exclude
 13 the data points that are on a dollar value,
 14 the actual point is the highest over the
 15 period that we're looking, we get minus 2.9
 16 percent. And similarly we see for the ten
 17 year ending December, minus 1.7 becomes minus
 18 2.4, a little more negative. We see a big
 19 change for the five year ending June, plus 1.9
 20 down to minus 7.6; and the five year ending
 21 December, minus 0.4 to minus 0.8. And so
 22 actually if we were to do it that way to
 23 exclude the highest dollar value, you actually
 24 get a bigger negative trend. And you know,
 25 again if you can just look at this and say,

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1 "Gee, I excluded a couple of different data
 2 points, I take ten years. I get another
 3 different answer." So this data is very, very
 4 volatile, and the findings are uncertain. So
 5 it's hard to take one number and say, "That's
 6 the right number. I've got it." You know,
 7 but you don't because it changes dramatically
 8 with different exclusions and different time
 9 periods.
 10 MS. GLYNN:
 11 Q. So if Oliver Wyman had used the actual values
 12 to exclude the high and low points as opposed
 13 to the percentage change to exclude the high
 14 and low points, the impact would have been an
 15 even lower trend rate?
 16 MS. ELLIOTT:
 17 A. That's correct, yes.
 18 MS. GLYNN:
 19 Q. Okay. And that would have resulted in a lower
 20 rate indication?
 21 MS. ELLIOTT:
 22 A. Right, so if you have a larger negative trend
 23 rate, then you would have your findings. Your
 24 rate level indication would be lower than what
 25 we present in our report, yes.

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1 MS. GLYNN:
 2 Q. Okay. And have you always used this approach
 3 to exclude the data points with the highest
 4 and lowest percentage change?
 5 MS. ELLIOTT:
 6 A. No, no. In trying to, you know, find a way to
 7 address the large percentage changes that we
 8 were seeing from period to period in 2012 for
 9 the June report, 2012 in the December report,
 10 2012, we tried that approach. And one of the
 11 difficulties with it was understanding which
 12 data points we were excluding. So before that
 13 we hadn't used that approach, and since that
 14 time we haven't used that approach, but no.
 15 So it was a short time that we'd use that.
 16 MS. GLYNN:
 17 Q. Okay. So we're gone back to the actual
 18 values?
 19 MS. ELLIOTT:
 20 A. Yes.
 21 MS. GLYNN:
 22 Q. Okay. Can you explain more about the
 23 difference in the reformed factor treatment,
 24 the difference between your approach and that
 25 of Mr. Doherty?

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1 MS. ELLIOTT:
 2 A. Okay. In the reform in the FA model they have
 3 as part of their 20-year review of the
 4 experience, and so it's integral to their
 5 model that they have looked at the reforms.
 6 So in the second half of 2004 they have
 7 estimated that the reform had a very sizable
 8 impact on the claims cost, and we're not
 9 finding that, in our view, intuitively
 10 reasonable. So FA--I've got my numbers here.
 11 FA has said that for bodily injury the reform
 12 cost reduced--that the reforms in 2004 caused
 13 the loss cost to reduce by 37 percent, and
 14 they've said for property damage those reforms
 15 or something in the second half of 2004 caused
 16 the lost cost to reduce by 17 percent, and for
 17 accident benefits they've said that the 2004
 18 reforms or something in the second half of
 19 2004 caused AB to reduce by 73 percent, and it
 20 was a reduction down, 73 percent, and a
 21 sustained reduction, not just a one-time dip,
 22 that all the cost came down by 73 percent and
 23 stayed at that level barring, you know, loss
 24 trend, changing it over time and we don't
 25 find that t be intuitively reasonable.

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1 MS. GLYNN:
 2 Q. And can you explain why you find these to be
 3 unreasonable?
 4 MS. ELLIOTT:
 5 A. Well, we have--we review the rate filings on
 6 behalf of the Board and we have not seen that
 7 in other rate filings. In FA's own rate
 8 filing last year for taxis, they assume that
 9 the reforms had no impact on the cost. So
 10 this is a complete turnabout by FA, that it
 11 now sees these reform savings from the 2004
 12 reforms, or something in 2004, and you know,
 13 saying--and I'm repeating what I said earlier,
 14 but saying that there's this sustained drop
 15 from these reforms moving forward, that
 16 everything shifted down, we don't find that to
 17 be intuitively reasonable. I can't explain to
 18 anyone why that would be the case, it doesn't
 19 need--the reforms were for two hundred and
 20 fifty--sorry, \$2,500 deductible on all BI
 21 claimed and some other minor changes. I can't
 22 think of any other event in the second half of
 23 2004 that would cause AB cost to decrease by
 24 73 percent; the reforms weren't for AB. I
 25 just don't find it intuitively reasonable, no.

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1 MS. GLYNN:
 2 Q. Ms. Elliott, I'd like to bring you to Page 121
 3 of Facilities' Memorandum.
 4 MS. ELLIOTT:
 5 A. Okay.
 6 MS. GLYNN:
 7 Q. And we've highlighted the numbers on the
 8 screen, just for ease. It's the exact same
 9 document with just some highlights in it.
 10 MS. ELLIOTT:
 11 A. Right. So I have a red arrow beside 2004-2,
 12 so in August 2004, the reforms in this
 13 province were implemented. So you can kind of
 14 see that, hopefully, across the line, and I
 15 highlighted each accident half years that you
 16 could compare--you know, starting with 1999,
 17 the second half going forward--you know, we
 18 could have done the whole column but just not
 19 to be so painful -
 20 MS. GLYNN:
 21 Q. So Ms. Elliott, can you walk us through what
 22 you see in this data?
 23 MS. ELLIOTT:
 24 A. Sure. So starting with 1999, in the second
 25 half, we see an average, and this is the

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1 average cost of claims for bodily injury. So
 2 in 1999, the second half, it was \$45,089 and
 3 then it dropped down to \$38,674 and then one
 4 year later it jumped up to \$75,498 and onward.
 5 And I calculated the percentage changes just
 6 out of my own curiosity. So starting with the
 7 45, dropping down to 38, it goes -14 percent,
 8 +95 percent, -59 percent, +44 percent, - 26
 9 percent, +19, +5, +39, -17. So you can see it
 10 goes up and down a lot, it's very volatile
 11 what the average claim size is going to be,
 12 and to me--I call that noise in the data,
 13 there's a lot of things changing and it's
 14 going up and down. So what FA has done,
 15 they've looked at the change for 2004 and
 16 they've seen a drop and said, oh, well, that
 17 must be the reforms or something that
 18 happened, but you can look at the prior period
 19 when it increased by 95 percent or it reduced
 20 by 59 percent--there's a lot of changes from
 21 period to period. And so just isolating 2004
 22 and seeing a decrease there and saying well,
 23 that was the reforms and I can measure that, I
 24 don't think so. I think there's so much noise
 25 in the data, up an down every year, that it's

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<p>1 hard to isolate 2004 and say, oh yeah, my cost 2 for AB decreased by 73 percent. That's just 3 some noise in the data. So I don't have 4 comfort that the reform factors that FA has 5 presented are intuitively reasonable, and 6 there are not many claims. Each accident half 7 year has about 50 to 70 claims with about 120 8 a year. There's not very much data, and it's 9 going up and down, up and down. So trying to, 10 you know, isolate here and present reform 11 factors of these magnitude, I'm not certain 12 that it's really measuring it correctly, and I 13 think it's perhaps a flaw in the FA regression 14 model.</p> <p>15 MS. GLYNN: 16 Q. Ms. Elliott, can you tell us why the average 17 claim size would change so much from year to 18 year? 19 MS. ELLIOTT: 20 A. Yes, and one of the things we want to remember 21 when we're looking at the severity of these 22 average claim costs, we're trying to measure 23 what's the percentage change in cost from year 24 to year? So if everybody had a whiplash 25 injury and you wanted to look at the costs in</p>	<p>1 small claims one year and maybe some bigger 2 claims the next year that are causing this 3 change. So we're not trying to measure how 4 many big claims you have one year, maybe not 5 the next year. We're trying to measure the 6 change in cost from year to year. So with 7 this noise in the data, it's very difficult to 8 measure, very difficult. So I think that 9 explains why we see these jumps, this mix of 10 small and large claims from year to year, 11 yeah.</p> <p>12 MS. GLYNN: 13 Q. We'll move in a little bit of a different 14 direction now. Can you explain the 15 differences in your approach and Mr. 16 Doherty's, relating to the claims handling 17 costs? 18 MS. ELLIOTT: 19 A. Okay. In the FA filing, the data that they 20 have or that they're using to calculate their 21 loss trend rates do not include loss 22 adjustment expenses, and in our analysis of 23 loss trend rates we do include the loss 24 adjustment expenses. And so if the change in 25 the loss adjustment expenses, the cost to</p>
<p>Page 38</p> <p>1 1999 and 2000 and--once the change in that 2 whiplash injury, you know, and it might be two 3 or three percent a year, the cost going up 4 with--surrounding, if you will--close to 5 inflation or the various heads of damage for a 6 bodily injury claim, but what happens--we only 7 have about 120 claims a year and so one year 8 you could have maybe pretty minor claims and 9 the next year you could have somebody that is 10 a paraplegic, and the next year there could be 11 a different mix of claims. So you could have 12 small claims one year, maybe a real big claim 13 the next year, maybe lots of big claims the 14 next year. You have a small group of claims, 15 and that mix of small claims and large claims 16 changes from period to period, and there's so 17 few of them, that this is what we're seeing, 18 these jumps in the severity. So when we look 19 at--I mean, it's a really good example going 20 from \$38,000 to \$75,000; what would be causing 21 that? I think--you know, I'm not positive 22 because we don't have any information that 23 tells us the types of claims in this data, we 24 just know roughly how many claims there are. 25 It is likely that there's a changing mix of</p>	<p>Page 40</p> <p>1 handle and to settle the claims, that changed 2 from year to year, it's not too different in 3 the percentage change in costs of the 4 indemnity, including or excluding, you won't 5 get two different--a loss trend rate. And we 6 did some testing to see if there was any 7 difference between calculating a loss trend 8 rate with or without it and we're finding that 9 the difference is kind of immaterial.</p> <p>10 MS. GLYNN: 11 Q. Okay. Did Facility include claims handling 12 costs in its prior filing to determine its 13 loss trend rates? 14 MS. ELLIOTT: 15 A. Yes. That was another difference in--between 16 their judgements last year and this year. In 17 last year's filing, they did include the 18 claims handling cost when they calculated 19 their loss trend rate, but in this year's 20 filing, they do not. 21 MS. GLYNN: 22 Q. Okay. In your report, Ms. Elliott, we noted 23 that there was some difference in the choice 24 of the loss development factors between Oliver 25 Wyman and Facility. Could you bring us</p>

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1 through bodily injury as an example and tell
 2 us how the differences in the choice of the
 3 loss development factors affect the loss trend
 4 rates that you calculated?
 5 MS. ELLIOTT:
 6 A. Okay. Well, let me just say, first of all, I
 7 know it gets confusing between loss
 8 development factors and trend factors, how
 9 they all fit together. So loss development
 10 factors, we apply that to the losses that are
 11 reported today to say what will they
 12 ultimately be when claims are all settled, and
 13 then we take those costs, what we think
 14 they'll ultimately be, and put them into the
 15 trend model. So the higher those costs are
 16 that you estimate with your loss development
 17 factor, all else being equal, you're going to
 18 get a higher loss trend rate. So that's kind
 19 of the connection with loss development
 20 factors. If we think they're too high, you're
 21 likely getting too high a loss trend rate. So
 22 that's the first part, and I think bodily
 23 injury is a good example we could look at so
 24 we can see a little view, a glimpse, of loss
 25 development factors. And there's some

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1 information I wanted to provide, it's an
 2 exhibit--I apologize, I don't know the number--
 3 --that's prepared by GISA, the General
 4 Insurance Statistical Agency, of their
 5 estimate.
 6 MS. GLYNN:
 7 Q. It would be Number 6 in the package provided
 8 to -
 9 MS. ELLIOTT:
 10 A. Okay. So this data is--we'll hold right there
 11 for a second. This is an exhibit produced by
 12 GISA, it is for Newfoundland/Labrador,
 13 commercial auto and it's bodily injury. So
 14 it's -
 15 STAMP, Q.C.:
 16 Q. Excuse me, miss, we don't have that document.
 17 We have--okay, I'm sorry. We'll get it.
 18 Thank you.
 19 MS. ELLIOTT:
 20 A. Okay. So GISA provides to the industry its
 21 estimate of what the ultimate costs are going
 22 to be for each of the accident half year for
 23 commercial automobile here in Newfoundland,
 24 and they do this for each province. So if we
 25 could scroll down to the accident half year

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1 2012-2, there at the bottom? Okay. So here
 2 we see, so this is for losses and loss
 3 adjustment expenses--allocated loss adjustment
 4 expenses for 2012-2, the very bottom, second
 5 column in, GISA has estimated the costs
 6 including these allocated loss adjustment
 7 expenses, at 3499, so \$350 per vehicle. Okay,
 8 so that's GISA's estimate including ALAE, and
 9 now I'd like to go to FA's exhibit, and I
 10 think it's 127 in my notes? Okay. So it's
 11 the same time period here, this column--maybe
 12 we could go to the top for a moment just to
 13 get our bearings.
 14 MS. GLYNN:
 15 Q. Yeah.
 16 MS. ELLIOTT:
 17 A. So this is bodily injury and the second column
 18 in from the -
 19 MS. GLYNN:
 20 Q. Ms. Elliott, we have Page 118, but that is the
 21 correct reference? We're on the right page
 22 here?
 23 MS. ELLIOTT:
 24 A. Yes. That's fine, that's fine.
 25 MS. GLYNN:

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1 Q. Okay.
 2 MS. ELLIOTT:
 3 A. So this is bodily injury Newfoundland and
 4 Labrador, again this is the commercial data,
 5 and the actual costs that FA has estimated for
 6 each period, and if we scroll down to see the
 7 comparable number--and again, this is just the
 8 losses, it does not include the allocated loss
 9 adjustment expenses. Again, coincidentally,
 10 they have \$349.99. It's quite coincidental
 11 that they're exact, but the GISA data includes
 12 allocated loss adjustment expenses and the FA
 13 data excludes it. So here we see that FA's
 14 number is 350 without the allocated loss
 15 adjustment expenses, and GISA's data is 350
 16 with it. So you know, that is related to the
 17 loss development factors that are selected by
 18 FA.
 19 MS. GLYNN:
 20 Q. And what does this higher estimate on the loss
 21 development factor mean for Facility's loss
 22 trend?
 23 MS. ELLIOTT:
 24 A. All else being equal, having this higher
 25 number of the 350 would lead to a higher loss

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1 trend rate.
 2 MS. GLYNN:
 3 Q. Okay, and can you tell us how much higher the
 4 loss and the ALAE per vehicle would be?
 5 MS. ELLIOTT:
 6 A. It ranges, and of course, the actual costs
 7 would vary from year to year, but for bodily
 8 injury, it's easily between 8 to 10 percent of
 9 the cost, so if you want to exclude allocated
 10 loss adjustment expenses, you take 8 to 10
 11 percent off.
 12 MS. GLYNN:
 13 Q. So if FA excludes ALAE and GISA includes ALAE,
 14 can you explain why both numbers are 350?
 15 MS. ELLIOTT:
 16 A. Okay. I can, and that's a little more
 17 complicated, so we're going to take you to
 18 some exhibits to show why that's occurring.
 19 Okay, I believe we have an exhibit which shows
 20 the bodily injury loss development factors
 21 that are selected by FA, and those that are
 22 selected by GISA.
 23 MS. GLYNN:
 24 Q. So can you bring us to the page in FA's
 25 Memorandum, please?

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1 MS. ELLIOTT:
 2 A. So this, I believe, is FA's report and this is
 3 for bodily injury, and it's showing for each
 4 six-month incremental period from 6 to 12 and
 5 12 to 18, these are the factors that are
 6 selected. So the row that says final
 7 selection and then the product row is the
 8 multiplication of all those factors. So each
 9 factor that FA has selected is under the final
 10 selection, and what's interesting if, for
 11 example, you look at 12 to 18, they've
 12 selected 1.1340, but when you look at the
 13 averages that they have presented as
 14 alternatives that they're going to select
 15 from, they don't match up and you can go
 16 across each column and say, well, they're
 17 close, but they don't match up. And now if we
 18 could pull up GISA's selected factors, and I'd
 19 like to see that lined up.
 20 MS. GLYNN:
 21 Q. That's back to Exhibit 6.
 22 MS. ELLIOTT:
 23 A. Okay. Thank you.
 24 STAMP, Q.C.:
 25 Q. What page are we looking at in the first piece

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1 of data?
 2 MS. GLYNN:
 3 Q. It's Page 127.
 4 MS. ELLIOTT:
 5 A. I think in the GISA exhibit--there we are,
 6 yeah. Okay, all right. So what we have on
 7 the top part of our screen are the factors
 8 that are selected by FA using--and they've
 9 presented their data with loss experience
 10 only, they exclude ALAE, and on the bottom
 11 part of our screen here we see GISA's selected
 12 factors and various averages, but the box are
 13 the selections made by GISA, and they're using
 14 a weighted average of all periods. And when
 15 you compare the factors that GISA has
 16 selected, 1.134, and then you compare the
 17 factors that FA has selected, and you go
 18 through--I mean, barring that there was
 19 rounding, the GISA presents three decimal
 20 places, but if you, you know, work through
 21 that, you'll see that they appear to be
 22 identical. It appears that FA took the GISA
 23 factors for each of these periods from 12 to
 24 18 as they go across here that are based on
 25 losses and ALAE and use those. So rather than

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1 taking, which they present, the weighted
 2 average of all periods, FA presents that
 3 number--so for example, in the 12 to 18 period
 4 the number is 1.1274, it's kind of in the
 5 middle of all that, but they didn't select
 6 that. They picked up GISA's, based on 1.134.
 7 So it would appear that FA used GISA's
 8 factors, which are based on losses and ALAE--
 9 that was not stated in the filing, and they
 10 presented the experience based on losses only,
 11 chose not to use them but, it appears, used
 12 the GISA factors, and that would be the case
 13 for all the periods except for the 6 to 12
 14 period. GISA's factor in the box is 1.322,
 15 their factor reflects seasonality, and in the
 16 case of FA, they've selected 1.663, which is
 17 different--this is the only column that
 18 appears to be different than GISA, and as a
 19 result they have higher loss development
 20 factors. So I hope that explains some of the
 21 selection that has been made by FA and these
 22 higher loss development factors can contribute
 23 to higher loss trend rates and it can explain
 24 part of the differences between the factors
 25 that we're determining--loss trend rate

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1 factors that we're determining and those that
 2 FA are determining.
 3 MS. GLYNN:
 4 Q. And the differences in your loss development
 5 factors, are they material to the findings?
 6 MS. ELLIOTT:
 7 A. Yes. They can be. I mean, we had a
 8 discussion at the prior--in our report, we
 9 raised there were differences with accident
 10 benefits, and although accident benefits is a
 11 small coverage, there are some larger
 12 differences there. And in this case here, I
 13 believe that these larger factors that FA is
 14 selecting, that are generally larger than if
 15 they had used their own experience, it's
 16 leading to higher loss development factors
 17 that are leading to higher loss trend rates
 18 and a higher rate indication, yeah.
 19 MS. GLYNN:
 20 Q. Ms. Elliott, can you explain the time period
 21 used by Facility and how that is different
 22 from the time periods that Oliver Wyman used?
 23 MS. ELLIOTT:
 24 A. Yes. So Facility, we've used 20 years of
 25 experience, and in their approach they select

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1 a regression--they choose to include a reform
 2 parameter in their model for the August 2004
 3 changes, and then as a result of that, they
 4 are effectively splitting their time period of
 5 the 20 years between--prior to this August
 6 2004 and after, so effectively, they have an
 7 eight-and-a-half year period of what they're
 8 using to select their loss trend rate, and
 9 because they split this 20-year period by
 10 these August 2004 reforms, it effectively
 11 forces FA into--now they just have eight-and-
 12 a-half years from the August--from the second
 13 half of 2004 to the end of 2012, they have a
 14 shorter period of time now to use this eight-
 15 and-a-half years. In our work, Oliver Wyman,
 16 we select 10 years of experience and five
 17 years of experience in making our selections,
 18 yeah.
 19 MS. GLYNN:
 20 Q. In Mr. Doherty's testimony, he stated that he
 21 thought Oliver Wyman agreed that there was a
 22 change in the bodily injury frequency trend
 23 beginning in 2004. Is that correct?
 24 MS. ELLIOTT:
 25 A. No. That is not correct. That was a

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1 misstatement. Well, they stated what they
 2 understood, but that's not a correct
 3 understanding, yeah.
 4 MS. GLYNN:
 5 Q. So do you agree that there was a change in the
 6 bodily injury frequency trend?
 7 MS. ELLIOTT:
 8 A. No. We don't agree, and what we were trying
 9 to express--we made a typo in a question that
 10 we presented to FA, and what we were trying to
 11 ask FA was that we were seeing in other
 12 provinces that there was a decline in the
 13 frequency rate that started in around
 14 2000/2001, and we were seeing this in other
 15 provinces, so the purpose of the question was
 16 to ask FA were they seeing a decline in the
 17 frequency rate starting in that 2000 period,
 18 and instead of typing 2000, we typed 2004 and
 19 of course, you know, rightly so, FA didn't
 20 understand our question.
 21 MS. GLYNN:
 22 Q. Facility has also stated that its fits are
 23 superior to Oliver Wyman's, can you comment on
 24 that?
 25 MS. ELLIOTT:

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1 A. Well, I don't accept the description that any
 2 of the fits with this commercial data are
 3 superior, great, good--any word, adjective
 4 you'd like to use. The data is very difficult
 5 to work with. In terms of the frequency fit,
 6 I think ours R square and FA's R square,
 7 they're really--I can't see that their fit is
 8 any better, we're looking at a frequency trend
 9 rate running from -5 to -6 percent range, and
 10 in terms of the severity that FA has presented
 11 and describing that as superior, I wouldn't
 12 agree. We looked at how the claims changed
 13 from \$75,000 to \$35,000, these average costs,
 14 very difficult to fit, and FA has stated in
 15 response to our questions that they struggled
 16 with the fit, that the P-Tests were poor--the
 17 T-Tests were poor for some of the parameters
 18 in their model. In fact, in the prior review
 19 from FA, it found that they couldn't determine
 20 what the fit was, they couldn't use the data.
 21 So describing any of these trend models as
 22 superior I don't think is a really appropriate
 23 description. There's a lot of uncertainty in
 24 the loss trend rates.
 25 MS. GLYNN:

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1 Q. Okay, and these loss development factors that
 2 we just discussed that were higher in
 3 Facility's than Oliver Wyman's, how do they
 4 come into play in this superior fit
 5 discussion?
 6 MS. ELLIOTT:
 7 A. Well, if we're taking into question that
 8 underlying data that's used to calculate these
 9 loss trend rates, so if we're taking into
 10 question those loss development factors, then
 11 it's pretty hard to have a discussion about a
 12 superior fit if you're questioning the data
 13 that's used in the model to calculate this
 14 superior fit, so.
 15 MS. GLYNN:
 16 Q. Are you trying to pick a loss trend model that
 17 has the best R squared?
 18 MS. ELLIOTT:
 19 A. No, and I think that's important to reiterate
 20 here. What we're looking for is to strike a
 21 balance between responsiveness to the data and
 22 stability for each review that we prepare--
 23 each loss trend review that we prepare each
 24 six months. So we're not trying to look at it
 25 and say, okay, I've got the best R square,

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1 this model is an R square of 45 and it's
 2 better than my other R square of 42, so I'm
 3 going to pick it, or whatever the number is.
 4 We're not attempting to do that here because
 5 the--with different time periods, different
 6 exclusions, the results change dramatically.
 7 So what we're trying to do is have a
 8 responsive and stable approach, and strike a
 9 balance of that, and that's why we have an
 10 averaging approach, yeah.
 11 MS. GLYNN:
 12 Q. I'd like to bring up Exhibit 4 from the
 13 Actuarial Memorandum. It's actually
 14 Information Item No. 5. From last year's
 15 filing, sorry. Thank you. And Ms. Elliott,
 16 can you bring us through the differences in
 17 FA's selected loss trends from this year and
 18 last year?
 19 MS. ELLIOTT:
 20 A. Okay. All right, so the--I guess there's a
 21 couple of differences in--from the prior
 22 review and this review. First is the time
 23 periods that are used. There are different
 24 time periods used in last year's review
 25 compared to this year's review, and the time

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1 periods are different for the different
 2 coverages in last year's review. A second
 3 issue is that in last year's review, FA found
 4 that the reform factor for the 2004 reforms
 5 had no impact on claim costs; this year they
 6 have determined that they do have a very large
 7 impact. Another item is that in last year's
 8 review, for bodily injury severity and for
 9 accident benefits, FA found that it couldn't
 10 figure out a loss trend rate and so chose to
 11 use a private passenger experience for
 12 accident benefits, for both frequency and
 13 severity, and in the case of bodily injury, it
 14 chose to use a private passenger for severity.
 15 And then there's one final difference--is that
 16 for uninsured auto last year FA used the
 17 third-party liability selection, and in this
 18 year's filing, they've chosen to use the
 19 accident benefits selection.
 20 MS. GLYNN:
 21 Q. So that's the differences in how they chose
 22 their trend rates. Can you summarize the
 23 differences in the value of those loss trend
 24 rates?
 25 MS. ELLIOTT:

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1 A. Yes. So last year, they were calculating a
 2 past trend rate of 2.4 for BI, a future of
 3 4.0, and just as a reminder we looked at
 4 earlier, the lost cost from 2011 to 2012
 5 decreased by 17 percent--we talked about that
 6 earlier. So even though we have a decrease in
 7 the loss trend rates, FA has now presented in
 8 this filing a higher trend rate of +4.4.
 9 Property damage last year was 3.8 for the
 10 past, 1.9 for the future. Their new trend
 11 rate is 2.4 percent and in fact, the lost cost
 12 from 2011 to 2012 decreased by about 12
 13 percent. And for accident benefits, last year
 14 they had 1.6 percent for a past rate and then
 15 they had 4.2 for a future rate, and this year
 16 they have +7.6 and the lost cost this year for
 17 this coverage also decreased for commercial
 18 auto by seven percent.
 19 MS. GLYNN:
 20 Q. Can you explain how Facility's rate
 21 indications would change if they had followed
 22 the Board's guideline, loss trend rates
 23 developed by Oliver Wyman?
 24 MS. ELLIOTT:
 25 A. Yes. It's presented in our report. It would

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1 decrease by approximately 27 percentage
 2 points.
 3 MS. GLYNN:
 4 Q. Thank you. Going to change gears here now,
 5 and we're going to move into the credibility
 6 standard, and this was identified as an issue
 7 in your report. Can you explain why the
 8 change in the number used for the credibility
 9 standard is an issue?
 10 MS. ELLIOTT:
 11 A. As I think--some of our introductory comments
 12 that I'd made, one of the things that we're
 13 looking for is consistency in the prior report
 14 and the current filing, and in this filing FA
 15 has changed its full credibility standard, so
 16 how many claims you need to say that your data
 17 is fully credible and reliable, and in this
 18 filing FA has lowered that number. So they've
 19 lowered it, which gives more weight to its own
 20 experience for taxis, and as a result, it
 21 increases their rate indication. But the
 22 issue is, for us, is that there's a change in
 23 the filing without any support for the change
 24 in that standard, so that was raised as an
 25 issue in our report.

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1 MS. GLYNN:
 2 Q. And what impact does the change in the
 3 credibility standards have on the rate
 4 indications?
 5 MS. ELLIOTT:
 6 A. It's estimated about--that change caused a
 7 seven percentage difference in the rate
 8 indication. So if they'd used the standards
 9 from last year, it would be about seven
 10 percentage points lower, the rate indication.
 11 MS. GLYNN:
 12 Q. Okay. Complement of credibility was also
 13 identified an issue. So can you detail the
 14 difference in the complement of credibility
 15 applied by yourself and by Facility?
 16 MS. ELLIOTT:
 17 A. Okay. Now we don't have any objection with
 18 the methodology that FA is using for the
 19 complement of credibility approach. Our issue
 20 is that FA is assuming that their current
 21 rates are inadequate. So in the prior filing,
 22 we had done our analysis and we estimated the
 23 rate indication for FA could support a +50
 24 percent change. FA proposed a +50 percent
 25 increase, and the Board approved a +50 percent

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1 increase, so in our view there was no rate
 2 inadequacy. The 50 percent change that was
 3 approved was supported and there would be no
 4 rate inadequacy, but in this rate filing, FA
 5 has come forth and said we have a rate
 6 inadequacy from our prior work, and we don't
 7 agree with that assumption that FA is putting
 8 forth that their rates are inadequate.
 9 MS. GLYNN:
 10 Q. And what impact does this change have on the
 11 rate indications?
 12 MS. ELLIOTT:
 13 A. So if we make the assumption that the prior
 14 rates, with the rate level that the Board
 15 approved, that the rates were adequate, the
 16 indication was +50, the Board approved +50--if
 17 we, you know, assume that's correct, then that
 18 change, making that assumption, that would
 19 reduce the rate level indication that FA has
 20 presented by about 24 percentage points.
 21 MS. GLYNN:
 22 Q. Okay. I'd like to bring up Page 20 of your
 23 report, Ms. Elliott, and can you summarize--
 24 here you talk about uncertainty, and I'd like
 25 you to summarize those issues of uncertainty

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1 for us.
 2 MS. ELLIOTT:
 3 A. So I guess the first issue that's important to
 4 remember if that we're dealing with very
 5 limited data. We're dealing with taxi data,
 6 very small volume, and it's volatile, so that
 7 adds considerable uncertainty to the
 8 calculated rate indications, and there are
 9 some other factors that--when you determine
 10 what the rate indications are, that we also
 11 have to think about the uncertainty of those
 12 factors, and one is--the loss development
 13 factor, is that FA applies to its own taxi
 14 experience, their base--so FA is including the
 15 last five years of experience in determining
 16 its rate indications, so from 2008 to 2012,
 17 the taxi losses, and it has to estimate what
 18 those costs will ultimately be with these loss
 19 development factors. But the loss development
 20 factors that it uses to apply to the taxi
 21 experience, it's based on its non-private
 22 passenger experience, and this is calculated
 23 for--I think we can go to the next page,
 24 please, this is calculated separately for
 25 bodily injury and property damage using that

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1 non-PPV experience, but then in applying it,
 2 FA has to combine the bodily injury and the
 3 property damage together, which forms third-
 4 party liability, TPL, and so some assumptions
 5 have to be made, how you weight that BI and PD
 6 using the non-PPV now to apply to taxi
 7 experience. So the bottom line is you're
 8 applying loss development factors based on
 9 non-PPV data to taxis and have to make some
 10 assumptions on applying that, how you weight
 11 it together, it's a different experience. So
 12 this adds to the uncertainty of the findings.
 13 Another item is the claim count development
 14 factors. The factors that are used by FA are
 15 the industry factors, they're not based on
 16 FA's own taxi experience--and again, that's
 17 just due to the limited data, it adds to the
 18 uncertainty of the findings. And another item
 19 is the loss trend rates, and even if you were
 20 to accept the loss trend rates that FA has
 21 calculated, and if we thought they were right,
 22 we're taking loss trend rates based on
 23 commercial data and applying it to taxi data;
 24 that adds to uncertainty. And on top of that,
 25 from these commercial loss trend rates, we

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1 have bodily injury and we have property
 2 damage, and have to combine that together,
 3 weight that together to apply in the TPL
 4 because we only have TPL taxi experience. So
 5 even if you accept FA's commercial loss trend
 6 rates, we're applying it to taxi data,
 7 uncertainty, and we have to combine the BI and
 8 PD into TPL to apply it because you only have
 9 taxi as TPL--more uncertainty.
 10 MS. GLYNN:
 11 Q. Ms. Elliott, I'd also like to bring up the
 12 response to Question 3 from Facility dated
 13 April 9th.
 14 MS. ELLIOTT:
 15 A. Okay.
 16 MS. GLYNN:
 17 Q. And I wonder if you can explain the charts
 18 that we see here?
 19 MS. ELLIOTT:
 20 A. Sure. So in this question, we're asking FA to
 21 present what were their estimates for taxi
 22 experience, what the costs will ultimately be
 23 from the prior filing to this filing, so the
 24 top matrix is the TPL coverage and the bottom
 25 one is AB. Well, we can just focus on TPL.

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1 So the third column, then, we have the
 2 accident year, we've got the claims that are
 3 reported at the end of 2012 that was provided
 4 in last year's report, and what they estimated
 5 the ultimate cost would be. So let's look at
 6 the middle row, 2009. At the end of 2012--
 7 sorry, June 2012, in last year's filing they
 8 had that data, they estimated the cost at \$2.6
 9 million. One year later in this filing, going
 10 across that row, their estimate of what the
 11 ultimate cost would be is \$2.3 million, and
 12 that difference in red on the right is
 13 \$304,000. That's a 12 percent decline. So
 14 all those red numbers mean, in the far column,
 15 that the costs that they estimated this year,
 16 one year later, for taxis is less than what
 17 they estimated last year. And this again adds
 18 to the uncertainty of the finding, the changes
 19 that we have from year to year. It's very
 20 hard to estimate what those costs are, it adds
 21 to the uncertainty. So it's just another
 22 example.
 23 MS. GLYNN:
 24 Q. Ms. Elliott, is there anything else that you
 25 would like to cover?

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1 MS. ELLIOTT:
 2 A. Let me look at my notes here, see if I missed
 3 anything from. I think what we have here is a
 4 filing that's presented with a 50 percent rate
 5 increase, and the FA's taxi experience has
 6 been poor, but we've just, last year,
 7 reviewed--the Board--and we reviewed the
 8 filing and the Board approved a 50 percent
 9 rate increase for taxi experience. So we
 10 thought that the poor experience was addressed
 11 with that large rate increase last year. So
 12 now we have FA presenting another rate filing
 13 with a proposed increase north of 50 percent
 14 and the suggestion that they will be coming in
 15 for additional rate increases next year again.
 16 And so I think the--you know, the key concern
 17 is what can be done to curb these costs,
 18 contain these rate increases? Because they're
 19 not sustainable. And so I would say that it's
 20 important for all parties to look at what can
 21 be done to contain the rate increases that are
 22 being proposed, and our focus has been on loss
 23 trend rates and the losses, but there are
 24 other components to the whole premium that's
 25 being charged. And I would suggest that it

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1 would be very helpful if FA took the
 2 initiative to look at the costs for
 3 underwriting, look at the costs for claims
 4 handling, look at the costs for commission--
 5 look at those costs and say how can I find a
 6 way to bring down this premium? And the FA,
 7 in its role, could take the initiative to find
 8 ways other than one big rate change, you know,
 9 last year, asking for another one this year
 10 and suggesting that they're coming back next
 11 year. I think it's not sustainable, the rate
 12 increases that are proposed here, so somebody
 13 has to sit down and think about what other
 14 ways can--what else can be done to contain
 15 these costs, and it cannot be just one big
 16 rate increase after another, so.
 17 MS. GLYNN:
 18 Q. Ms. Elliott, we have covered out material much
 19 quicker than we had estimated. So we are
 20 actually ready to turn you over to Mr. Stamp.
 21 MS. ELLIOTT:
 22 A. Okay.
 23 MS. GLYNN:
 24 Q. We had discussed taking a break at 11:00, so I
 25 think the timing worked out pretty good.

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1 CHAIRMAN:
 2 Q. So we'll adjourn until 11:25, is that correct?
 3 MS. GLYNN:
 4 Q. Does that work?
 5 CHAIRMAN:
 6 Q. That agreed?
 7 STAMP, Q.C.:
 8 Q. That's fine.
 9 MS. GLYNN:
 10 Q. Yes. Thank you.
 11 CHAIRMAN:
 12 Q. Okay.
 13 (RECESS)
 14 CHAIRMAN:
 15 Q. So I believe it's over to you, Mr. Stamp, if I
 16 -
 17 STAMP, Q.C.:
 18 Q. That's right. We're taking our cross-
 19 examination first.
 20 CHAIRMAN:
 21 Q. Yes.
 22 MS. PAULA ELLIOTT, CROSS-EXAMINATION BY MS. JENNIFER
 23 NEWBURY
 24 MS. NEWBURY:
 25 Q. Thank you. Hi, Ms. Elliott. I will be asking

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1 the questions to--for you this morning. I'm
 2 going to first start with the general
 3 questions, probably more of an overview on the
 4 trend selection process, and I wonder if you
 5 can state what your goal or objective is in
 6 the trend selection process that you have
 7 chosen?
 8 MS. ELLIOTT:
 9 A. Our goal in it?
 10 MS. NEWBURY:
 11 Q. Yes.
 12 MS. ELLIOTT:
 13 A. Well, we're preparing our reports, our review,
 14 for the Board, these are Board guidelines, and
 15 these are loss trend rates that are provided
 16 for insurers to use if they so choose to, and
 17 we're trying to provide loss trend rates that
 18 are both responsive to the data and stable
 19 from review to review that we prepare.
 20 MS. NEWBURY:
 21 Q. And the actual model that you've chosen, the
 22 trend selection process that you use, is this
 23 your own as opposed to process described--
 24 prescribed by the Board or anyone else?
 25 MS. ELLIOTT:

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1 A. That's correct. The Board does not prescribe
 2 the process, yeah.
 3 MS. NEWBURY:
 4 Q. Okay, and there were no directions or
 5 guidelines in terms of the detail or the
 6 content of that process?
 7 MS. ELLIOTT:
 8 A. That's correct.
 9 MS. NEWBURY:
 10 Q. And now I understand that you have done
 11 similar things for other jurisdictions such as
 12 the Nova Scotia Board. Is the trend selection
 13 process that you use in your trend reports for
 14 Nova Scotia also something that you've derived
 15 on your own?
 16 MS. ELLIOTT:
 17 A. Yes. We're not given any direction from the
 18 Nova Scotia Board in that process.
 19 MS. NEWBURY:
 20 Q. Okay. I'm going to refer to Page 11 of your
 21 report, the May 16th, 2004 report, and in that
 22 report you state that "Oliver Wyman's selected
 23 loss trend rates are based on various
 24 regression analysis over different periods of
 25 time spanning ten years or less, with data

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1 exclusion and use of parameters that we find
 2 reasonable," and I understand from your
 3 evidence and from your report generally that
 4 you are using only ten years, is that correct?
 5 MS. ELLIOTT:
 6 A. The loss trend rates that we present in our
 7 report as using ten years and five years of
 8 experience.
 9 MS. NEWBURY:
 10 Q. And five years.
 11 MS. ELLIOTT:
 12 A. But within the data that we look at, we have
 13 15 years of experience.
 14 MS. NEWBURY:
 15 Q. Okay. So you look at 15 years of experience
 16 for data, but the loss trend rates are based
 17 on ten years and five years?
 18 MS. ELLIOTT:
 19 A. That's correct.
 20 MS. NEWBURY:
 21 Q. Okay, and what would be the problem with using
 22 something greater than ten years for the trend
 23 rate analysis?
 24 MS. ELLIOTT:
 25 A. I don't know if you'd call it a problem, it's-

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1 -we've taken an approach here to look at ten
 2 years or less, yeah.
 3 MS. NEWBURY:
 4 Q. Okay. So if you had chosen, say, 12 years or
 5 15 years, would that be an equally valid
 6 approach?
 7 MS. ELLIOTT:
 8 A. I think the issue when you choose a time
 9 period, you want to be consistent in that
 10 review for that particular set of data that
 11 you're reviewing, from review to review.
 12 MS. NEWBURY:
 13 Q. Okay. So if you had decided, for example, a
 14 number of years ago, I'm going to choose ten
 15 years, you're saying that you should use that
 16 each and every year afterward?
 17 MS. ELLIOTT:
 18 A. No. I think that's maybe a rigid statement, to
 19 say that we would never consider anything
 20 else. We do, we have 15 years of data, and I
 21 definitely will run the button looking at all
 22 15 years and many other ways, and sometimes I
 23 just look at the top five, the middle five,
 24 the bottom five. We run many looks at it, but
 25 one of the things that we have in this

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1 commercial data is due to its volatility and
 2 uncertainty, we're trying to be both--strike a
 3 balance between the responsiveness and the
 4 stability to our findings. So in this
 5 particular circumstance, we're choosing to
 6 look at ten years.
 7 MS. NEWBURY:
 8 Q. Okay, and was there anything about the
 9 particular analysis itself that confirmed that
 10 you would keep the ten-year approach for this
 11 particular review?
 12 MS. ELLIOTT:
 13 A. Not that I recall, that there was something
 14 specific, no.
 15 MS. NEWBURY:
 16 Q. Okay. So basically this choice of ten years
 17 was basically a pre-determined choice because
 18 you've used this in previous reviews, you
 19 wanted to stick with that approach?
 20 MS. ELLIOTT:
 21 A. What we like to do, as I said, is we look at
 22 all the data, all the experience, the 15
 23 years, and one of the things that I find quite
 24 interesting is to slice it off to look at the
 25 first five years, the middle five years and

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1 the most recent five years, and see what those
 2 findings are. And also, you know, looking at
 3 the ten years of experience and the five years
 4 of experience, we're trying to see are there
 5 patterns that are changing, and we're
 6 reviewing the experience to see, to try to
 7 measure, what are the patterns, what are the
 8 changes going on. And if there is something
 9 that we found where we felt the data was
 10 credible enough and it was telling us
 11 something, that perhaps ten years was wrong,
 12 perhaps we should only be looking at five
 13 years, then we would take that into
 14 consideration and we would explain our
 15 rationale for the changes. So in this
 16 circumstance, we're starting off with ten
 17 years and five years in our review, and if
 18 evidence was to present itself that, you know,
 19 we thought, gee, we should do something
 20 different, then we certainly would consider
 21 that. And we also present our report to the
 22 insurers for their comment, and if we had
 23 comments in from the insurers that said hey,
 24 wait a minute, we think you should be doing
 25 this, then we would look at that and consider

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1 that, but we haven't received that.
 2 MS. NEWBURY:
 3 Q. So a few questions arising out of that, Ms.
 4 Elliott. First of all, you've mentioned that
 5 you use 15 years of data, why not use 20? I
 6 understand that there would be 20 years of
 7 data available to you.
 8 MS. ELLIOTT:
 9 A. You could go back farther than 20. I mean,
 10 you can get easily 25 years from the GISA
 11 portal. It's our choice to look at the last
 12 15 years. We don't think that going back
 13 from--I think that would be 1993 to 1998, that
 14 that is really relevant today when we're
 15 trying to set rates that will be in effect in
 16 2015.
 17 MS. NEWBURY:
 18 Q. And you mentioned that you--when you look at
 19 the 15 years of data, you segment it, the
 20 earliest five years, the middle five years and
 21 the most recent five years. Have you actually
 22 done an analysis of a 15-year trend rate?
 23 MS. ELLIOTT:
 24 A. Yes. We can easily--our model is very
 25 flexible, it's very sophisticated. We can do

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1 an analysis of 15 years, 12 years, 13 years, 7
 2 years. Any number, we do it.
 3 MS. NEWBURY:
 4 Q. Right. I understand from your evidence this
 5 morning that you do, indeed, have a flexible
 6 model, but did you actually do the 15-year
 7 trend analysis in this case?
 8 MS. ELLIOTT:
 9 A. Yes. I spent considerable time going through
 10 the analysis. We run many, many versions, and
 11 this data actually takes a lot of time to
 12 select and to review and understand that
 13 patterns in the data, because it's so
 14 volatile. I can make a comparison for you.
 15 In other provinces like Ontario where we have
 16 a large sample of data, it is much easier
 17 because we get more consistent trends. Here,
 18 because the data is so thin, we're dealing
 19 with so few claims--I said there's about 120
 20 or so a year, it's very difficult, it's very
 21 challenging to pick trends. So we end up
 22 looking at a lot of different alternatives
 23 here because it's so challenging.
 24 MS. NEWBURY:
 25 Q. Okay, and in the 15-year trend analysis that

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1 you did, how many outliers did you exclude,
 2 how many data points did you exclude?
 3 MS. ELLIOTT:
 4 A. I can't recall that.
 5 MS. NEWBURY:
 6 Q. Okay. Have you done any--selected trend rates
 7 that are based on other than ten or five
 8 years?
 9 MS. ELLIOTT:
 10 A. In some circumstances. Are you referring to
 11 commercial auto here in Newfoundland?
 12 MS. NEWBURY:
 13 Q. Just generally speaking. I'm trying to ask,
 14 now, general questions about your approach and
 15 the choices that you've made, and you've
 16 indicated that you generally pick a consistent
 17 approach. I'm wondering if, in other
 18 jurisdictions, you've provided reports and
 19 produced reports based on a trend analysis
 20 other than for ten years and five years.
 21 MS. ELLIOTT:
 22 A. Yes. Definitely different coverages that are--
 23 say like collision coverage, we would
 24 typically use fewer years, definitely, there.
 25 Yeah. For a variety of reasons or external

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1 forces, sometimes data. There could be
 2 changes that have gone on in a certain
 3 province. So yes, we would definitely
 4 consider the environment when we're running
 5 our analysis, yeah.
 6 MS. NEWBURY:
 7 Q. Okay, and have you ever done this for the
 8 Board here for a Newfoundland benchmark?
 9 MS. ELLIOTT:
 10 A. I don't have at my fingertips all the reports
 11 that we've prepared, but it's certainly
 12 possible that we might have.
 13 MS. NEWBURY:
 14 Q. And in doing your 15-year trend analysis,
 15 which I understand that you did do in your
 16 review for this particular rate application,
 17 did you determine whether there was a
 18 consistent trend or more than one trend?
 19 MS. ELLIOTT:
 20 A. Well, we did not choose a 15-year trend in
 21 this, and I don't have that number, I don't
 22 recall what that value was, yeah.
 23 MS. NEWBURY:
 24 Q. Okay.
 25 MS. ELLIOTT:

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1 A. I would hazard a guess given the--and I guess
 2 it's an educated guess, given the differences
 3 that we've seen in the loss trend rates for
 4 this commercial auto in Newfoundland, how it
 5 can change so significantly whether you're
 6 using ten years of data, five years of data,
 7 exclude this point or exclude that point--I'm
 8 pretty sure we'd get a very different number
 9 if we looked at 15 years as well.
 10 MS. NEWBURY:
 11 Q. And you have no sense as to whether that would
 12 be a higher number or a lower number?
 13 MS. ELLIOTT:
 14 A. Not off the top of my head. I cannot recall.
 15 MS. NEWBURY:
 16 Q. If you have a situation where you don't think
 17 the trend has changed over a period of 20
 18 years, would you not get a better estimate of
 19 the trend if you use all the 20 years of data
 20 if you believe that there is no change in the
 21 trend?
 22 MS. ELLIOTT:
 23 A. Well, if the data is stable enough, then
 24 you're going to see more consistency or you
 25 can develop and understand the rationale for

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1 the changes in the data. So if you have
 2 coverage where there've been no reform
 3 changes, there has been no weather issue,
 4 everything is nice and smooth, then you can
 5 often run a 20-year trend and a five-year
 6 trend because that data is so stable and large
 7 and voluminous that you get pretty consistent
 8 trends. Certainly you can do that, but that
 9 is not the case with this data. This data is
 10 not stable at all.
 11 MS. NEWBURY:
 12 Q. Okay, and you're referring to the commercial
 13 industry data?
 14 MS. ELLIOTT:
 15 A. Yes. That's been used here, yes.
 16 MS. NEWBURY:
 17 Q. Yeah, and I understand from your evidence this
 18 morning, and correct me if I'm wrong, but my
 19 understanding is that the more recent the
 20 data, the more volatile it is. Is that
 21 correct?
 22 MS. ELLIOTT:
 23 A. No. Not the more recent the data, the more
 24 volatile it is. That's not what we're saying
 25 in terms--the estimates of what the losses are

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1 for the more recent experience are subject to
 2 change. That's different than being volatile.
 3 MS. NEWBURY:
 4 Q. Okay, and when you're referring to, you know,
 5 the concerns of using 20 years of data, about
 6 the volatility, which type of volatility were
 7 you referring to?
 8 MS. ELLIOTT:
 9 A. Well, in looking at the 20-years of data, and
 10 we had a chart out earlier today that I'd
 11 highlighted the yellow, and you can see the
 12 changes in the average claim size, that it
 13 went up and down for really all the periods.
 14 So you can see that volatility in the change
 15 in that average severity amount over the
 16 entire period.
 17 MS. NEWBURY:
 18 Q. So the change in the average severity, and is
 19 this based on commercial-industry data or is
 20 it taxi? I'm just trying to make sure I
 21 understand.
 22 MS. ELLIOTT:
 23 A. Well, we'll make that clear here. The loss
 24 trend rates that FA used in its rate filing is
 25 based on commercial industry data in

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1 Newfoundland.
 2 MS. NEWBURY:
 3 Q. Yeah, and that's the volatility that you're
 4 referring to now?
 5 MS. ELLIOTT:
 6 A. There is volatility in that commercial data,
 7 yes.
 8 MS. NEWBURY:
 9 Q. Okay, and so you're saying that the volatility
 10 that would cause you some concerns in using
 11 all 20 years of data is due not necessarily to
 12 how the claims costs are assessed or
 13 estimated, which would be a recent type of an
 14 issue--the more recent that type of data, the
 15 more volatile that would be, but you're saying
 16 it's due to the fact that there have been
 17 larger, you know, changes, fluctuations over
 18 the years?
 19 MS. ELLIOTT:
 20 A. Right. There's two issues with the data, and
 21 I'll reiterate what we had said earlier today.
 22 The data for each accident year changes. So
 23 once accident year, we looked at the average
 24 severity, it was \$75,000, one year later it
 25 was \$35,000. So there's a lot of volatility

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1 in the data. The other issue is that when
 2 we're dealing with these loss amounts that
 3 we're trying to fit a trend line over, they're
 4 estimates, they're subject to change, so data-
 5 -it can take a number of years for large
 6 claims to settle. So the more recent periods
 7 of time are subject to more change in the
 8 estimates, not necessarily the volatility for
 9 that period. The mix of the small or the
 10 large claims are what they are for that year,
 11 but it's the estimates of those claims for the
 12 more recent years that are subject to change
 13 as those claims are handled and settled.

14 MS. NEWBURY:
 15 Q. Okay, and then back to the 20-years issue, why
 16 you would not use 20 years of data. So the
 17 volatility that you're referring to, you're
 18 not saying that there are changes in the
 19 trends, that there was one trend earlier and a
 20 different trend later on. You're saying that
 21 it was just too volatile to be reliable?

22 MS. ELLIOTT:
 23 A. No. I'm not saying that it's too volatile to
 24 be reliable, I'm not say that--what we're
 25 expressing is that over the 20-year period,

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1 over the 10-year period, 15-year period or 5-
 2 year period, there is a lot of volatility in
 3 that average claim size.

4 MS. NEWBURY:
 5 Q. Okay, and but that same volatility will be
 6 there for more--a shorter period of time than
 7 a longer period of time?

8 MS. ELLIOTT:
 9 A. I think what you're--if I'm understanding you
 10 correctly, the more recent estimates, the
 11 claims are newer.

12 MS. NEWBURY:
 13 Q. Yeah.

14 MS. ELLIOTT:
 15 A. So if the claim is from 2002, those estimates
 16 are the more recent estimates and, you know,
 17 they're subject to--those claims are open,
 18 they have to be settled and closed. That's
 19 different than the volatility aspect that
 20 we're getting at.

21 MS. NEWBURY:
 22 Q. But are you saying that one type of volatility
 23 is in the first 15 of that 20 years, and that
 24 a different type of volatility occurs in the
 25 last five of the 20 years?

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1 MS. ELLIOTT:
 2 A. No, no.

3 MS. NEWBURY:
 4 Q. Okay.

5 MS. ELLIOTT:
 6 A. The change from year to year--one is a stable
 7 issue, you don't really have stable data. So
 8 one is the change from year to year. We had a
 9 very good example earlier, I'm going to repeat
 10 it again. We had \$75,000 one year, \$35,000
 11 the next. That's volatility from year to
 12 year. Another concern in dealing with this
 13 data, and with bodily injury data, it takes a
 14 long time for these claims to settle and
 15 close. Some of the claims are complicated,
 16 someone could be a paraplegic, there's death
 17 injuries, all sorts of claims that are very
 18 difficult to handle and close and they take a
 19 long time. So there could be a claim that's
 20 from seven years, ten years ago, even 15 years
 21 ago that still isn't closed. So the estimates
 22 of the claims are subject to change over time.

23 MS. NEWBURY:
 24 Q. Right, and that's the second type of
 25 volatility, but the -

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1 MS. ELLIOTT:
 2 A. And that applies to all lines of business,
 3 which is different than the volatility. If we
 4 look at bodily injury in Ontario, much larger
 5 database, it doesn't have that same volatility
 6 from year to year. We don't look at one year
 7 the average is 75 and the next is 35; they're
 8 not the kind of numbers we have to deal with
 9 there, but in both cases, the estimates for
 10 2012--at December 2012, when we look at that
 11 data, it's tough to estimate in Ontario, in
 12 Alberta, in Newfoundland. New claims are
 13 subject to change because the claim is opened,
 14 the claims adjuster--you know, they haven't
 15 closed it. So that issue applies no matter
 16 what line of business we're looking at.

17 MS. NEWBURY:
 18 Q. Sure, and I do understand what you're saying.
 19 I'm just trying to find out what is it about
 20 the volatility--not the difficulty in
 21 estimating the claims costs, but the
 22 volatility over time, and it sounds like it's
 23 from the small sample size here in this
 24 province. What is it about that volatility
 25 that would suggest that you shouldn't look at

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1 a full 20 years? Would that not actually help
 2 you in dealing with the volatility issue, if
 3 you look at a larger amount of data?
 4 MS. ELLIOTT:
 5 A. No. No, because then--I mean, we had an
 6 example earlier, I can find it again. You
 7 know, we had -14, +95, -59, +44, -26, +19.
 8 Having more of that doesn't help me.
 9 MS. NEWBURY:
 10 Q. But it's not eliminating the volatility
 11 problem to ignore the first five or ten years
 12 of that 20-year period.
 13 MS. ELLIOTT:
 14 A. It's certainly not eliminating the volatility
 15 problem. You can't eliminate the volatility
 16 problem.
 17 MS. NEWBURY:
 18 Q. Right.
 19 MS. ELLIOTT:
 20 A. You know, if you have data that's up and down
 21 like a yo-yo, like +95, -14, having more of it
 22 doesn't make it any better.
 23 MS. NEWBURY:
 24 Q. Okay, and having less of it doesn't make it
 25 any better either?

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1 MS. ELLIOTT:
 2 A. Sure doesn't. No, sure doesn't.
 3 MS. NEWBURY:
 4 Q. Ms. Elliott, would you be able to provide any
 5 benchmark rate filings for this province in
 6 the last ten years where you did not use the
 7 ten and five years as your--for bodily injury
 8 only?
 9 MS. ELLIOTT:
 10 A. I'm sorry--benchmark rate filings?
 11 MS. NEWBURY:
 12 Q. Yeah. Sorry, not your--your reports for
 13 benchmark reports--your benchmark reports.
 14 MS. ELLIOTT:
 15 A. Are you referring to loss trend reports?
 16 MS. NEWBURY:
 17 Q. No. So twice a year, I understand that you
 18 provide a benchmark report for the Board, and
 19 you've been doing that for a number of years.
 20 MS. ELLIOTT:
 21 A. Loss trend reports, not -
 22 MS. NEWBURY:
 23 Q. Loss trend reports.
 24 MS. ELLIOTT:
 25 A. Yeah.

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1 MS. NEWBURY:
 2 Q. Okay. We've been referring to them as
 3 benchmark reports, but it's your report to the
 4 Board twice a year, the end of June, the end
 5 of December each year, and you propose what
 6 the trend rates are, is that correct?
 7 MS. ELLIOTT:
 8 A. We provide a report that then is provided to
 9 insurers for their comment, if they'd like to
 10 make changes. I have to acknowledge there
 11 have been very few comments, and I'm sure
 12 there's copies of all those reports that could
 13 be provided, um-hm.
 14 MS. NEWBURY:
 15 Q. And those reports are provided for the
 16 purposes of setting the benchmark rates, is
 17 that correct?
 18 MS. ELLIOTT:
 19 A. No, there's--I'm afraid there's no benchmark
 20 rates. There's some confusion here; there's
 21 no benchmark. There's loss trend rates that
 22 we prepare. Now -
 23 MS. NEWBURY:
 24 Q. That you prepare. What is the purpose of
 25 that?

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1 MS. ELLIOTT:
 2 A. Of the loss trend rates?
 3 MS. NEWBURY:
 4 Q. Of you providing that to the Board?
 5 MS. ELLIOTT:
 6 A. Sorry, are you asking about benchmark rates
 7 that we used to prepare for the Board or loss
 8 trend rates?
 9 MS. NEWBURY:
 10 Q. Trend rates.
 11 MS. ELLIOTT:
 12 A. Loss trend rates?
 13 MS. NEWBURY:
 14 Q. Yeah.
 15 MS. ELLIOTT:
 16 A. Well, we provide the loss trend rates for the
 17 Board. We do our analysis, the report is sent
 18 to the insurers for their review and comment,
 19 there's, I think, a two-week period for that.
 20 If there's any comments or consideration, we
 21 review that and then the loss trend rates are
 22 provided to the insurers for their use.
 23 MS. NEWBURY:
 24 Q. Okay, and what I'm asking that you do is to
 25 identify in those reports any reports that

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1 relied upon other than ten years and five
2 years for bodily injury. (REQUEST)
3 MS. ELLIOTT:
4 A. Okay.
5 MS. NEWBURY:
6 Q. Thank you. Now I'm going to refer to your
7 report at Page 4, and that's the March 16th
8 report.
9 MS. GLYNN:
10 Q. Ms. Newbury, while you're looking for that,
11 can I just confirm for that undertaking that
12 Ms. Elliott just provided, would you be
13 looking for those for commercial and private
14 passenger or just for -
15 MS. NEWBURY:
16 Q. For both, yes.
17 MS. GLYNN:
18 Q. For both? Thank you, and for the last ten
19 years?
20 MS. NEWBURY:
21 Q. Yes, that's correct.
22 STAMP, Q.C.:
23 Q. So the twice-yearly report.
24 MS. GLYNN:
25 Q. Yeah. For commercial and private passenger.

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1 Thank you.
2 MS. NEWBURY:
3 Q. You've noted in your report--it's actually the
4 report CAOWO01. That's Page 4 of that report.
5 So in the second paragraph, you state that
6 "while the five-year period is generally more
7 responsive to changing patterns, due to the
8 small number of claims and the continuing
9 volatility, we do not find the five-year
10 report sufficiently stable and therefore give
11 consideration to the ten-year period." When
12 you're referring to changing patterns, are you
13 referring to changes in trends, and if not,
14 what are the patterns that you're referring to
15 there?
16 MS. ELLIOTT:
17 A. The changing patterns is we're trying to
18 measure--I think I spoke to changing patterns
19 earlier today, we're trying to measure the
20 change in the frequency rate, the severity
21 rate, the lost costs. So how is that changing
22 over time, how are those costs changing over
23 time, that's what we're trying to measure in a
24 loss trend rate.
25 MS. NEWBURY:

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1 Q. Okay. I'm trying to understand how your
2 comment here fits into the bigger picture of
3 the trend analysis. So you're talking about a
4 five-year period being more responsive to
5 changing patterns.
6 MS. ELLIOTT:
7 A. Well, we're trying to measure loss trend
8 rates, we're preparing a report every six
9 months with new data. So what we're trying to
10 measure and present in our reports every six
11 months is a measure of that changing pattern.
12 So the loss trend rate is looking at the costs
13 of the data that's available, and how are
14 those costs changing, what is that changing
15 pattern? Maybe today, the loss trend rate we
16 might calculate for a coverage is +2 percent
17 and maybe five years ago when we did it, the
18 changing pattern, the data, indicated a +3
19 percent. So there's changing patterns.
20 That's why we look at the new information
21 every six months to see, as best we can, what
22 is that changing pattern. So with the new
23 information that's provided, we try to assess
24 that.
25 MS. NEWBURY:

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1 Q. Okay. So it is a change in trend?
2 MS. ELLIOTT:
3 A. Well, we're trying to measure what that change
4 is, yes, in each report.
5 MS. NEWBURY:
6 Q. Okay. So it is a change in--so changing
7 pattern refers to a change in the trend?
8 MS. ELLIOTT:
9 A. That's what we're trying to measure, yes.
10 MS. NEWBURY:
11 Q. Okay, and how often over a 20-year period, you
12 know, just generally speaking, would you
13 expect to see a change in the pattern or
14 changes in the patterns? Would you see that
15 frequently over a 20-year period or on
16 occasion over a 20-year period?
17 MS. ELLIOTT:
18 A. I think there's two different things here.
19 You can see a change in direction, and so in
20 some cases you could see, due to the
21 environment, whatever the reasons might be,
22 you can see a pattern where frequency rate is
23 increasing and then, you know, for whatever
24 reason, things change and you can see a
25 frequency rate declining, and that occurs,

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1 yes. And how often? It depends on the
 2 environment. There are a lot of external
 3 factors that can affect a change in direction
 4 of a pattern.
 5 MS. NEWBURY:
 6 Q. Um-hm, and is it that every six months when
 7 you do your new report, what you're observing
 8 actually is a change in a pattern or are you
 9 just better, you know, fine tuning a pattern
 10 that is there because you now have more data,
 11 you can better see a pattern that was already
 12 in existence at the time, but maybe you didn't
 13 fully understand it because of more limited
 14 data.
 15 MS. ELLIOTT:
 16 A. I'm not sure what you're asking me there
 17 specifically, but I'll try to answer as best I
 18 can. We get new information that's available
 19 every six months. We review that information
 20 to try to assess what the lost cost trend rate
 21 is. The lost cost trend rate is a measure of
 22 what we think that changing pattern is, on
 23 average, from the historical data that we're
 24 reviewing. New information gives us new
 25 insight. GISA provides this data every six

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1 months, so that you can look at it and
 2 determine your lost trend rates. It's
 3 available for us to us, all actuaries to look
 4 at and review, and that's what we do. We're
 5 provided with the data and we do our best to
 6 analyze it every six months.
 7 MS. NEWBURY:
 8 Q. Well, perhaps I could ask the question this
 9 way, you do your reports every six months and
 10 I take it that you will frequently have a
 11 change in your trend rate for a particular
 12 type of coverage from one six-month period to
 13 the next?
 14 MS. ELLIOTT:
 15 A. Well, as I stated earlier, we try as best to
 16 be both responsive and stable, you know,
 17 strike a balance with that, which is difficult
 18 with this commercial data, and one of the
 19 things that we do is draw in our prior
 20 selection of the lost cost trend rate into our
 21 averaging approach, and it's using our prior
 22 estimate and our new estimate and averaging
 23 them for this selection, and we do that moving
 24 forward and that brings a little more
 25 stability so that we're not up and down each

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1 review.
 2 MS. NEWBURY:
 3 Q. But when you do these reviews every six
 4 months, and if you come up with a different
 5 trend rate for a particular type of coverage,
 6 is that because there is now a change in the
 7 pattern or a change in the trend as of that
 8 new six-month period of time?
 9 MS. ELLIOTT:
 10 A. Well, the pattern is what we're trying to
 11 measure, what are the changes, and that lost
 12 cost trend rate is the terminology used for
 13 that changing pattern that we're trying to
 14 measure. We have new data. The Board asks us
 15 to look at that data every six months and do
 16 our analysis. The data, sometimes you could
 17 get the same number, you could get a higher
 18 number or lower number because you're looking
 19 at new data that's available, new estimates of
 20 what losses are compared to private estimates,
 21 so.
 22 MS. NEWBURY:
 23 Q. Okay, but are you able to say that, look, this
 24 is a new trend, six months later, or I have
 25 better estimated or I can fine-tune a trend

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1 that I was previously working on six months
 2 before? Because it sounds like to me, when
 3 you're talking about changing trends and
 4 responding to that, that you're having trend
 5 rates that change frequently over a period of
 6 five years or ten years, and I'm trying to
 7 understand if that's what you're saying or
 8 whether it's a fine-tuning of a trend rate.
 9 MS. ELLIOTT:
 10 A. No. We truly are trying to present a balanced
 11 approach to being responsive to the new data
 12 that's available, looking at it, and looking
 13 at what our prior selection was so that we
 14 have a stable loss trend rate that we present
 15 in our report that ensures--can review and
 16 comment upon. The new datas available--I
 17 don't have a pre-conceived idea that when I
 18 get the new data, it's going to change
 19 everything dramatically. It's just the new
 20 data, I'm going to look at it and assess it
 21 and prepare a report and provide it for
 22 comment.
 23 MS. NEWBURY:
 24 Q. Okay, and because you identify a different
 25 trend rate in December of 2011, for example,

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1 compared to June of 2011, it doesn't mean that
 2 the trend has changed in that period of time?
 3 That you were going in one direction, now
 4 you're going in a completely different
 5 direction?
 6 MS. ELLIOTT:
 7 A. No, and I wouldn't say that we're going in a
 8 completely different direction. As I've
 9 stated we try to take a very stable approach
 10 by looking at our prior selection and
 11 incorporating that in. That's one of the
 12 things that we think is important with this
 13 limited commercial data that we're working
 14 with.
 15 MS. NEWBURY:
 16 Q. Are you familiar with the terms "noise" and
 17 "signal" as used in statistics?
 18 MS. ELLIOTT:
 19 A. Yes.
 20 MS. NEWBURY:
 21 Q. And how would you describe those terms?
 22 MS. ELLIOTT:
 23 A. Well, I think we can bring up an example of
 24 noise, we referred to it earlier today, and it
 25 was the exhibit with the yellow highlights.

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1 We had a red arrow on it.
 2 MS. GLYNN:
 3 Q. Can you identify that document, please, for
 4 the record?
 5 MS. ELLIOTT:
 6 A. It's from the FA Filing, Part 2, 121. So when
 7 we look at the average claim size we're trying
 8 to measure how does the--what is the change in
 9 the average cost of a claim from period to
 10 period by looking at the severity data, and if
 11 all the claims were fender benders and
 12 everyone was very similar, it would be pretty
 13 easy. Those costs would be similar. They
 14 might be \$2,500, \$3,000, \$3,100--they'd be
 15 close, it'd be easy to measure what that
 16 change in cost is over time. With this data
 17 here, we see a lot of ups and downs; we went
 18 through that this morning. So this could be
 19 referred to as a little bit of noise in the
 20 data. We're not measuring the same thing when
 21 we look at the change from period to period.
 22 We're not measuring just what is the actual
 23 increase in the costs. In that data, is a
 24 change of the mix of small claims and big
 25 claims that are going on from year to year,

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1 and I don't know what that mix is, but to me,
 2 the changes are so significant that it makes
 3 intuitive sense. You only have a hundred-and-
 4 twenty-odd claims, some years you're going to
 5 have some big claims, and it's affecting the
 6 average claim size. So the noise in this case
 7 here is the fact that you have a mix of big
 8 claims and small claims changing, and we're
 9 not trying to measure the change in the mix of
 10 claims, whether there was a big death accident
 11 or a paraplegic one year and not the next.
 12 We're not trying to measure that. We're
 13 trying to measure what's the change in the
 14 cost to settle a claim. If you had a whiplash
 15 this year and a whiplash next year, how much
 16 more does it cost you today versus five years
 17 from now, that's what we're trying to measure.
 18 So this data, because there's a changing mix,
 19 is what we call noise in the data.
 20 MS. NEWBURY:
 21 Q. And what about signal?
 22 MS. ELLIOTT:
 23 A. The signal in the data?
 24 MS. NEWBURY:
 25 Q. Yeah.

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1 MS. ELLIOTT:
 2 A. We don't measure it directly here, but there's
 3 an indication that the data, the fits will be
 4 poor with this data. We're not getting a good
 5 fit with this data.
 6 MS. NEWBURY:
 7 Q. And if you're doing a five-year analysis, how
 8 would you determine that what you're measuring
 9 is actually signal and not noise in the data?
 10 You've indicated that you tend, especially
 11 with these smaller sample sizes, you tend to
 12 get different mixes, and that's not unusual,
 13 you expect that.
 14 MS. ELLIOTT:
 15 A. Um-hm.
 16 MS. NEWBURY:
 17 Q. You're going to get maybe one year a lot of
 18 minor claims, the next year maybe a lot of
 19 major claims, another year smaller number of
 20 claims but quite significant. So you expect
 21 that, and how would you deal with that in
 22 looking at a five-year analysis, to make sure
 23 that what you're looking at is not the noise
 24 instead of the actual signal.
 25 MS. ELLIOTT:

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1 A. Right. I think in all this data, whether
 2 we're looking at 5 years, 10 years, 15 years
 3 or 20 years of data, there is a lot of noise
 4 in this data, the fits are poor. FA stated in
 5 its review that it struggled with its fits
 6 over the 20-year period, it's P-Tests and T-
 7 Tests were poor, they did not meet their
 8 standards. FA last year in its filing
 9 rejected the severity trend rate, it said it
 10 couldn't figure it out. So it's very
 11 difficult with this data to differentiate what
 12 is the noise, what are we trying to measure,
 13 are we really measuring the intent here, is
 14 that cost--the change in cost for the severity
 15 from period to period, there's a lot of noise
 16 here.
 17 MS. NEWBURY:
 18 Q. And again referring to the changes in pattern
 19 in the five-year period of time, did you
 20 confirm a point in time in the two five-year
 21 periods that you looked at for this
 22 particular--your report--did you confirm the
 23 point or points in time, if indeed there are
 24 more than one, when the change in pattern
 25 occurred?

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1 MS. ELLIOTT:
 2 A. Sorry. I don't understand your question.
 3 MS. NEWBURY:
 4 Q. So you've indicated that the five-year period
 5 responds to a change in pattern, and have you
 6 -
 7 MS. ELLIOTT:
 8 A. No. I'm sorry, I haven't indicated that the
 9 five-year period responded to a change in
 10 pattern. That -
 11 MS. NEWBURY:
 12 Q. Well, to changing patterns.
 13 MS. ELLIOTT:
 14 A. No, no. No, I said that we've measured the
 15 trend rate over a five-year period, which is a
 16 measurement of how costs are changing. That's
 17 what we're trying to measure, and we've
 18 measured it over ten years, that's what we've
 19 done. I have not stated that there's a
 20 changing pattern. What I have stated is here
 21 is the trend rate over five years and here is
 22 the trend rate over ten years.
 23 MS. NEWBURY:
 24 Q. Okay. Well, let's go back to CAOWOO1, Page 4
 25 again, the second paragraph, and I'm going to

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1 refer you back to that sentence--and perhaps
 2 I've misunderstood what you're explaining
 3 there. "While the five-year period is
 4 generally more responsive to changing
 5 patterns, due to the small number of claims
 6 and continuing volatility, we do not find the
 7 five-year results sufficiently stable and
 8 therefore give consideration to the ten-year
 9 period."
 10 MS. ELLIOTT:
 11 A. Um-hm.
 12 MS. NEWBURY:
 13 Q. So what changing patterns, if any, have you
 14 identified in this particular analysis?
 15 MS. ELLIOTT:
 16 A. Well, in terms of changing patterns, I guess
 17 I'm going to give you an example of what that
 18 could be in a five-year period. Say in
 19 Ontario--and I apologize for going back to
 20 Ontario but it's got a big database and you
 21 know, but in Ontario there's been a lot of
 22 issues with fraud, and so we can look at, say,
 23 some coverage thing like, again, collision,
 24 it's a simpler coverage to estimate, and if
 25 there is more fraud--they have issues with the

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1 tow trucks, with the repair trucks, so if
 2 something is happening in the last five years
 3 and we see the claims costs are increasing,
 4 there's a changing pattern because there's an
 5 awareness and there's more fraud. The tow
 6 truck drivers are, you know, just on the
 7 highway waiting for you. So we try to look at
 8 that, is there something going on in that more
 9 recent data that we need to be responsive to?
 10 That would be a typical thing that we want to
 11 make sure we're picking up in the data. In
 12 this case here, it's very difficult to pick up
 13 a change in what's going on in the more recent
 14 five years versus ten years, but we look at
 15 it. We calculate it and present it to see
 16 what the data tells us.
 17 MS. NEWBURY:
 18 Q. Okay. So earlier when I was asking, just
 19 trying to understand the terminology "changing
 20 patterns," I had understood that you, you
 21 know, confirmed that, yes, indeed, that is
 22 referring to changes in the trends, but am I
 23 correct that you haven't actually identified
 24 any changes in the trends over either the
 25 five- or ten-year period of time?

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1 MS. ELLIOTT:
 2 A. Right. I think you're incorrect. What I said
 3 was that we're measuring the trend rate over a
 4 five-year period to see what the number tells
 5 us, and we're measuring it over a ten-year
 6 period to see what the number tells us.
 7 MS. NEWBURY:
 8 Q. Okay.
 9 MS. ELLIOTT:
 10 A. The five years is a subset of the ten years,
 11 and we want to see what the calculation is.
 12 That's what we're doing. We're not saying oh,
 13 and I believe there is a different direction
 14 in the trend rate at five years, that it was
 15 going this way at ten years and at five years--
 16 the last five--we're not saying that. We're
 17 just saying what is that trend rate, what is--
 18 that pattern that we're trying to measure is
 19 the trend rate, the changing costs, what is it
 20 over five years and what is it over ten years,
 21 period.
 22 MS. NEWBURY:
 23 Q. Okay. So again, you were explaining why you
 24 were choosing the five years and the ten
 25 years, and I take it that your evidence is

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1 that the five-year period is generally more
 2 responsive to changing patterns or changing
 3 trends, which is why you include that.
 4 MS. ELLIOTT:
 5 A. For some coverages, yes. It will be, yes.
 6 MS. NEWBURY:
 7 Q. Right, and but you haven't actually looked for
 8 or identified, in either the five-year period
 9 of time or the broader ten-year period of
 10 time, any actual changes in the trend?
 11 MS. ELLIOTT:
 12 A. When we look at the data, we do try to
 13 identify if there's a change in the direction,
 14 is something going on with that trend rate
 15 that before the frequency, the number of
 16 claims was going up, the number of claims that
 17 you had for all the cars that you insured was
 18 the pattern going up, and then it decreased.
 19 We're definitely looking to see if that
 20 occurs, yes, we are.
 21 MS. NEWBURY:
 22 Q. And you looked for that in this case?
 23 MS. ELLIOTT:
 24 A. We look for that in every review that we do.
 25 We look for that, yes.

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1 MS. NEWBURY:
 2 Q. Okay, and you didn't find any changes in the
 3 trend, in the five- or ten-year period, for
 4 these coverages?
 5 MS. ELLIOTT:
 6 A. That's correct. We're not presenting our
 7 report, that we believe that there's a change
 8 in direction at the five-year mark and that's
 9 why we presented it. That's not what we're
 10 saying. We're not identifying that there's a
 11 change in direction if we had 25 years of data
 12 because we're looking at measuring what is the
 13 trend rate over ten years. That doesn't imply
 14 that we think there's a change in direction in
 15 that ten-year period than the prior period.
 16 We're just saying what happened in those last
 17 ten years, let's measure the trend rate over
 18 that period. And let's look at the latest
 19 five years. What is the trend rate that we
 20 can measure there, what happened there? By
 21 doing so, we're not implying that we think
 22 there's a change in the direction of the trend
 23 rate. We're simply trying to measure what it
 24 is in that time period.
 25 MS. NEWBURY:

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1 Q. Okay. Now you could have a change in the
 2 trend rate that's not necessarily a change in
 3 direction, is that not correct?
 4 MS. ELLIOTT:
 5 A. Well, that's why we look at the trend rates,
 6 we do the reports every six years to--sorry,
 7 every six months to find out what is the data
 8 showing us this time, yeah.
 9 MS. NEWBURY:
 10 Q. Okay, but in this case here, if you haven't
 11 identified any changes in the patterns or
 12 changes in the trends over the ten-year period
 13 of time, they why would you--what's the
 14 benefit, then, of looking at the five-year
 15 period?
 16 MS. ELLIOTT:
 17 A. Sorry. I don't understand your question, I -
 18 MS. NEWBURY:
 19 Q. So you've indicated that changing patterns is
 20 basically changes in the trends?
 21 MS. ELLIOTT:
 22 A. What we're trying to measure is--we have the
 23 data, we have the loss cost, and we see that
 24 experience, say, for the last ten years of
 25 data and we look at each of those data points

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<p>1 and we're trying to measure what is that 2 pattern. On average, what is the percentage 3 change in that lost cost over the period of 4 time that we're looking at. That's the 5 pattern that we're trying to measure. 6 MS. NEWBURY: 7 Q. Okay, and so your evidence is that in the most 8 recent five years, you would expect that it 9 would be more responsive to any change in the 10 pattern over that five-year period of time? 11 MS. ELLIOTT: 12 A. What we're trying to say with those words is 13 that yes, any more recent data, if something 14 was happening--I gave the example of tow 15 trucks, a problem in Ontario with fraud, that 16 the more recent data, that something new 17 that's occurring, the more recent data would 18 help you see that if you look at that five- 19 year period, yeah. 20 MS. NEWBURY: 21 Q. Okay, but you haven't actually identified any 22 such change of pattern here? 23 MS. ELLIOTT: 24 A. That was an example. No, that's right. We 25 haven't identified -</p>	<p>1 know, taking advantage of the fact that you 2 now have more data and perhaps you can fine- 3 tune your trend rate six months on, as opposed 4 to saying, oh, it's now changed, we were going 5 up until June, now we're going down, or we 6 were stable before and now we're increasing or 7 decreasing? 8 MS. ELLIOTT: 9 A. Yeah. Well, we try to take into consideration 10 the fact that--we look at what we selected in 11 our prior report, we look at what the ten-year 12 trends and the five-year trends are telling 13 us, what those numbers are, and then we try to 14 take--you know, we're striking a balance here 15 between being responsive to the new 16 measurements that we've calculated, and to 17 what we presented in the prior report, and we 18 take an average. I am the very first person 19 to say that this data is very difficult and 20 challenging to work with, and that's, you 21 know, a step that we try and follow here so 22 that we have something that we believe is 23 stable from report to report. 24 MS. NEWBURY: 25 Q. What factors might be considered to cause</p>
<p>Page 110</p> <p>1 MS. NEWBURY: 2 Q. Or any other change of pattern? 3 MS. ELLIOTT: 4 A. Well, when we present the loss trend rates, 5 the values that are provided are the values, 6 and if those values are different between ten- 7 year, five-year or whatever period, that's 8 telling you something, yeah. 9 MS. NEWBURY: 10 Q. Okay. So there has been a change in trend 11 and--if there's been a change in your rate? 12 MS. ELLIOTT: 13 A. Well, the numeric value changes, yes. With 14 each review that we do, typically it changes. 15 There's new data available, new estimates. If 16 it never changed, then I assume the Board 17 would say, well, you've done it once and the 18 data doesn't change, so don't look at it 19 again. So new data comes in, the Board asks 20 us to look at it, and so we do. 21 MS. NEWBURY: 22 Q. And just one more question on that before I 23 leave that. Is it possible that the--you 24 know, looking at it every six months and 25 updating your trend rate is actually, you</p>	<p>Page 112</p> <p>1 frequency or severity or lost costs to change 2 over time, other than the passage of time 3 itself? And you've mentioned some examples of 4 fraud, for example, in another province. 5 MS. ELLIOTT: 6 A. Sure. Yeah, frequency--and one of the 7 interesting things is we're seeing in many 8 provinces across the land is that--and even in 9 the US as well, we're seeing a decline in 10 frequency and a lot is attributed to that--to 11 technology with cars, whether you're starting 12 with ABS brakes, now cars have little signals 13 on the windows--I like those because I know 14 that they'll see me if I'm passing them. So 15 there's more changes in cars that are 16 happening that are driving a reduction in the 17 frequency, so--and I'd say that's more of a 18 phenomena in the last sort of ten years or so, 19 that we're seeing that, yeah. 20 MS. NEWBURY: 21 Q. Okay. So you're not surprised, then, that 22 frequency is negative? 23 MS. ELLIOTT: 24 A. Negative? No. 25 MS. NEWBURY:</p>

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1 Q. And in terms of factors that might cause there
2 to be changes in frequency and severity and
3 lost cost as well over time, how do you take
4 these factors into consideration in your
5 analysis?
6 MS. ELLIOTT:
7 A. Could you be more specific? I'm not sure what
8 you're asking me.
9 MS. NEWBURY:
10 Q. So you've acknowledged and given examples of
11 factors that might cause frequency, severity
12 or lost costs to change over time, and I'm
13 just--other than simply the passage of time,
14 so how do you take these factors into account
15 in doing your analysis?
16 MS. ELLIOTT:
17 A. Well, hopefully my answer will get at what
18 you're asking me here. We look at--in our
19 model, we can incorporate many parameters to
20 try to measure these external forces. So
21 we're able to include a parameter, or exclude,
22 depending on what the stats tell us, whether
23 it's for the reforms that happened in this
24 province, we can incorporate the unemployment
25 rate, we can incorporate the Consumer Price

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1 Index, we can incorporate precipitation--there
2 are many things that we can incorporate into
3 our model to see is that telling us something,
4 does that help us get a better fit? So we
5 look at that external information, which is a
6 measurement of--to help with the model. You
7 know, there is a key example in this province,
8 and it was during the timeframe when there was
9 a hearing. We had a very severe winter when I
10 was here in Newfoundland and you could see
11 that in the claims experience, the frequency
12 rate was really high in the early 2000s.
13 MS. NEWBURY:
14 Q. And do you only look for any impact of such an
15 event if you're aware of it, or do you look at
16 the statistics, the numbers, the data, and
17 then try to see what might explain, you know,
18 a change in frequency or a change in severity?
19 How do you go about doing that?
20 MS. ELLIOTT:
21 A. Yeah. Well, that's an interesting point, and
22 I can speak, because it's public knowledge.
23 We're doing a review in BC and in that filing--
24 and BC is government-run auto, and in that
25 filing, there's an adjustment to the most

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1 recent data in their trend model because of
2 precipitation, and in that case, the
3 precipitation was so low, it was unusually
4 low, that they thought--because Vancouver,
5 they get a lot of rain, that that was causing
6 a distortion in their trend model, so--and
7 this is the--we're reviewing this file. They
8 had modified their data for that. So one of
9 the things you do is you look at the data and
10 you say, gee, it's changing, and then you say,
11 why is it changing? And in that case, the
12 experience was to go and look at the
13 precipitation and say, oh, there was a
14 dramatic change in the participation and that--
15 there's a link with the frequency rate. So
16 it's looking at the data and then trying to
17 research to find out why did that occur. It's
18 picking up the phone to Bob Byrne and saying
19 can you tell me if, you know, such and such--
20 did anything go on? They're the things that
21 we do, yeah.
22 MS. NEWBURY:
23 Q. Okay. So basically, you see something in the
24 data that raises a question, I wonder if
25 something happened at this point in time, and

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1 then you start to look and make inquiries and
2 see if there's any changes in weather or
3 changes in legislation that could have perhaps
4 prompted that change?
5 MS. ELLIOTT:
6 A. Right, and so often that will be the new
7 experience, or the more recent experience
8 comes through. We'll investigate and then
9 you've got a note in your file. As you go
10 forward over time, you kind of go, oh, yeah, I
11 remember back then there was that bad snow
12 storm and that explains that high point, yeah.
13 MS. NEWBURY:
14 Q. Okay, and what happens if you know something
15 has occurred, like product reform, within the
16 timeframe of your analysis, would you look to
17 see whether there's any impact from that or is
18 it all -
19 MS. ELLIOTT:
20 A. Oh, absolutely. I think I just said that. We
21 have in our model the flexibility to include
22 or exclude that, depending upon whether it's
23 significant or not, so we definitely do that.
24 MS. NEWBURY:
25 Q. Sure, and I'm aware that you do have a very

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1 flexible model and you can look at EI and
 2 Consumer Price Index and number of things, but
 3 I'm wondering when do you actually introduce
 4 that? Do you do that automatically for each
 5 and every analysis?
 6 MS. ELLIOTT:
 7 A. Yes.
 8 MS. NEWBURY:
 9 Q. You do? Okay. So every analysis that you do,
 10 you look at that?
 11 MS. ELLIOTT:
 12 A. Yeah. Our model, we click an X on, click an X
 13 off. It's one second, yeah. Absolutely.
 14 MS. NEWBURY:
 15 Q. So you did, in fact, look at product reform in
 16 this particular case?
 17 MS. ELLIOTT:
 18 A. Um-hm.
 19 MS. NEWBURY:
 20 Q. And that was for the ten-year period,
 21 presumably?
 22 MS. ELLIOTT:
 23 A. Well, we have 15 years of data that we
 24 reviewed, and we looked at the reform
 25 parameter in our review, yeah.

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1 MS. NEWBURY:
 2 Q. Okay, and did you keep the information, the
 3 analysis that you had for that?
 4 MS. ELLIOTT:
 5 A. No. It's done in Excel, as we work through
 6 it. I don't have it printed up.
 7 MS. NEWBURY:
 8 Q. Okay. So you would have discarded that after?
 9 MS. ELLIOTT:
 10 A. Um-hm.
 11 MS. NEWBURY:
 12 Q. And again, that was a 15-year -
 13 MS. ELLIOTT:
 14 A. We used 15 years of data, yeah, so -
 15 MS. NEWBURY:
 16 Q. 15 years of data? Would you look for a 15-
 17 year trend?
 18 MS. ELLIOTT:
 19 A. Well, that's one of--as I said as the--when we
 20 started our discussion here, that we have 15
 21 years of data and we look at the data, 15
 22 years. We look at not just ten years and five
 23 years; we look at seven years. Yeah, all
 24 different ways. Numerous ways.
 25 MS. NEWBURY:

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1 Q. Okay, but maybe I--so I heard at the beginning
 2 of the evidence that you looked at five-year
 3 segments, so you'd look at the first five
 4 years, the next five years, the more recent
 5 five years.
 6 MS. ELLIOTT:
 7 A. Um-hm.
 8 MS. NEWBURY:
 9 Q. But you would have looked at a full 15-year
 10 trend?
 11 MS. ELLIOTT:
 12 A. We look at numerous segmentations of the data,
 13 yeah.
 14 MS. NEWBURY:
 15 Q. Okay. Including the 15-year trend, yes.
 16 MS. ELLIOTT:
 17 A. Including 15 year.
 18 MS. NEWBURY:
 19 Q. And I also indicated or questioned you this
 20 morning about the outliers, and you couldn't
 21 recall, I don't believe, what data points you
 22 might have excluded as outliers for a 15-year
 23 trend.
 24 MS. ELLIOTT:
 25 A. Right.

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1 MS. NEWBURY:
 2 Q. It's my understanding from your evidence, and
 3 reports and documentation that you've
 4 produced, that for five years you exclude one
 5 point, high and low, and for ten years, you
 6 exclude two points, high and low.
 7 MS. ELLIOTT:
 8 A. Um-hm.
 9 MS. NEWBURY:
 10 Q. Do you have a standard approach for excluding
 11 data points when you use a 15-year trend?
 12 MS. ELLIOTT:
 13 A. No, not presenting--we do look at that. So my
 14 answer would be no, we don't have a standard
 15 approach of what we're excluding. Part of
 16 what we--you know, we have the data, that's
 17 one of the first things we do is look at the
 18 data without any exclusions, and I can't--you
 19 know, we run many versions of it and say what
 20 would happen if we--you know, what about this
 21 point, that point.
 22 MS. NEWBURY:
 23 Q. And when you run those versions, do you do
 24 your, you know, regression statistics to see
 25 about the fit of the data?

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1 MS. ELLIOTT:
 2 A. Yes. It's an automatic output.
 3 MS. NEWBURY:
 4 Q. And you have no recollection of what you would
 5 have produced or what your results were for
 6 the 15 year trend?
 7 MS. ELLIOTT:
 8 A. Not form 2012 now. I do so many, no, I
 9 wouldn't -
 10 MS. NEWBURY:
 11 Q. So, you didn't do that in relation to this
 12 particular report for May 16, 2014?
 13 MS. ELLIOTT:
 14 A. No.
 15 MS. NEWBURY:
 16 Q. No, okay. I'm going to request that you
 17 provide, either look for and provide the 15
 18 year with the 2011 H1--so, I'm just trying to
 19 clarify with my colleague about the 15 year
 20 analysis. So, you've indicated before that
 21 you done a 15 year analysis of a trend, you
 22 can't recall what outliers you may or may not
 23 have included in that.
 24 MS. ELLIOTT:
 25 A. I don't recall the outliers and parameters,

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1 but I know one of the--we have 15 years of
 2 data and it's an easy process for us to run
 3 our model.
 4 MS. NEWBURY:
 5 Q. Okay. So, I'm going to request that you do
 6 that please (REQUEST).
 7 MS. ELLIOTT:
 8 A. Okay.
 9 MS. NEWBURY:
 10 Q. Thank you.
 11 MS. GLYNN:
 12 Q. Can we clarify the period? We're talking
 13 about a 15 year period, but where we start and
 14 where we end.
 15 MS. NEWBURY:
 16 Q. Well, let's say, we've been doing the end of
 17 2012, so December 2012 and also June 2012.
 18 MS. ELLIOTT:
 19 A. Yes, okay.
 20 MS. GLYNN:
 21 Q. And 15 years back, okay.
 22 MS. NEWBURY:
 23 Q. And for bodily injury, also if you could do
 24 the same exercise for two periods, 1998 H1 -
 25 2004 H1 and 2004 H2 to 2012 H2. (REQUEST).

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1 Now, I'm going to move on and ask about your
 2 understanding of Facility's approach and more
 3 specifically do you believe that they're
 4 looking at a 20 year trend?
 5 MS. ELLIOTT:
 6 A. I believe that they are looking at 20 years of
 7 data.
 8 MS. NEWBURY:
 9 Q. Okay. And if you were looking at 20 year
 10 period in conducting a trend analysis, would
 11 you be able to detect if there is more than
 12 one trend present in that data?
 13 MS. ELLIOTT:
 14 A. Would I--do we have the capabilities within
 15 our Excel?
 16 MS. NEWBURY:
 17 Q. Yes.
 18 MS. ELLIOTT:
 19 A. Yes, sure.
 20 MS. NEWBURY:
 21 Q. Okay. And I'm trying to distinguish between
 22 the talk about the changing patterns this
 23 morning where it's just a bit more--you
 24 updated from half year to half year, but you
 25 haven't actually identified any point in time,

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1 but I'm wondering, you know, more
 2 specifically, can you look at 20 years and say
 3 here's a trend from this period to that
 4 period, it changes and now we're moving on to
 5 a different type of a trend. So, you're
 6 saying that you do have the capability to do
 7 that. Would one such trend be independent of
 8 another trend, if you do find two or more
 9 trends in a 20 year period or a 15 year
 10 period?
 11 MS. ELLIOTT:
 12 A. Would they be independent?
 13 MS. NEWBURY:
 14 Q. That's correct.
 15 MS. ELLIOTT:
 16 A. It's possible that they're independent, sure.
 17 MS. NEWBURY:
 18 Q. Okay, but if they're two distinct trends, if
 19 you decided that they're going up at a
 20 consistent rate for six years and then for the
 21 next seven years, they are stable and then the
 22 final few years, they go on a downward
 23 direction, would the values that you get for
 24 period one be in, any way, influenced by the
 25 values in period 3 or could you basically look

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1 at the third period and say, well this is
 2 separate.
 3 MS. ELLIOTT:
 4 A. Right.
 5 MS. NEWBURY:
 6 Q. Whatever happened back in 2002 for example is
 7 not going to influence what my claims costs
 8 are going to be a year from now?
 9 MS. ELLIOTT:
 10 A. Sure, and there's different ways to run a
 11 model. You can run a model over the full 20-
 12 year period and then layer on top of that a
 13 different trend rate, so those--one long trend
 14 rate isn't merged in with the separate trend
 15 rate.
 16 MS. NEWBURY:
 17 Q. Yes.
 18 MS. ELLIOTT:
 19 A. Or you can slice it up into two separates one,
 20 which I understand is what FA did.
 21 MS. NEWBURY:
 22 Q. Okay. So they had two separate trend rates,
 23 and is it your understanding that the second
 24 trend rate is separate and distinct from the
 25 first trend rate?

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1 MS. ELLIOTT:
 2 A. It's my understanding that they take the trend
 3 rate over the period, the eight and a half
 4 years, from 2004-2 to 2012-2, and that period
 5 is their measured trend rate that's applied to
 6 taxi experience, yeah.
 7 MS. NEWBURY:
 8 Q. Okay. So if the capability exists for
 9 detecting multiple trends which might occur in
 10 a 20-year period of time, why would you be
 11 concerned that Mr. Doherty has looked at a 20-
 12 year period, you know, in looking at the data?
 13 It seems like there's been some sort of
 14 criticism I guess, or you've got some
 15 differences of opinion as to why he would look
 16 at 20 years of data?
 17 MS. ELLIOTT:
 18 A. Um-hm.
 19 MS. NEWBURY:
 20 Q. But when in fact he's identified that there is
 21 a separate and distinct trend in the last
 22 eight and a half years, why would you be
 23 concerned that he initially started out by
 24 looking at the first twelve and a half years
 25 or eleven and half years?

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1 MS. ELLIOTT:
 2 A. Well the--sure. The reason why we're
 3 concerned is that they're taking 20 years of
 4 data and they're assuming as part of their
 5 model for every coverage, collision, AB,
 6 property damage, BI, they're assuming that the
 7 2002 reforms affected all of those coverages.
 8 And they come up with reforms costs, and AB
 9 was a big example with the reforms causing
 10 claims to reduce by 73 percent. And so
 11 they've said that there's a change that
 12 occurred at 2004-2 that there's a new trend
 13 rate because of reforms caused this big
 14 massive reduction in costs for AB, down 73
 15 percent, and now everything is trending
 16 differently at that point. So you have to buy
 17 in that the reforms caused AB to drop by 73
 18 percent and then say now the trend rate is
 19 different at that point. So if you accept
 20 that there's reforms, that there's a change in
 21 pattern at that point, that the reforms caused
 22 this drop, and now you're just going to look
 23 at that eight-and-a-half-year period because
 24 you think the trend rate, the direction has
 25 changed from the prior periods. Over the 20

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1 years you might see a trend rate going this
 2 way for AB, and then it goes that way,
 3 starting at 2004-2. That's what the FA model
 4 is. So although they are effectively just
 5 using that last eight and a half years, it is
 6 driven by saying, "Here's a low point from
 7 2004-2, and we think costs decreased by 73
 8 percent for AB, and now they're going up." If
 9 you buy that, then you can buy that there's a
 10 change in direction.
 11 MS. NEWBURY:
 12 Q. Okay, so I take it from your evidence that
 13 your concern with Mr. Doherty and Facility
 14 using 20 years of data isn't necessarily the
 15 fact that he's used 20 years of data. It's
 16 just that you disagree that there's been an
 17 impact from the reform in 2004?
 18 MS. ELLIOTT:
 19 A. And I think what happens with this approach is
 20 assuming for all the coverages that there was
 21 an impact on the reform. That's what they do.
 22 They don't explain in their rate filing why
 23 costs for BI would have gone down 73 percent
 24 for reforms, and so in doing so, and in
 25 accepting what their model prints out for

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1 them, accepting this reform cost, they are now
 2 forced to say, "I have this eight-and-a-half-
 3 year period, from 2004-2 to the end of 2012.
 4 I have this eight-and-a-half-year period, so
 5 now I have to kind of work with it because
 6 things have changed." See it kind of, I
 7 think, forces them into a little bit of a box
 8 that they've now accepted, that the reforms
 9 changed things starting in 2004, reduced AB
 10 costs by 73 percent, and now we have a new
 11 pattern. It--I think it puts them in a little
 12 bit of a box and now I have eight and a half
 13 years to work with going forward and now I'm
 14 going to see what happened to the trend rate
 15 over that period. So using the 20 years,
 16 assuming that the reforms affected all the
 17 coverages, limits them to this eight-and-a-
 18 half-year period going forward.
 19 MS. NEWBURY:
 20 Q. Now it was actually Mr. Doherty's evidence
 21 that he didn't assume that there was an
 22 impact. In fact, he was looking at the data
 23 and tested four possibilities that that
 24 happens. And I understand that you look at
 25 these type of things as well, you

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1 automatically look at EI and CPI, so the fact
 2 that he looked at the 2004 reform as a
 3 potential for a change in the trend isn't any
 4 different than what you do, is that correct?
 5 MS. ELLIOTT:
 6 A. Yes.
 7 MS. NEWBURY:
 8 Q. Yes.
 9 MS. ELLIOTT:
 10 A. You can put a parameter in your model to
 11 measure for that, yes.
 12 MS. NEWBURY:
 13 Q. Now he actually says in his evidence that was
 14 the statistics that made him conclude that
 15 something changed then. He wasn't even
 16 necessarily sure that it was the reform, but
 17 there were changes and it was actually the
 18 numbers and the regression statistics that
 19 confirmed indeed -
 20 MS. ELLIOTT:
 21 A. Yeah.
 22 MS. NEWBURY:
 23 Q. - that there was a change there.
 24 MS. ELLIOTT:
 25 A. Sure.

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1 MS. NEWBURY:
 2 Q. So it wasn't that he's trying to force -
 3 MS. ELLIOTT:
 4 A. No.
 5 MS. NEWBURY:
 6 Q. - a reform into the data.
 7 MS. ELLIOTT:
 8 A. Yeah.
 9 MS. NEWBURY:
 10 Q. It's just that data suggested it and the
 11 statistics confirmed that from his analysis,
 12 but in terms of your comment that he's chosen
 13 a box, it's an eight-and-a-half-year box, and
 14 how he had to force everything to fit that,
 15 how is that any different than selecting a
 16 predetermined length of time such as ten
 17 years? Would that not suffer from being
 18 considered forced into a box and not seeing
 19 what happened in a longer period of time?
 20 What's magical about the ten years?
 21 MS. ELLIOTT:
 22 A. Well, our difference is that we do look at the
 23 ten years ending December 2012. We look at it
 24 ending June 2012. We look at the five years
 25 under two alternatives. So we look at

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1 alternatives, and when we look at those
 2 alternatives, we see that very different
 3 calculated trend rates present themselves. So
 4 that's what's different. FA is presenting one
 5 calculation with this eight-and-a-half-year
 6 period that they are using, and that's the
 7 number that they're picking. We're saying
 8 when you have different time periods,
 9 different exclusions, you get very different
 10 numbers, and we need to take this uncertainty
 11 of the data into consideration in our
 12 selection. That's the difference.
 13 MS. NEWBURY:
 14 Q. So you're--you think that the fact that you're
 15 taking four different regressions over four
 16 different periods of time, different lengths
 17 of time, and averaging those out would
 18 actually take care of any issues with
 19 restricting yourself to a ten-day period of
 20 time because you're adjusting it? It's not
 21 just ten years, it's ten years and then we'll
 22 shift it back by six months, so that'll be a
 23 separate ten-year period time, and then we'll
 24 also limit it to the most recent five years
 25 and shift that back?

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1 MS. ELLIOTT:
 2 A. Um-hm.
 3 MS. NEWBURY:
 4 Q. So that, in your view, that takes care of the-
 5 -having a predetermined length of time?
 6 MS. ELLIOTT:
 7 A. What we're trying to do is find a balance
 8 between being responsive and stable. So yes,
 9 we take the various averages over the ten-year
 10 periods and the five-year periods, and make
 11 your selection, and draw in what we selected
 12 the prior period. And that we believe gives
 13 us a responsive and stable approach to the
 14 loss trend selection. I'm not an advocate of
 15 doing one run with this data, looking at what
 16 the number is. The R square, you know, it--
 17 we're not looking at R squares that are up in
 18 the nineties and it's a great fit. FA has
 19 presented their one run, and that's their
 20 selection, and I maintain that you can exclude
 21 different points, different time periods, and
 22 get very different numbers because the data is
 23 volatile. And if you just pick one number and
 24 say, "That's it, that's right. I've got the
 25 bet fit," you may not have the right answer.

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1 This data is very volatile. I'm really saying
 2 it very uncertain.
 3 MS. NEWBURY:
 4 Q. So if you restrict yourself to the ten-year
 5 period, are you not running a risk that you--
 6 the first few years of that period of time
 7 might actually contain a separate and distinct
 8 trend, and you're only catching the tail end
 9 of that in your ten-year analysis? Do you
 10 take that into account in your approach?
 11 MS. ELLIOTT:
 12 A. Well, we're looking at ten years of data and
 13 measuring the change over that ten-year
 14 period.
 15 MS. NEWBURY:
 16 Q. Yes.
 17 MS. ELLIOTT:
 18 A. We're--and then we're also looking at the more
 19 recent five years and measuring the change in
 20 that period of time. So--and we're also
 21 seeing pretty different results for that. So
 22 I think our approach is, you know, what we
 23 think is a reasonable approach.
 24 MS. NEWBURY:
 25 Q. But my question is that if you restrict

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1 yourself to looking at the ten-year period of
 2 time -
 3 MS. ELLIOTT:
 4 A. Um-hm?
 5 MS. NEWBURY:
 6 Q. - if you happen to have a different trend that
 7 ended for example in the first couple of years
 8 of that ten-year period of time, don't you run
 9 the risk that you are going to be missing that
 10 previous trend?
 11 MS. ELLIOTT:
 12 A. Well, we would see it when we look at the--if
 13 I'm understanding what you're saying, in the
 14 more recent period, if we look at the five-
 15 year trend, we would see that.
 16 MS. NEWBURY:
 17 Q. And how would you see that?
 18 MS. ELLIOTT:
 19 A. Because we calculate it.
 20 MS. NEWBURY:
 21 Q. So you can see that if you've got Year 1 and
 22 Year 2 which is the tail end of a trend from
 23 the ten-year period before that, or five-year
 24 period before that -
 25 MS. ELLIOTT:

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1 A. Sorry, what's Year 1 and Year--what years are
 2 you referring to?
 3 MS. NEWBURY:
 4 Q. These are just examples.
 5 MS. ELLIOTT:
 6 A. Sure.
 7 MS. NEWBURY:
 8 Q. This is a hypothetical question. So if you
 9 are looking at a ten-year period of time, and
 10 you've got the first two years which -
 11 MS. ELLIOTT:
 12 A. Okay, well which are the first two years? The
 13 older years or the more -
 14 MS. NEWBURY:
 15 Q. The older years.
 16 MS. ELLIOTT:
 17 A. Okay.
 18 MS. NEWBURY:
 19 Q. Yes. So the older--the oldest of the two
 20 years.
 21 MS. ELLIOTT:
 22 A. Um-hm.
 23 MS. NEWBURY:
 24 Q. Year 1 and Year 2 out of ten years happen to
 25 be the tail end of a trend from the--a

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1 previous period of time.
 2 MS. ELLIOTT:
 3 A. Um-hm.
 4 MS. NEWBURY:
 5 Q. How would looking at the most recent five
 6 years detect that previous trend?
 7 MS. ELLIOTT:
 8 A. Well if you're not including that in the five-
 9 year model, you're not going to see that.
 10 MS. NEWBURY:
 11 Q. Yes.
 12 MS. ELLIOTT:
 13 A. But if you look at the full ten years, and you
 14 look at your fitted values and your actual
 15 values, and compared that, you're going to see
 16 any differences there. Yeah, and it might
 17 force you to, you know, look at that and maybe
 18 you're going to decide that you're not going
 19 to use those more recent--the first year and
 20 the second year -
 21 MS. NEWBURY:
 22 Q. Yes.
 23 MS. ELLIOTT:
 24 A. - because it's not giving you a good fit.
 25 MS. NEWBURY:

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1 Q. Right.
 2 MS. ELLIOTT:
 3 A. The direction is changing. Certainly you look
 4 at the data.
 5 MS. NEWBURY:
 6 Q. But you're not looking to see whether or not
 7 there's actually more than one trend going on
 8 and I'm restricting myself to ten years?
 9 MS. ELLIOTT:
 10 A. We absolutely look at the data to see what's
 11 going on with the data. We absolutely do.
 12 MS. NEWBURY:
 13 Q. Okay, beyond the ten years?
 14 MS. ELLIOTT:
 15 A. We look at the data.
 16 MS. NEWBURY:
 17 Q. Yes.
 18 MS. ELLIOTT:
 19 A. The 15 years, to see what is going on with the
 20 data.
 21 MS. NEWBURY:
 22 Q. Okay, but not 20 years?
 23 MS. ELLIOTT:
 24 A. No, not 20 years.
 25 MS. NEWBURY:

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1 Q. Is it possible that the Facility Association
 2 charts which showed the full 20 years of data
 3 as opposed to 15 years of data would allow the
 4 additional data to reveal a separate trend
 5 that started in the, say, the most--the
 6 earliest of the five years of that 20-year
 7 period of time?
 8 MS. ELLIOTT:
 9 A. So you're asking me if a trend occurred in
 10 1993 to 1998 in there, if it identified
 11 something different going on?
 12 MS. NEWBURY:
 13 Q. Well it could be a trend that starts in '96 -
 14 MS. ELLIOTT:
 15 A. Sure.
 16 MS. NEWBURY:
 17 Q. - and ends in 2002 or -
 18 MS. ELLIOTT:
 19 A. In fact, in think there was. I think the
 20 frequency, it was going up then.
 21 MS. NEWBURY:
 22 Q. Yes.
 23 MS. ELLIOTT:
 24 A. And then around 2000 it started declining.
 25 MS. NEWBURY:

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1 Q. Yes.
 2 MS. ELLIOTT:
 3 A. So--but I already know that because I looked
 4 at that data before. So yeah, but what am I
 5 going to do with it in 2015?
 6 MS. NEWBURY:
 7 Q. Okay. So you don't feel that there's any
 8 advantage looking at an additional five years
 9 of data, at the, you know, the earliest 15 to
 10 20 years ago for example.
 11 MS. ELLIOTT:
 12 A. I don't think looking at 1993 to 1997 in 2015
 13 is going to help in any way. And I have
 14 looked at that data over time. Now let's not--
 15 you know, as I said, we've been doing this,
 16 looking at trend rates over a period of time.
 17 I have some, vague as it may be, recollection
 18 of data from back then.
 19 MS. NEWBURY:
 20 Q. Okay, and is there a harm in looking at the
 21 full 20 years of data?
 22 MS. ELLIOTT:
 23 A. No harm. No harm in looking at it, no.
 24 MS. NEWBURY:
 25 Q. Now it's your evidence, and you just alluded

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1 to it again, that there has been a change in
 2 frequency. I think you've indicated since
 3 2002? Is it 2002 that you -
 4 MS. ELLIOTT:
 5 A. Earlier I think there was an increasing
 6 pattern and then it started to decline.
 7 MS. NEWBURY:
 8 Q. Okay.
 9 MS. ELLIOTT:
 10 A. Yeah.
 11 MS. NEWBURY:
 12 Q. And that has increased? That is continuing to
 13 this day, the change in frequency?
 14 MS. ELLIOTT:
 15 A. I believe that the frequency is a decline,
 16 yeah.
 17 MS. NEWBURY:
 18 Q. Okay. And that's over quite a long period of
 19 time then in that case? So you can have a
 20 trend that goes for more than ten years?
 21 MS. ELLIOTT:
 22 A. Yes, we're--and I said that we're seeing this
 23 decline in the frequency rate in many
 24 provinces.
 25 MS. NEWBURY:

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1 Q. Yes.
 2 MS. ELLIOTT:
 3 A. And we attribute that more so in the last ten
 4 years to advances in technology with vehicles.
 5 MS. NEWBURY:
 6 Q. And given that you do recognize that there is
 7 a trend in frequency in and of itself which
 8 would be not necessarily the same as the trend
 9 in loss costs or severity, would that mean
 10 that it should be important or beneficial to
 11 look at these trend rates separately?
 12 MS. ELLIOTT:
 13 A. Absolutely, and we do that, yeah.
 14 MS. NEWBURY:
 15 Q. Okay. Now in the trend rates that you've
 16 provided, there are actually--it's one trend
 17 rate for severity and frequency combined into
 18 loss costs?
 19 MS. ELLIOTT:
 20 A. Right, because when the--in the application of
 21 the trend rate it is one number. In the
 22 exhibit prepared by FA they take their taxi
 23 experience and they apply the loss trend
 24 factor. It's one number that's presented for
 25 the loss costs, yeah.

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1 MS. NEWBURY:
 2 Q. Okay. You referred to the CA 0W 001, page 1
 3 of that report. You state in that report
 4 that, "We modelled the data several different
 5 ways in an attempt to identify the underlying
 6 trends during the experience period with and
 7 without certain data points that are
 8 considered to be statistical outliers, and
 9 over time periods that are longer than the
 10 experience period."
 11 MS. ELLIOTT:
 12 A. Sorry, is this on the screen or -
 13 MS. NEWBURY:
 14 Q. Perhaps we can scroll down a little bit to see
 15 where that is. It's the third paragraph. I
 16 don't believe that's the one. Oh, it's page
 17 4, is it? Sorry. I've got the wrong page over
 18 there. Just bear with me for a minute.
 19 MS. GLYNN:
 20 Q. I think we have it there on the screen now,
 21 Jennifer.
 22 MS. NEWBURY:
 23 Q. Oh, is there?
 24 MS. GLYNN:
 25 Q. Yes.

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1 MS. NEWBURY:
 2 Q. Yes, sorry, it's the fourth paragraph, at the
 3 very end. Okay? So, "We modelled the data
 4 several different ways in an attempt to
 5 identify the underlying trends during the
 6 experience period with and without certain
 7 data points that are considered to be
 8 statistical outliers, and over time periods
 9 that are longer than the experience period as
 10 a means of increasing the stability
 11 reliability of the data being analyzed." Now
 12 there's several different ways that you refer
 13 to modelling the data. Can you explain what
 14 that means?
 15 MS. ELLIOTT:
 16 A. What we're trying to express here is that we
 17 look at measuring the trend rate. You know,
 18 perhaps modelling is a bit of a confusing
 19 word, but measuring the trend rate over
 20 several different time periods with different
 21 exclusions and that's what we're trying to
 22 express there.
 23 MS. NEWBURY:
 24 Q. Okay. So basically it's the--you have some
 25 specifics in your report about the time

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1 periods and the data exclusions, but you're
2 saying that you did much more than that?

3 MS. ELLIOTT:
4 A. Yes.

5 MS. NEWBURY:
6 Q. But you haven't produced the reports and
7 haven't necessarily kept all of that
8 information? You're just saying that you have
9 done a bunch of other models?

10 MS. ELLIOTT:
11 A. Right, we showed earlier a 2012 exhibit where
12 there was a summary of some of the runs that
13 we prepare -

14 MS. NEWBURY:
15 Q. Yes, okay.

16 MS. ELLIOTT:
17 A. - that are broader than what's presented in
18 the summary, in the discussion section for
19 each coverage.

20 MS. NEWBURY:
21 Q. Okay.

22 MS. ELLIOTT:
23 A. Yeah.

24 MS. NEWBURY:
25 Q. And would that be comprehensive? Would that

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1 include everything that you did?

2 MS. ELLIOTT:
3 A. No.

4 MS. NEWBURY:
5 Q. And how do you measure the various models in
6 terms of their ability to identify underlying
7 trends during the experience period?

8 MS. ELLIOTT:
9 A. Well we have a number. There's standard stats
10 that are produced, and we're looking at a
11 measure called an R square, we're looking at,
12 and a T statistic. They would be the two
13 common ones that we look at to determine
14 whether the parameters are significant in the
15 model.

16 MS. NEWBURY:
17 Q. And how would you describe the T statistic to
18 lay people like most of us?

19 MS. ELLIOTT:
20 A. Sure. Well there's a set value, and we're
21 really looking at what is the value of the T
22 statistic. Typically we want to see a number
23 of two or higher to indicate that that
24 parameter is significant, that's it's adding
25 to the model. And certainly with this data

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1 because it's so limited and volatile, we do
2 not get as good fits, our R squares are not
3 what we'd like them to be.

4 MS. NEWBURY:
5 Q. Okay.

6 MS. ELLIOTT:
7 A. And it's a difficult data to fit.

8 MS. NEWBURY:
9 Q. Okay. So, you do use this T statistic in your
10 own trend analysis or analyses?

11 MS. ELLIOTT:
12 A. Um-hm.

13 MS. NEWBURY:
14 Q. And how is that related to the P value which
15 Mr. Doherty has referred to from time to time
16 in his evidence and in some of his
17 documentation?

18 MS. ELLIOTT:
19 A. They're actually similar measures, if you have
20 a low P value, you'll tend to have a high T
21 statistic measure.

22 MS. NEWBURY:
23 Q. And is there a way of describing, like you
24 know, what does P value mean? Is it -

25 MS. ELLIOTT:

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1 A. Well, P value and T value are both trying to
2 indicate whether they parameter that you're
3 using adds to the--so, say if you incorporated
4 precipitation into your model and if your T
5 value was 3.5 and your P value was .0001,
6 you'd think yeah, okay, that's pretty good. I
7 really should include precipitation in my
8 model. So, there are different values that
9 you're looking for for P test and a T test,
10 but both are trying to indicate that the
11 parameter is adding to your fit. It's a good
12 parameter to use.

13 MS. NEWBURY:
14 Q. But does it have any sort of meaning, you
15 know, it's--you often hear about stats,
16 something is correct 99 times out of a hundred
17 or -

18 MS. ELLIOTT:
19 A. Sure, and I don't have the T test book. I
20 mean, there's a whole page of numbers, but
21 yes, there's a book and there's a value that's
22 printed that you're looking at, yeah.

23 MS. NEWBURY:
24 Q. Is there one term that would be more helpful
25 in describing it to lay people? Is the T

Page 149

1 statistic more useful when dealing with other,
 2 you know, technical people and the P value
 3 more helpful when dealing with lay people in
 4 terms of its -
 5 MS. ELLIOTT:
 6 A. I don't know, we have fairly highly educated
 7 people in the room, but I use T statistic to
 8 look at whether that value that we are
 9 including in the trend model adds to the fit,
 10 if it's significant.
 11 MS. NEWBURY:
 12 Q. And how would you choose to rely upon one
 13 description over the other? Why would you
 14 choose to refer to T statistic as opposed to P
 15 value?
 16 MS. ELLIOTT:
 17 A. You could have both, I mean, if not objection
 18 to having both. You could have one, I mean,
 19 you could, it's just a value that if you will,
 20 comes out from an excel model.
 21 MS. NEWBURY:
 22 Q. Okay. And what is the term outlier, as it's
 23 used in statistics?
 24 MS. ELLIOTT:
 25 A. Well, there'd be a common term, often for an

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1 outlier in statistical terms you're looking at
 2 the actual data and then you're looking at the
 3 fitted data and then the difference between
 4 those two pieces of data.
 5 MS. NEWBURY:
 6 Q. Um-hm. Can you get into a bit more detail
 7 about specifically what an outlier is? Is it
 8 different than--how different?
 9 MS. ELLIOTT:
 10 A. Well, that really is the issue is how
 11 different is it? What is that difference?
 12 So, if you take all your data and you run, try
 13 to fit a line to it and maybe you have a
 14 really good fit, but you've got one piece of
 15 data that it's different from the actual
 16 experience is really why maybe it's much
 17 higher or much lower, whatever the case may
 18 be, you could consider that an outlier.
 19 MS. NEWBURY:
 20 Q. Okay. So, is it sort of like an anomaly in
 21 the data? It's different from most of the
 22 data that, you know, either it's a lot higher
 23 or a lot lower -
 24 MS. ELLIOTT:
 25 A. Right, there could be something that caused

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1 that particular data point to be different.
 2 And we spoke earlier about an example in
 3 Vancouver where they found the precipitation
 4 was causing a difference. So, yes, you have a
 5 particular data point that you think is out of
 6 keeping with everything else and if you
 7 include that data point in your trend model,
 8 then perhaps you won't get the best
 9 calculation or the best measurement that
 10 you're intending to measure.
 11 MS. NEWBURY:
 12 Q. So, basically it's a data point that's out of
 13 keeping with everything else and there might
 14 be an explanation for it, it might not be
 15 necessarily an error in the data, there could
 16 be a very good explanation for it, like -
 17 MS. ELLIOTT:
 18 A. And sometimes you don't necessarily know what
 19 the reason is. You just know that it's really
 20 different than everything else.
 21 MS. NEWBURY:
 22 Q. And it may or may not be explainable.
 23 MS. ELLIOTT:
 24 A. Unfortunately, that's true.
 25 MS. NEWBURY:

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1 Q. And you noted that when you do your different
 2 ways of modelling the data that you will do it
 3 with and without certain data points that are
 4 considered to be statistical outliers. And
 5 I'm wondering how would you determine if a
 6 data point is, in fact, an outlier?
 7 MS. ELLIOTT:
 8 A. Well, in our approach and in what I'm
 9 expressed earlier today, what we do is that we
 10 take the two highest and two lowest points, we
 11 feel that that helps reduce the, exclude the
 12 points that are high and low out of the model
 13 in our measurement and that's the approach
 14 that we've taken and we do that from review to
 15 review.
 16 MS. NEWBURY:
 17 Q. Okay. And is it the consistent number of data
 18 points that you would exclude? Do you
 19 exclude, in some reviews, one data point for a
 20 ten year period of time and maybe the next
 21 time, four data points for a ten year period
 22 of time?
 23 MS. ELLIOTT:
 24 A. Well, I think that we typically, when we're
 25 looking at ten year, exclude two high and two

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1 low and five years, one high and one low.
 2 MS. NEWBURY:
 3 Q. Okay. And for a 15 year you don't have a
 4 typical exclusion.
 5 MS. ELLIOTT:
 6 A. We have a presented trend rates for 15 years
 7 in our report. So, as I said earlier, I don't
 8 have a number for you.
 9 MS. NEWBURY:
 10 Q. Okay. And do you do any testing to perform,
 11 if in fact, the data points, the two high, the
 12 two low in a ten year period, for example, are
 13 in fact outliers?
 14 MS. ELLIOTT:
 15 A. Well, we are looking at the data without any
 16 exclusions. The actual data and how does that
 17 fit in looking at the differences, yes.
 18 MS. NEWBURY:
 19 Q. Okay, but do you do any specific tests, not
 20 just comparing how does it look with no
 21 exclusions and how does it look with four
 22 exclusions, two high and two low?
 23 MS. ELLIOTT:
 24 A. We're looking at the actual data and the
 25 fitted data. You can see graphically and with

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1 this commercial data, a layman can see some of
 2 the outliers, I mean, they're fairly extreme
 3 because the data is so limited. But yes, as I
 4 said, we're excluding the two high and the two
 5 low.
 6 MS. NEWBURY:
 7 Q. Okay.
 8 MS. ELLIOTT:
 9 A. We look at the actual data and the fitted
 10 data, with no exclusions and see those
 11 differences. We look at the graphs of the
 12 data and see these high points. That's what
 13 we do.
 14 MS. NEWBURY:
 15 Q. Okay. Are there any names on any of the tests
 16 that you perform?
 17 MS. ELLIOTT:
 18 A. No.
 19 MS. NEWBURY:
 20 Q. Are there standard tests to confirm whether a
 21 data point is, in fact, an outlier?
 22 MS. ELLIOTT:
 23 A. Yes.
 24 MS. NEWBURY:
 25 Q. And what are those standard tests?

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1 MS. ELLIOTT:
 2 A. There's tests where you can, you're looking at
 3 the difference and what the difference is for
 4 each of the data points, where you're
 5 measuring those differences, there'll be a
 6 bell curve of the differences and you're
 7 trying to see how far within that bell curve
 8 those differences lie, yes.
 9 MS. NEWBURY:
 10 Q. Okay. And you haven't done of any of this
 11 sort of testing?
 12 MS. ELLIOTT:
 13 A. Not in this example, no.
 14 MS. NEWBURY:
 15 Q. Okay. And why not?
 16 MS. ELLIOTT:
 17 A. Because we've taken the approach that we're
 18 going to exclude the two highest and the two
 19 lowest, the data is very volatile and that's
 20 why, because it's so obvious to a lay person
 21 when you have a point up here and a point down
 22 there that they're high and low.
 23 MS. NEWBURY:
 24 Q. Okay. Now, you said that a lay person would
 25 be able to see some of the outliers. Would

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1 you expect an outlier to be obvious or
 2 noticeable all the time? Would each and every
 3 outlier seem obvious to the lay person?
 4 MS. ELLIOTT:
 5 A. Well, I guess if you're looking at the--no,
 6 not all the time, no, not all the time, some
 7 of the time here for sure.
 8 MS. NEWBURY:
 9 Q. And in terms of the, I guess, the exclusion of
 10 data points as being outliers, it would seem
 11 from your approach that outliers occur in
 12 pairs, that you have one high and one low, two
 13 high/two low. What is the statistical support
 14 for this approach?
 15 MS. ELLIOTT:
 16 A. I don't think there's a statistical approach
 17 that I'm going to reference. It's the
 18 approach that we've taken to try to smooth out
 19 the effect of the highs and the lows, the
 20 extremes that we are taking. I don't have--
 21 there's not a name for it.
 22 MS. NEWBURY:
 23 Q. Okay, but it is an assumption that if you have
 24 one high outlier, then you'll have a matching
 25 low outlier and if you have two high outliers,

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1 you'll have two matching low outliers?
 2 MS. ELLIOTT:
 3 A. We're taking the approach that we can have a
 4 more stable result by excluding the two high
 5 and the two low points.
 6 MS. NEWBURY:
 7 Q. And is it possible then that these are not
 8 true outliers, that data points that you've
 9 excluded?
 10 MS. ELLIOTT:
 11 A. It depends on what your standard is of true
 12 outliers.
 13 MS. NEWBURY:
 14 Q. And what is a standard for true outliers?
 15 MS. ELLIOTT:
 16 A. I don't know, I guess, you said that. I don't
 17 know what your standard is.
 18 MS. NEWBURY:
 19 Q. I'm going to refer you to several exhibits.
 20 These are the exhibits SD 1 through SD 4. So,
 21 looking here at SD 1, now this is Mr.
 22 Doherty's, I guess, summary is his
 23 understanding of your regression analysis.
 24 And this one, SD 1, would be the ten-year
 25 period ending December 2012. Is that correct?

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1 Did I understand that you've have a chance to
 2 review these exhibits before?
 3 MS. ELLIOTT:
 4 A. Yes, um-hm.
 5 MS. NEWBURY:
 6 Q. Okay. And can you just identify what the low
 7 and high outliers here, that he's identified,
 8 but these were your outliers.
 9 MS. ELLIOTT:
 10 A. I can't see it on the screen to--I mean, I
 11 don't see the full page to tell you that.
 12 MS. NEWBURY:
 13 Q. Okay. I've got copies of the exhibit, I could
 14 provide that. I can provide these to you.
 15 MS. GLYNN:
 16 Q. There's a binder on the desk containing all
 17 the exhibits as well.
 18 MS. NEWBURY:
 19 Q. I'll be referring to (inaudible - away from
 20 microphone) markings on that. So, I'll just
 21 leave that -
 22 MS. ELLIOTT:
 23 A. Okay, yes.
 24 MS. NEWBURY:
 25 Q. So, can you identify then the two low outliers

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1 and the two high outliers?
 2 MS. ELLIOTT:
 3 A. Sure, on the column, Excluded Data Points, you
 4 take the bottom four Y's and that would be the
 5 four excluded points.
 6 MS. NEWBURY:
 7 Q. Sorry, I can't hear you very well.
 8 MS. ELLIOTT:
 9 A. Sorry, on the column labelled Y's, Excluded
 10 Data Points, you take the bottom four Y's, is
 11 the simple way to express it, over the last
 12 ten-year period as the excluded four points.
 13 MS. NEWBURY:
 14 Q. And which are the highs and which are the
 15 lows?
 16 MS. ELLIOTT:
 17 A. Well, on the yellow highlight you can see the
 18 values of the percentage changes and the ones
 19 that are positive are the highs and the ones
 20 that are negative would be referred to as the
 21 lows.
 22 MS. NEWBURY:
 23 Q. And can you identify those by the year, half
 24 year?
 25 MS. ELLIOTT:

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1 A. Well, yes, I can. 2003-1, 2005-1 -
 2 MS. NEWBURY:
 3 Q. Are those high or low?
 4 MS. ELLIOTT:
 5 A. We have to go across and they're low, the
 6 negative.
 7 MS. NEWBURY:
 8 Q. Okay. So, those two that you read, 2003 H1
 9 and 2005 H1 are low.
 10 MS. ELLIOTT:
 11 A. Um-hm.
 12 MS. NEWBURY:
 13 Q. And 2007-2 and 11-2 are the high values.
 14 MS. NEWBURY:
 15 Q. And could we go through the same exercise for
 16 the other three exhibits. So, what are the
 17 two low outliers for SD 2?
 18 MS. ELLIOTT:
 19 A. 11-2 and 8-2.
 20 MS. NEWBURY:
 21 Q. That's right, there's only--that's the five
 22 year period, so there would be one of each.
 23 MS. ELLIOTT:
 24 A. Yes.
 25 MS. NEWBURY:

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1 Q. So, the low is?

2 MS. ELLIOTT:

3 A. The 8-2 and the high would be the 11-2.

4 MS. NEWBURY:

5 Q. And for SD 3? So, that's a ten year period

6 ending June 2012, can you identify the two low

7 outliers?

8 MS. ELLIOTT:

9 A. That would be the 2002-2 and 2005-1 and yes,

10 then the high ones are the 7-2 and 11-2.

11 MS. NEWBURY:

12 Q. Okay, thank you. And finally SD 4 which is

13 the five-year period ending June of 2012, and

14 what is the low outlier?

15 MS. ELLIOTT:

16 A. There we have 8-2 and then the high is 7-2.

17 MS. NEWBURY:

18 Q. Okay. So, comparing the two ten year period

19 of times, so that's SD1 and SD 3, it's noted

20 that 2003 H1 which was a low outlier is no

21 longer considered to be a low outlier when you

22 look the ten year period in regression of the

23 SD 3, 2012. Can you explain why something

24 that was considered a low outlier in a very

25 similar ten year period of time with a simple

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1 shift back six months is now no longer a low

2 outlier?

3 MS. ELLIOTT:

4 A. Sure. The approach that we were trying to use

5 here and I stated earlier today that we did

6 this percentage change approach to the

7 exclusions just in our two reports for June

8 2012 and December 2012, we were trying to see

9 what were the larger percentage changes and

10 exclude those related data points. It's

11 difficult to follow and it's being pointed out

12 here, rightly so, that it's difficult to make

13 the comparison from different models, we end

14 up excluding different points and also, it's

15 hard to follow which points were excluded.

16 And so we acknowledge that and we worded that

17 to the dollar basis exclusion that's cleaner

18 and everyone can follow it. And as we also

19 presented today, if in fact, we have chose to

20 look the dollar values, exclude those, on a

21 basis of here's the large, high dollar one,

22 exclude that; here's a low dollar amount,

23 exclude that over the period that we're

24 looking at, we, in fact, for this particular

25 circumstance, get a bigger negative trend than

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1 what did on what we did, present here.

2 MS. NEWBURY:

3 Q. My question is more focused on how--and I

4 understand that you've changed, that you've

5 abandoned the approach at looking the change

6 in values from on period to a comparable

7 period in the following year, and now you

8 focus on the actual data for that period of

9 time.

10 MS. ELLIOTT:

11 A. Yes.

12 MS. NEWBURY:

13 Q. But still we have an issue that an outlier was

14 identified and that really doesn't have

15 anything to do with the ease of somebody

16 understanding what's happening, it's that the

17 model somehow, because of, it seems to me it's

18 because you've decided on a pre-determined

19 basis, I'm going to take two high and exclude

20 then and two low.

21 MS. ELLIOTT:

22 A. That's correct.

23 MS. NEWBURY:

24 Q. And you might run into the same problems if

25 you look at the data, not just the change

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1 between periods of time, but if you look at

2 the data itself, if you arbitrarily decide I'm

3 going to take two high and take two low, you

4 might end up with these sort of unusual

5 situations, I would suggest, where something

6 that is an outlier for one ten-year period of

7 time suddenly loses that characteristic of

8 being an outlier for a slightly different ten-

9 year period of time. Is there an explanation

10 for that?

11 MS. ELLIOTT:

12 A. Yes. When we look at the data, when we take

13 the ten years of data, we will run the

14 regression model without any exclusions and

15 then we run it with the exclusions and we find

16 that you're getting a better fit with the

17 exclusions because of the volatility of this

18 data. So, when we take out those extreme high

19 points and the extreme low points, we get a

20 little better fits in the regression model and

21 that's the reason for doing it. So, you know,

22 we acknowledge that our approach of the

23 percentage, we thought that might be, you

24 know, better, but in fact, in hindsight, it's

25 confusing and convoluted and so, we've stopped

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1 that. On the other hand, we do acknowledge,
 2 if we had prepared on the dollar basis, the
 3 lost trend rate would have been a larger
 4 negative than we calculated. So, it's an
 5 approach that we take to try to smooth out the
 6 results from review to review. That's what we
 7 do.

8 MS. NEWBURY:
 9 Q. And again, my focus here is not on the change
 10 in values. It's more on the fact that you've
 11 got an outlier that suddenly loses its
 12 characteristic. Is that because--are you
 13 saying that an outlier for the first ten-year
 14 period lost its characteristic in the second
 15 ten-year period because of your approach of
 16 using the change of values?

17 MS. ELLIOTT:
 18 A. What I'm trying to express here is, you know,
 19 I take, I think, Mr. Doherty's comments,
 20 finding it confusing and showing that there's
 21 a shift in what's excluded when we look at the
 22 two. It's a valid comment. I acknowledge it
 23 and that's why we changed in our subsequent
 24 reports. We tried it, it was a little
 25 convoluted and confusing and we stopped using

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1 it. We learned. We don't do everything the
 2 same all the time. We try to look at what
 3 we're going; how to do it better. We made an
 4 attempt and it didn't work.

5 MS. NEWBURY:
 6 Q. But that's not my question. My question is
 7 did that approach that you've not abandoned
 8 and I understand the reasons for that and I
 9 accept that, but the approach of focusing on
 10 the change of values as opposed to the actual
 11 data values themselves, but looking at the
 12 change, how much did it go up; how much did it
 13 go down. Did that actually cause this
 14 situation that you have, an outlier identifier,
 15 the low outlier of 2003 H1 in December 2012 no
 16 longer being an outlier.

17 MS. ELLIOTT:
 18 A. Yeah, absolutely. So, that's the point, that
 19 it's a bit confusing, hard to follow what's
 20 excluded and I acknowledge it as something we
 21 tried. It's hard to follow and yeah, so.

22 MS. NEWBURY:
 23 Q. So, you're saying that if you had not used
 24 that approach, if you focused instead on the
 25 data points themselves and not the changes,

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1 that you would not have this same situation
 2 where a low outlier for a ten-year period of
 3 time disappears in the subsequent ten-year
 4 period of time because that's arising from the
 5 approach of looking at the changes of the
 6 value?

7 MS. ELLIOTT:
 8 A. Well, when you look at the ten-year trend,
 9 excluding two high and two low and a dollar
 10 value and we looked at it ending December 2012
 11 and then if we shift everything up to look at
 12 ten years ending up June 2012, it's possible
 13 that there could be different high and low
 14 data points, just due to what the data is,
 15 that's possible.

16 MS. NEWBURY:
 17 Q. If that there were the case though, so if
 18 something--I understand it now, you've got
 19 another six month period of time, you've lost
 20 the data point on the more recent end and
 21 you've gained a data point on the beginning of
 22 that period of time, but you know, if you
 23 were--something that you decided was an
 24 outlier was something that was so unusual from
 25 the rest of the data, I could see that maybe

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1 you've got a new even more unusual higher
 2 point or lower point from the data, but would
 3 still--would that point, that low point 2003 H1
 4 still not have the characteristic of looking
 5 like it's out of keeping with everything else?

6 MS. ELLIOTT:
 7 A. If your question is could we exclude a point
 8 looking on a percentage basis and exclude that
 9 same point looking on a dollar basis, that's
 10 possible, sure.

11 MS. NEWBURY:
 12 Q. Okay. Now, you still have the SD 1 and SD 4
 13 on your desk there, I believe, Ms. Elliott.

14 MS. ELLIOTT:
 15 A. Yes.

16 MS. NEWBURY:
 17 Q. So, I'm going to request that you circle all
 18 of the outliers on the graphs that Mr. Doherty
 19 has on the second page for each of those
 20 exhibits. So, those outliers that you just
 21 identified for us, the two high and two low
 22 for each of the ten year periods and the low
 23 and high for each of the five year periods,
 24 I'm going to ask that you circle where those
 25 are on the graphs.

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<p>1 MS. GLYNN: 2 Q. We won't be able to see that on the screen. 3 MS. NEWBURY: 4 Q. No, but what I could do is get her to do the 5 circles on this graph and then I'm going to 6 request that that be entered as exhibits. And 7 then we could have them downloaded and 8 available on the screen. It's just going to 9 help to identify for us where these different 10 outliers are. 11 MS. GLYNN: 12 Q. You want to take that document now and do 13 that? 14 MS. NEWBURY: 15 Q. Yes. 16 MS. GLYNN: 17 Q. To use for questioning now. 18 MS. NEWBURY: 19 Q. Yes. 20 MS. GLYNN: 21 Q. Okay, I'm not sure--I mean, we only have 15 22 minutes left in the day. 23 MS. NEWBURY: 24 Q. It's just to demonstrate. Ms. Elliott, I mean 25 we could do this--it shouldn't take more than-</p>	<p>1 documents. These are her outliers, but she 2 hasn't provided a graph showing where the 3 outliers are. So, we're asking that she now 4 identify those outliers on each of the four 5 graphs for our benefit, so that we can 6 visualize what she's talking about. 7 MS. GLYNN: 8 Q. Are you able to do that, Ms. Elliott? 9 MS. ELLIOTT: 10 A. I think so, I will try. (REQUEST) 11 MS. NEWBURY: 12 Q. And that's the actual in-fitted model lost 13 cost. 14 MS. GLYNN: 15 Q. So, the first graph there. 16 MS. NEWBURY: 17 Q. Yes. 18 MS. GLYNN: 19 Q. Okay. 20 MS. NEWBURY: 21 Q. Actually both graphs because they are slightly 22 different. Just one is fine. 23 VICE CHAIR WHALEN: 24 Q. Ms. Glynn, are you clear on what's being 25 questioned?</p>
<p>Page 170</p> <p>1 -I mean she's gone through these graphs, so it 2 shouldn't take more than ten minutes to do 3 that. I mean, this is the exercise that I 4 want her to go through. She's given evidence 5 that outliers are easily noticeable to lay 6 people. I just want to have Ms. Elliott 7 identify those on the graphs. 8 MS. ELLIOTT: 9 A. I don't have a pen, sorry. 10 VICE CHAIR WHALEN: 11 Q. Would it make sense for her to take this away 12 and do this evening, overnight, rather than 13 have her do it on the stand right now. 14 MS. NEWBURY: 15 Q. Or we can take a break. 16 MR. JOHNSON: 17 Q. I'd feel more comfortable if she's not doing 18 it on the fly. 19 VICE CHAIR WHALEN: 20 Q. Absolutely. 21 MS. GLYNN: 22 Q. So, an undertaking from Ms. Elliott to provide 23 a visual aid of the circled outliers. 24 MS. NEWBURY: 25 Q. Each and every outlier on those four</p>	<p>Page 172</p> <p>1 MS. GLYNN: 2 Q. I think so. I'm going to look to my witness 3 and make sure she's - 4 MS. ELLIOTT: 5 A. I think so, yes. 6 STAMP, Q.C. 7 Q. Just for clarification then, Ms. Elliott - 8 MS. GLYNN: 9 Q. How about if I tell you what my understanding 10 is and you can tell me. So, for each of these 11 exhibits, SD 1 through 4, on the actual in- 12 fitted model, lost cost graph, you would like 13 Ms. Elliott to circle the data points that she 14 has excluded. 15 STAMP, Q.C.: 16 Q. The four and the two with each of these. 17 MS. GLYNN: 18 Q. I think we have it. 19 MS. NEWBURY: 20 Q. On page 4 of the report at CA OW 001, under 21 the heading, the data points we considered, 22 you stated in the first paragraph, "we 23 recognize that the indicated trends produced 24 by the regression model, particularly those 25 over a five year period can ben sensitive to</p>

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1 one or two of the data points". Now, looking
 2 that the ten year regressions that you model,
 3 you have automatically excluded two of the
 4 highest and the two of the lowest data points
 5 which would be a total of four data points
 6 being excluded. Why would you, in light of
 7 your earlier comment that a regression model
 8 can be sensitive to one or two of the data
 9 points, why would you have excluded four data
 10 points?
 11 MS. ELLIOTT:
 12 A. That was the approach that we chose to use in
 13 this circumstance given that we felt that
 14 there was a fair amount of volatility in the
 15 data and made that choice.
 16 MS. NEWBURY:
 17 Q. Okay. So, you comment then that the
 18 regression model can be sensitive to one or
 19 two of the data points, that doesn't cause you
 20 concern when you decided to exclude four of
 21 the data points?
 22 MS. ELLIOTT:
 23 A. No, that doesn't. I think what it tells us is
 24 that when you look at a lost trend rate and
 25 you exclude the data points, and when you

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1 don't exclude the data points, looking at
 2 those differences, that tells you something.
 3 So, no, I don't have concern.
 4 MS. NEWBURY:
 5 Q. Now, the process of eliminating the two high
 6 and two low for the ten year, that actually
 7 results in the elimination of 20 percent of
 8 your data points.
 9 MS. ELLIOTT:
 10 A. We end up with 16 data points.
 11 MS. NEWBURY:
 12 Q. So, 20 percent -
 13 MS. ELLIOTT:
 14 A. Out of 20.
 15 MS. NEWBURY:
 16 Q. And how many would you have in the five year?
 17 Would you not also reduce your data points by
 18 20 percent?
 19 MS. ELLIOTT:
 20 A. They go from ten to eight.
 21 MS. NEWBURY:
 22 Q. So, it's a 20 percent reduction both times.
 23 And have you done an analysis to test for the
 24 likelihood that a sample of 20 data points
 25 would contain 20 percent outliers?

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1 MS. ELLIOTT:
 2 A. Well, I think in this case, wondering if a
 3 sample ten data points would have two
 4 outliers. I think what you really want to
 5 think about in presenting trend rates that you
 6 think are absolutely right and we're not
 7 taking that position that's why we have a
 8 variety of looks at the data, how credible is
 9 this data that we're looking at? And the data
 10 is not very credible, this commercial data
 11 that we're reviewing. So, I don't think the
 12 issue is that we have ten data points and
 13 we've looked at, you know, was there a high
 14 point here and a low point and what do we get
 15 when we exclude these extremes and what's the
 16 value? If you want to talk about how good is
 17 that, really, the issue is how good is this
 18 data for determining a trend rate? And that's
 19 what we're saying, there's considerable
 20 uncertainty in the data. We think that by
 21 excluding the high and the low points it's
 22 helping to give a more stable measurement of
 23 the trend rate.
 24 MS. NEWBURY:
 25 Q. If a regression model can be sensitive to one

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1 or two data points, would it not also be
 2 sensitive to excluding the data points, one or
 3 two or up to four?
 4 MS. ELLIOTT:
 5 A. Absolutely. I agree fully. And the issue is
 6 that if you just exclude one or two data
 7 points and you get a different answer or you
 8 use, you know, five years or six years and you
 9 get a different answer, yes, that tells you
 10 something. It tells you that it's very hard,
 11 it's very challenging to pick the right
 12 number. It definitely tells you something.
 13 MS. NEWBURY:
 14 Q. Okay. And are you saying that if you exclude
 15 the data points, that your fit is no better
 16 than when you include all of the data points?
 17 MS. ELLIOTT:
 18 A. Typically the fit will be better when you
 19 exclude high points and low points, typically,
 20 yes.
 21 MS. NEWBURY:
 22 Q. Okay. And what was it in this case?
 23 MS. ELLIOTT:
 24 A. I don't have that in front of me.
 25 MS. NEWBURY:

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1 Q. Okay. If you had done an analysis of ten
 2 years or five years or fifteen years and found
 3 that you had a better fit, would you have
 4 discarded that or would you have--what would
 5 you have done with that?
 6 MS. ELLIOTT:
 7 A. Well, in those cases where we running a
 8 regression analysis and we have ten years of
 9 data or whatever time period and the fit is
 10 really good, we don't necessarily exclude any
 11 points unless again, we think, that that is
 12 necessary. Here with this commercial data in
 13 Newfoundland it is the most challenging data
 14 that we look at. Of all the reviews for lost
 15 trend rates, it is the most challenging. It
 16 is the most limited data. And so this is the
 17 approach that we've taken to try to account
 18 for this volatility in this limited database
 19 that we have work with. So, you will get a
 20 different answer if you exclude one or two
 21 data points than if you don't. And we
 22 generally find with that exclusion, we get a
 23 little better fit. We've taken off these high
 24 and lows and smoothed it in a little bit.
 25 MS. NEWBURY:

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1 Q. Okay. And whether or not you did actually get
 2 a better fit, in this particular case, you
 3 don't know.
 4 MS. ELLIOTT:
 5 A. I don't have that at my finger tips, no I
 6 can't tell you.
 7 MS. NEWBURY:
 8 Q. How did you determine how sufficient the data
 9 is for estimating trends?
 10 MS. ELLIOTT:
 11 A. Sorry, could you repeat that, please?
 12 MS. NEWBURY:
 13 Q. How did you determine how sufficient the data
 14 was for estimating trends? I mean, you've
 15 commented about the data and exclusion of
 16 points, how do you determine what is
 17 sufficient?
 18 MS. ELLIOTT:
 19 A. Well, with our different standards and in
 20 terms of determining whether the data is
 21 sufficient for determining lost trends rates
 22 is certainly a point discussion and people
 23 have different views. The standard for
 24 determining whether data is sufficient for
 25 credibility, the credibility standard is much

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1 higher than just for the regular experience
 2 period that's used. This data would not meet
 3 the standard that we would or see in other
 4 provinces. And I'm repeating myself, the data
 5 is very thin, very volatile and not reliable
 6 in terms of the estimate that is provided.
 7 So, if you're asking me do I think this data
 8 is fully credible and reliable, that whatever
 9 trend result pops out of XL model, is the
 10 right number? The answer is no. It is not
 11 fully credible, absolutely not.
 12 MS. NEWBURY:
 13 Q. And in your various models that you've done as
 14 part of your report here or your report to the
 15 Board that filed in CA OW 001, did you
 16 consider excluding maybe two high and one low
 17 or excluding two low and one high or looking
 18 at maybe how do the data points look? Do they
 19 look like outliers as it relates to the graph?
 20 Did you try other combinations and
 21 permutations of exclusion of data points?
 22 MS. ELLIOTT:
 23 A. Yes, I mean, we have the data and I can't
 24 speak to specifically what was antonym when we
 25 did that, but as I said, it's a flexible

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1 model, we can test different exclusions quite
 2 readily, but at the same time, we're trying to
 3 prepare a report, where we prepare a report
 4 every six months and we're trying to present
 5 something that's reasonably stable from report
 6 to report. So that if every time we looked at
 7 it, we did something completely different, I
 8 assure you we'd get a very different answer
 9 each time. And so what we're trying to do is
 10 find some consistency--and it's not always the
 11 same, but try to do the same thing generally
 12 from report to report, we calculate the number
 13 using the ten year and the five year models
 14 that we've selected to use and we average that
 15 against what we picked the last time, in
 16 trying, if you will, almost weight what we did
 17 the last time with what we're finding this
 18 time, to have some stability in our findings.
 19 You know, it's an approach that we've used
 20 because the data is very limited and thin.
 21 And we try to follow that approach so that,
 22 you know, we're not presenting reports where
 23 insurers write in and say, hey, how come you
 24 changed your mind and did it this way and that
 25 way in every which review that we do.

1 MS. NEWBURY:

2 Q. Okay, sure, but in terms of the exclusion of
3 outliers, I understand that these are
4 anomalies and they're different from the data.
5 I assume that they don't occur on a regular
6 basis, that you regularly have every year,
7 you're going to have two outliers on the high
8 side and two outliers on the low side.

9 MS. ELLIOTT:

10 A. You can always find the two high points and
11 two low points.

12 MS. NEWBURY:

13 Q. But sometimes the high points might actually
14 be just slightly above your typically data.
15 So, it may not actually look like an outlier
16 to a lay person -

17 MS. ELLIOTT:

18 A. Sure, and if that that was the case, I think,
19 you know, we can go, I guess, to the next page
20 might help me explain, in the--go down a
21 little bit further please. So, here we have
22 the change from year to year, the 29 percent,
23 you know, we've gone through this before, the
24 -11--so, it's possible that there'd be
25 something where we didn't see anything really

1 CERTIFICATE

2 I, Judy Moss, hereby certify that the foregoing is a true
3 and correct transcript in the matter of a Facility
4 Association Application re: Taxi and Limousine Automobile
5 Insurance Rates heard on the 17th day of November, 2014
6 before the Board of Commissioners of Public Utilities,
7 120 Torbay Road, St. John's, Newfoundland and Labrador
8 and was transcribed by me to the best of my ability by
9 means of a sound apparatus.

10 Dated at St. John's, Newfoundland and Labrador
11 this 17th day of November, A.D., 2014

12 Judy Moss

13 Discoveries Unlimited Inc.

1 high or low, but this data is very limited and
2 volatile, the commercial Newfoundland data.
3 So, if you're telling that it's--is it likely
4 that there won't be any high or low and
5 everything will be consistent? Well, I guess
6 it's possible, but that's not what we're
7 seeing.

8 MS. NEWBURY:

9 Q. But every high is not an outlier and every low
10 is not an outlier?

11 MS. ELLIOTT:

12 A. As I expressed, we area, our method is to take
13 the two high and the two low, that's what
14 we're doing, yes.

15 MS. NEWBURY:

16 Q. Okay. Thank you, perhaps we could continue
17 this tomorrow morning with Ms. Elliott.

18 CHAIRMAN:

19 Q. So, 9:30 tomorrow morning?

20 MS. GLYNN:

21 Q. We usually start at 9:00 on the second day,
22 but it's up to your discretion.

23 CHAIRMAN:

24 Q. Okay, 9:00.

25 Upon conclusion at 1:29 p.m.

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